November / December 1999

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The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 21, Number 6

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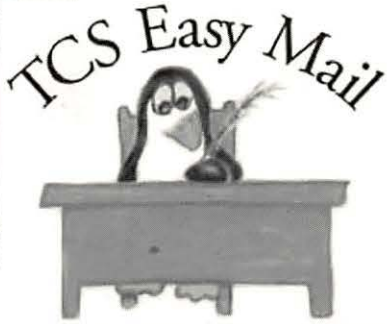

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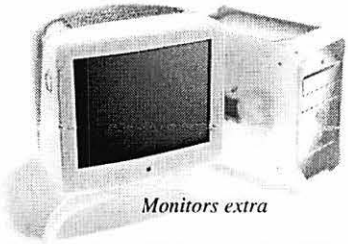

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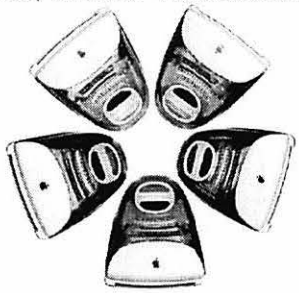

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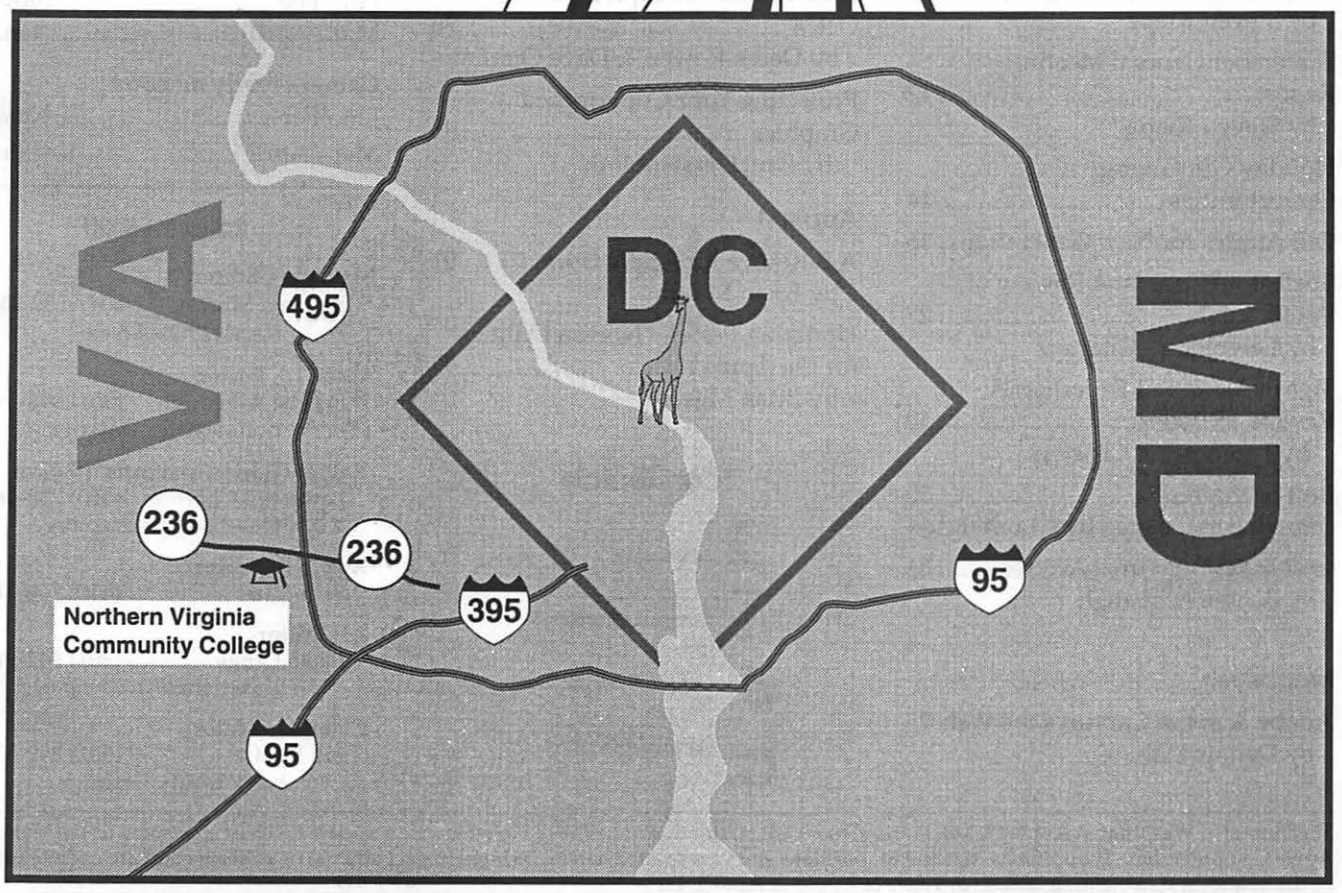

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Washington Apple Pi

This issue of the Washington Apple Pi Journal was created on a PowerMac, with proofing and final output on an HP LaserJet 5000 N.

The page layout program used was PageMaker 6.5 the word processing program was Microsoft Word 5.1; the principal typeface is Palatino (10/12) for the articles; and Avant Garde Demi for headlines, subheads, and emphasis. Charlemagne Bold for drop caps.

Cover Design: The WAP Journal cover design was created by Ann Aiken in collaboration with Nancy Seferian. The Capital artwork was illustrated by Carol O'Connor for One Mile Up, which donated it for use on our cover.

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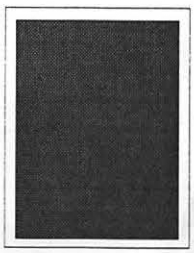

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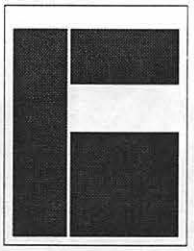

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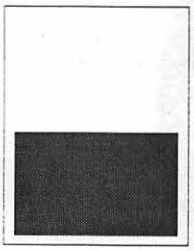

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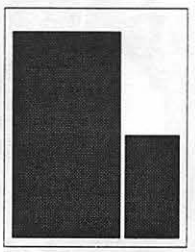

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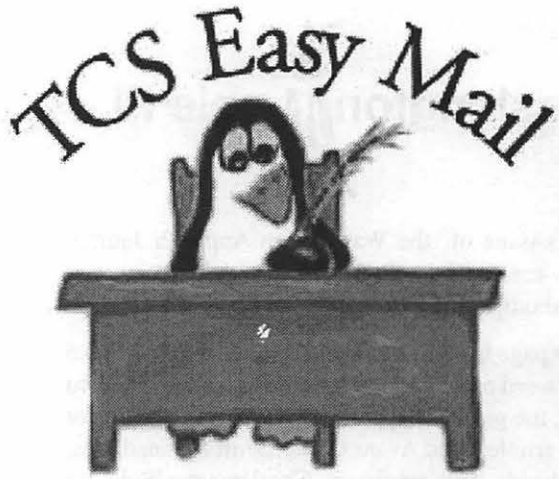

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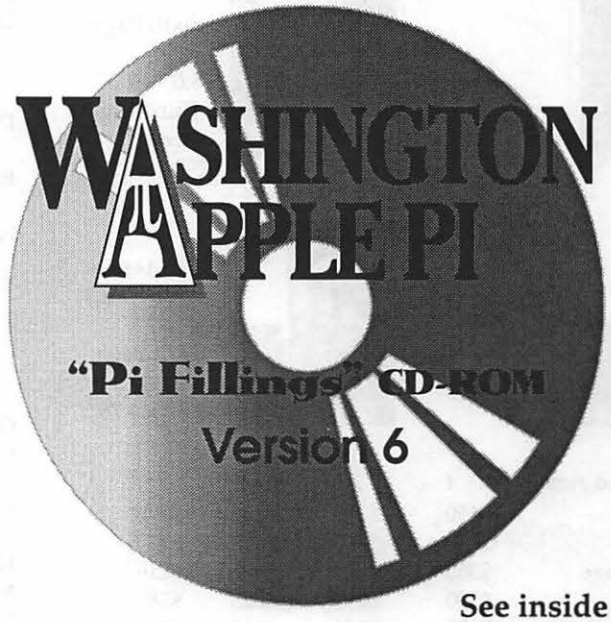

See inside back cover for more details

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The Making of A Problem

THIS IS a sad story. You are about to learn that some folks at Apple made a decision last month that they must believe is in the best interest of their company, you the folks who use computers made by them, and user groups, the grass roots advocates for the Macintosh. But, from where I sit, I am watching them create a problem where none exists.

We Have Mail

Washington Apple Pi, like all user groups registered with Apple, is eligible to obtain a license to redistribute Apple software updates, patches, and utilities to our members. The Pi has been a signatory since its inception. That's a lot of years that we have been supporting Apple by making their updates available directly to you just as received, and helping you install them. Late last month all user groups, who have a license like ours, received a letter from Apple telling us that we may no longer redistribute Macintosh OS system updates to our members. In plain English, if you want to update your Mac OS system, go download it yourself, or pay Apple for their CD when they make one available. This change involves such things as the update to Mac OS 7.6, which is 7.6.1; the update to Mac OS 8.0, which is 8.1; the update to Mac OS 8.5, which is 8.6; as well as future Mac OS systems updates. What is involved is not insignificant. We are talking about the improvements to the operating systems you purchased. These are the updates that squash bugs, add functionality, and improve the stability of that OS.

The employees at Apple who defend the decision to prohibit us from making these updates available directly to you offer that it is a minor change to protect the "look and feel" of the software they created. Rather than focus on what we may no longer distribute, they would like us to focus on all the other things we may still redistribute. I am not comforted by their words. Please keep in mind as you read this that the stuff is theirs; they created it and may dispense it as best it suits their needs. I am sorry we were not consulted about the impact of their thinking. Who knows, I could have shown them how their decision to end this part of our long relationship was misguided.

In The Beginning

The distribution license arrangement has its roots in an era when there was no easy way for you to receive such updates. Apple distributed system revisions and utilities to its dealers on disk, offered it to subscribers on a proprietary electronic service called AppleLink, and made it available via AppleLink to Apple user groups who paid an hourly fee to access the service. This method of distribution was an incentive to help strengthen the relationship between dealers and customers in an era when most Apple product dealerships were individually owned, and to create an additional incentive for user groups to attract members.

All of those pieces have undergone tremendous change in the last few years. The strong local dealer network once associated with Apple and your source for updates is essentially defunct. A retail outlet today knows you only long enough for your check or plastic to clear. It does not offer

their customers access to updates or help installing them wherever found. The subscription service, AppleLink, is gone and its offerings moved to the Internet sites operated by Apple. (Please do not ask me to comment on the state of the user group community.) It is now the preference of Apple that you obtain Mac OS system updates at their web site, which also happens to be the only way Apple distributes most of its utilities and updates.

There are said to be two kinds of physical education instructors out there. One says: "You climb the rope by putting one hand over the other and pull yourself up. Now do it." The other says: "Follow me." My problem is that I see this decision as having been made by "do it" people. Now, watch me.

The "Do It" People's Gospel of the All-Consuming Internet believes that:

1. everyone has a fast and wide connection to the Internet, and a Mac capable of taking advantage of it;

2. that each of you is facile at using the Internet;

3. each of you owns a Macintosh whose operating system is in the same condition as when it first came out of the box.

4. each of you has a CD-ROM drive attached, knows how to install software, and is comfortable adding updates to your system software;

5. what you eventually receive via some two hour download will install just like it did when tested in Cupertino;

6. that when your Mac goes sprong and you are told to reinstall your system and associated updates, you have them on hand, or can access the Internet from your sick Mac so as to get them; and finally,

7. you will be happy to pay $25.00 per hour to have an Apple telephone service technician 'fix' your new mess— or, absent that, pay a local tech $75.00 per hour and pray that will undo the mess you are now facing.

As a 'follow me' person, I can tell you that is not how it happens!

"The employees at Apple who defend the decision to prohibit us from making these updates available directly to you offer that it is a minor change to protect the 'look and feel' of the software they created."

Creative Messmaking

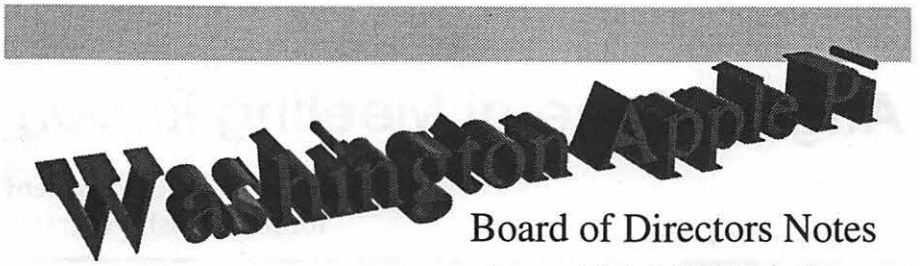
Where is the user group in all of this? Sorry, we are no longer allowed to pass along an update to you. Apple has told us that you must download the update or buy it from them. You may install it yourself or bring that copy to your user group for assistance if the installation goes sprong. The reality? You will need us more now than before; yet, this decision cripples our ability to aid you. For certain, the "do it" people who created this mess are not in a position to help you. If they are thinking of making money from CD sales, watch the offset from the increased calls to the remodeled telephone tech support.

An Apple spokesperson told me they want more control over the "end user's experience." We are just the folks to do that, not they. With the ability to redistribute, we help assure a positive end user experience for the 'net- and install-phobic among us; we reduce repetitive reinstallation stress with hands-on support that reduces crashing and burning; our support reduces the cost to Apple of its telephone techies; and we build the bonds that make for a strong Macintosh user group community, which translates into repeat sales for Apple. We are being marginalized by the "do it" people. Towards what end? What am I missing here?

Obviously these updates are needed or Apple would not waste money creating them. So, too, is it obvious that you should obtain them and make them a functioning part of your computer. A user group takes the pucker factor out of "the experience." It is this value that we add to the updates created by Apple that makes us the more desirable solution over obtaining the components via the Internet and winging it. Permission to redistribute is an affirmation from Apple to the member asking for our help that we are a valuable resource. This is the reason user groups exist! When we deliver, and we do it every day: you benefit, we remain vibrant, and Apple has another satisfied customer. "Follow me" people know this; "do it" people don't.

You have just read the recipe for making a mess where none exists. There must be a decisionmaker somewhere around One Infinite Loop who understands this, or is at least willing to listen to me explain the impact of what they mandated. Such a dialog between us can help maintain the balance of interests among Apple, its installed base of users, and the user group community. Clearly, our message is not getting through.

—Lorin



Board of Directors Notes

August 11, 1999 Meeting

[Note: these are not the full minutes of the Board of Directors; those may be found on the Washington Apple Pi bulletin board, the TCS, in File Transfer Area 5.]

Directors Present: John Barnes, David Harris, Mary Keene, Steven Kiepe, Lorin Evans, Dale Smith, Pat Fauquet, Dave Ottalini, Brian Mason, Lawrence Charters, Don Essick, Lou Dunham
Directors Absent: Dave Weikert

THE MEETING was called to order at 7:42 p.m. The minutes of the previous meeting were approved as corrected. In honor of the last total eclipse of the century, a Chinese feast started *after* the meeting was called to order.

Old Business

MacWorld Expo New York was discussed. The Expo was definitely a success, but there were a few rough spots in the Pi's bus trip to the Expo. Planning for the next trip needs to start in January. Things required include: contract with a bus company, contract with the Expo, etc.

Aside from some rough spots, the trip was a hit. People enjoyed themselves, the Expo was worth attending, and everyone came back with stories. Some of the stories were probably even true.

New Business

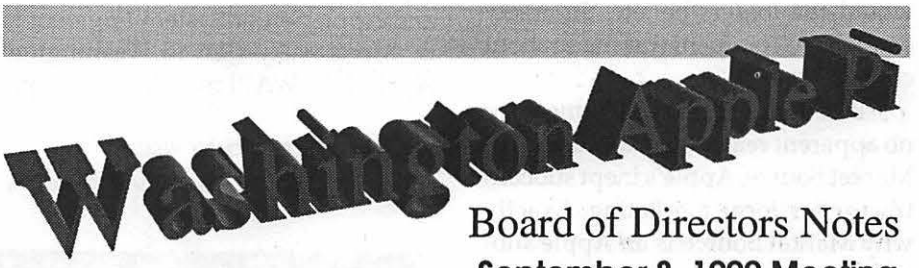
There was an extended discussion about the Pi's name and reputation. Apparently a local business, implying they represented in some way Washington Apple Pi, managed to schedule a major vendor for a presentation. The major vendor was unaware the presentation was *not* for Washington Apple Pi but, rather, the local business.

This lead into a discussion of how to coordinate and communicate with our own SIGs and Slices, not to mention local businesses. Everyone agreed this was a Good Thing to do.

David Harris mentioned that the TCS Crew is working on TCS Easy Mail. In essence, this would allow TCS subscribers to read and write Internet E-mail using a standard Internet client, rather than the terminal-style interface used by the TCS. Roll-out of TCS Easy Mail is scheduled for this fall.

Pat Fauquet mentioned that she is looking for working 250 MB drives for use in the Pi classroom. She wouldn't turn down a donation of a dozen Power Mac G4 machines, however.

Dale Smith moved that the Board adjourn. After three minutes of "but waits..." the motion was approved at 8:50 p.m. ■



Board of Directors Notes

September 8, 1999 Meeting

[Note: the Board had not approved the minutes of this meeting as of this writing. Full minutes of Board meetings may be found on the Washington Apple Pi bulletin board, the TCS, in File Transfer Area 5.]

Directors Present: Brian Mason, John Barnes, Pat Fauquet, Mary Keene, Dale Smith, Lou Dunham, Don Essick, Lorin Evans, David Harris, Lawrence Charters, Dave Weikert
Directors Absent: Dave Ottalini, Steve Kiepe

THE MEETING came to order at 7:46 p.m. after extensive fact-finding. Facts were found on the status of the photocopy machine (poor), Beth's presence (still hadn't left for home), the need for catsup if you are having barbecue (none), and the status of an agenda (if there were agendas, they were hidden). The minutes of the previous meeting were approved with corrections.

Old Business

Several simultaneous discussions erupted on various things that needed to be done, projects that needed to be staffed, and similar items. The consensus seemed to be that, sure 'nuf, these needed leadership and staffing.

The conversation lurched unexpectedly to the August 1999 Income Statement ("For Management Purposes Only"). This soon took the form of a Question and Answer session, with questions such as "What is 'Special Events Cost'?" and "What is 'Misc Revenue Costs'?" with matching answers of "Not sure" and "Could it be ____?" The spontaneous discovery of

the Socratic Method of Accounting was unexpectedly entertaining.

The discussion of money moved to a completely out of order discussion on the pricing of the new Power Macintosh G4. Some felt the G4/400 was "priced OK for a transition machine" but that the real bargain would be the entry-level Sawtooth model, the G4/450. Several people agreed that the G4/Cinema Display bundle was a terrific idea, and they wished they had the funds to buy a couple. A satellite discussion concerned how to tell when new models were coming out based on availability and pricing on current models.

For no particular reason, the conversation then moved to the next edition *of Pi Fillings*, the CD-ROM. What color would the disc be, what color would the folders be, etc. Strangely enough, no comment was made about content.

Discussion then transitioned, for no apparent reason, to a discussion of Market Source, Apple's inept subcontractor for local marketing. Exactly why Market Source is an Apple subcontractor is unclear, but it probably has something to do with money: they must be cheap, since they certainly demonstrate no other qualities. Market Source corporate headquarters has apparently been crippled, multiple times, by the Melissa virus (which would not be possible if they actually used the technology they were marketing from Apple). They have announced contests for their marketing "volunteers," then made it impossible for the volunteers to qualify by requiring the volunteers to fax items to a disabled fax machine. Their latest Apple marketing effort requires volunteers to fill out more paperwork than candidates for President.

The evening's collapse of parliamentary procedure was brought to a merciful close when Dale Smith moved that the meeting be adjourned. The motion passed at 8:28 p.m. ■

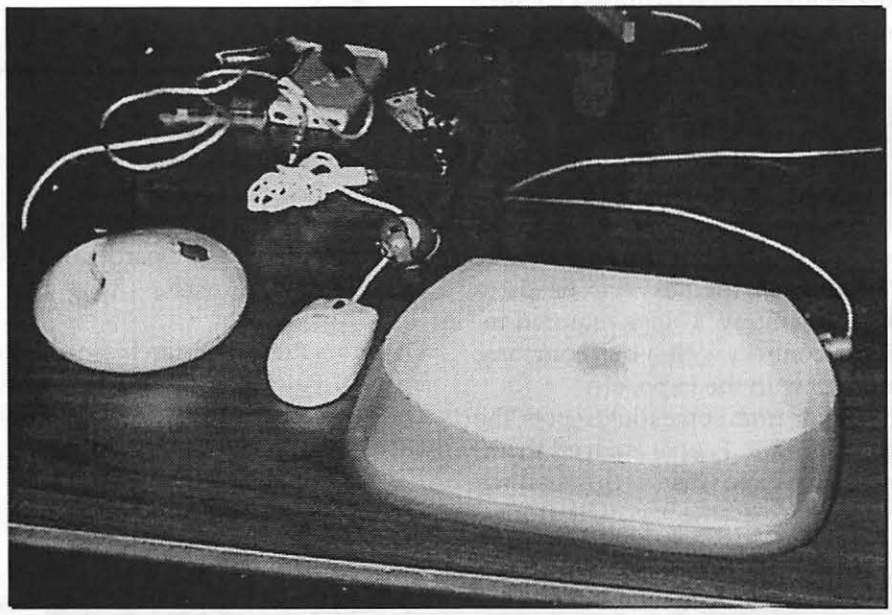
August General Meeting Report

Steven Kiepe, Vice President for Macintosh programs

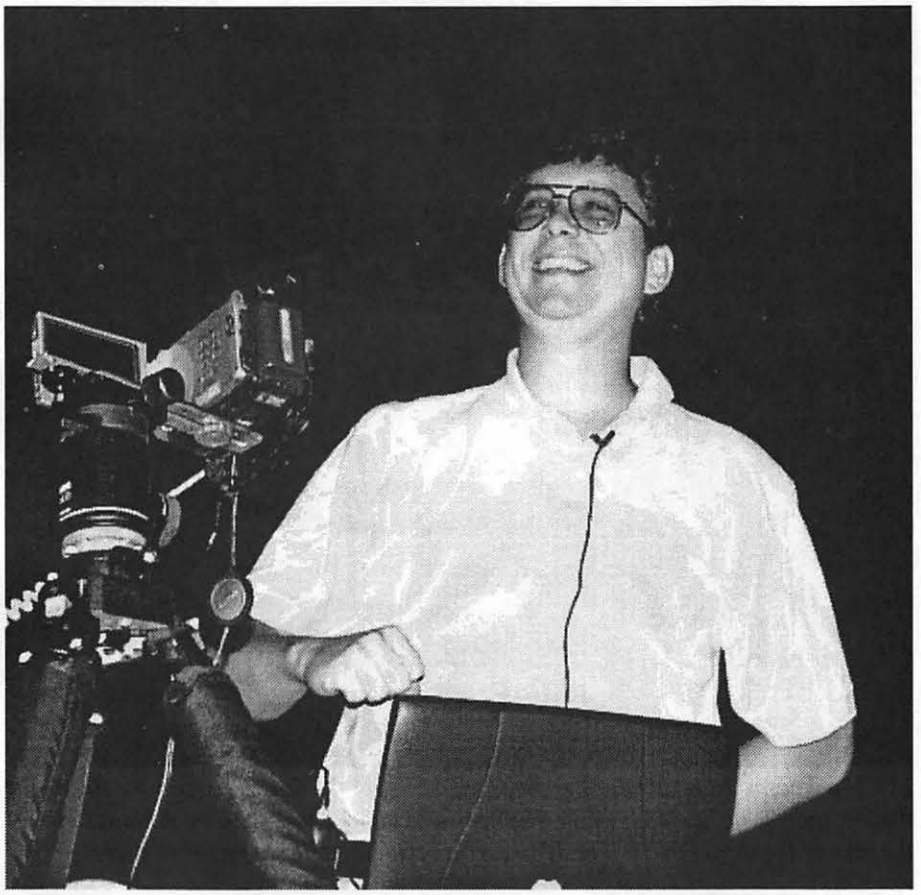
SATURDAY MORNING is the one day a week that I try to start slowly, letting the events of the week work their way out of my overstressed mind as I reflect on nothing more profound than the orientation I should take in mowing my lawn. August 28th, however, was not to be quite so mindless. Instead, I joined a crowd of almost 200 enthusiastic Macintosh devotees in welcoming Fortner Software's Ted Meyers and Apple Senior System Engineer J. D. Mankovsky (JD) to Washington Apple Pi's (WAP) monthly meeting.

Data made visible

Our first presenter, Ted Meyers, is the Chief Executive Officer, Chief Technology Officer and President of Fortner Software, a Sterling, Virginia based firm focused on developing tools for analyzing and managing data. If you have marveled at computer generated graphical depictions of the inner workings of complex systems as portrayed on TV programs such as PBS's *Nova*, or viewed climatology maps or depictions of fluid dynamics problems in magazines like *Scientific American*, you've seen the utility of applications that can convert raw data into images. Fortner Software's flagship product, *NOeSYS*, is a highly sophisticated yet easy to use application that renders unintelligible raw



Among the items demonstrated at the August meeting were (from left to right) an AirPort wireless networking base station; a USB scrolling mouse, and an iBook (a tasty blueberry). In the background are a couple of USB and FiireWire storage devices. Resting on the cord of the scrolling mouse is a small, round USB-based video camera. (Photo by Lawrence I. Charters)



In August, former Pi Apple II guru Ted Meyers demonstrated Fortner Software's Noesys data visualization tools on his father-in-law's PowerBook G3 laptop. Ted's excellent, well-organized presentation was enhanced by frequent asides, commenting on the PowerBook and his need to get one of his own. (Photo by Steve Kiepe)

data into visual multi-dimensional depictions of stunning clarity.

Ted began his presentation "Killer Apps & Desktop Science" with a primer on the evolution of data display standards. As he brought us to the present, his presentation entered into a realm formerly the province of supercomputers and high-end graphic workstations. Ted showed how graphic depictions can be rendered from any type of digital data, whether magnetic resonance imaging (MRI) of human tissue; satellite imagery of ocean temperatures and currents; national data bases of geographic positions, terrain and characteristics; and computer generated visualizations from the smallest particles in the universe to the depths of space.

After bringing the crowd up to the present day, Ted demonstrated the ease with which visualization software could render, manipulate and present data that would otherwise be unfathomable. He showed the vast amount of data available from national satellite systems. Although freely accessed on the internet, it may never be analyzed or even viewed because of the shear quantities of data archived and available. Ted showed how a user, with the right applications, could avail themselves of data which would be considered priceless only a few decades ago. Just as importantly, with the highly advanced capability to analyze data now available to users of *NOeSYS* and similar programs, doctors, engineers, scientists, researchers, teachers and the general public can gain insight into areas previously the province of NASA researchers and computer geeks. All of this power accessible with little more than a point and double click of a mouse.

"If you have marveled at computer generated graphical depictions...on TV programs such as PBS's *Nova*....Fortner Software's flagship product, *NOeSYS*, is a highly sophisticated yet easy to use application that renders unintelligible raw data into visual multi-dimensional depictions of stunning clarity.""

For more information and a walkthrough of the power (and even beauty) of visually rendered data, turn your web browser to www.fortner.com.

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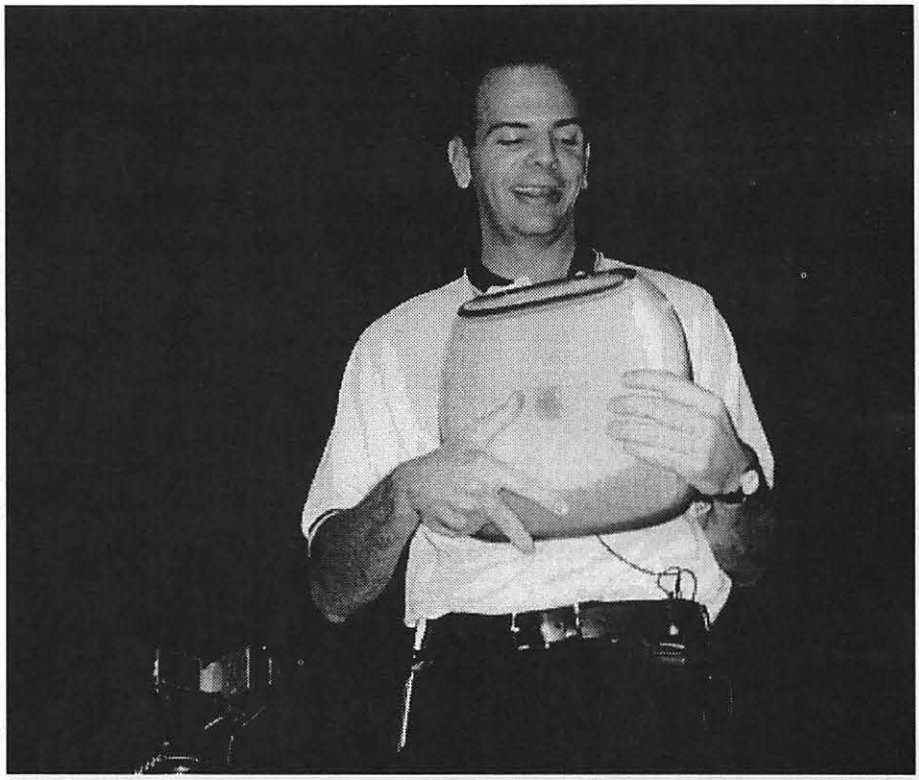
iBook debuts at Washington Apple Pi

With the pride reminiscent of a new parent displaying his new six and a half-pound progeny, JD introduced the crowd to a blueberry and white package of amazing speed and capability, Apple's new "iBook" notebook computer. The iBook's unveiling at August's WAP general meeting appears to be the first presentation to any user group since the iBook's announcement at July's New York MacWorld conference. If the WAP audience's reaction is any measure, the iBook is destined to set new notebook sales records.

JD's presentation began with a business update showing Apple's amazing return to profitability and the recent innovations that have once again set the computing world on end. To that end, the revelation that over 2 million iMac's have been sold to date, and that Apple *Macintosh* sales have been nearing 1 million computers per quarter during the last year, indicated that Apple is on very solid footing as it builds its road to the future.

JD moved on to the high end of the portable computer crowd, the PowerBook G3. He had good news on this front as well, with the revelation that these high-end PowerBooks are suitable replacements for desktop computers. With a full range of built in interfaces including S-Video supported by the ATI *Rage* LT Pro controller, USB, 56K modem, and 10/100 baseT ethernet all standard, and availability of a range of other plug in cards including Newer Technologies $199 *Firewire* card, the *PowerBook* G3 can handle even the most arduous of tasks such as digital video production. Further, the copper construction of the G3 central processing unit brings low power consumption and outstanding battery life to this lightweight powerhouse, with more than 5 hours of operation possible on a single battery and provisions for two batteries.



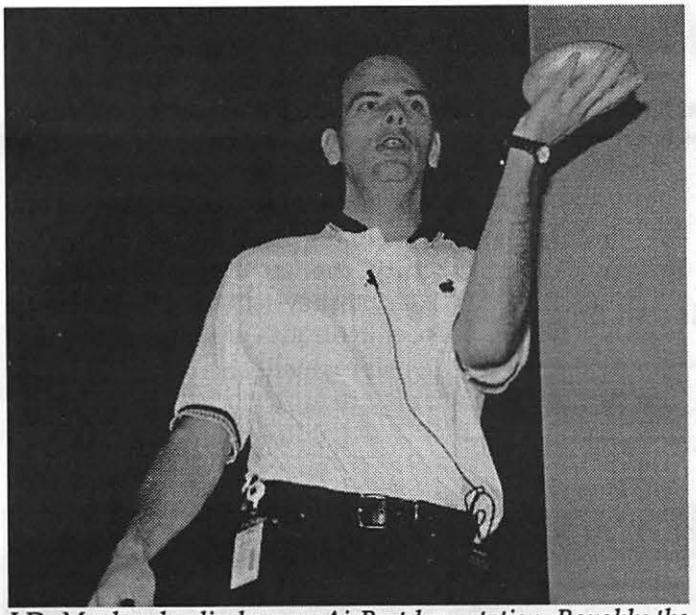
J.D. Mankovsky demonstrates the clamshell design of the iBook. To open the iBook, lift the top; there is no latch. Opening the iBook also turns it on. Note the flattened oval at the back of the iBook; this is a built-in carrying handle. (Photo by Steve Kiepe)

"Just when we thought there was nothing left to say, JD gave a quick teaser on Mac OS 9, and offered to return for the October meeting to demonstrate its new capabilities soon after it is released to the public."

All this good news about Apple's resurrection from the media-world's grave not withstanding, many in the crowd came to the meeting to see the new *iBook* put through its paces and they weren't long disappointed.

From the relative safety of the elevated stage, JD reviewed the near indestructible construction of the *iBook*, its careful engineering including built in 56K modem, 10/100 baseT ethernet and USB ports, and the ease of access to the computer's available memory expansion and wireless communication slots. Waking the computer from its sleep mode, he immediately ran it through its paces demonstrating demanding computing video presentations (very smooth full screen video), courtesy of the *iBook's* ATI *Rage* Mobility Advanced Graphics Processor video chip and the demonstration system's 300MHZ G3 central processing unit. The thoughtful design work evident in such touches as the wind-up power adapter, ease of RAM upgrade, padded cover edges and 6 hour battery life demonstrated a commitment to making the *iBook* fit the user, rather than the reverse as is common to most computers.

JD next demonstrated the *Airport*, Apple's entry into the wireless networking arena. Based on industry standard IEEE 802.11 wireless technology, the *Airport* system ($299 for



J.D. Mankovsky displays an AirPort base station. Roughly the same size as an Olympic discus, the AirPort weighs much less and is a much more stylish silver color. With a range of roughly 150 feet, it also operates over a longer range than most people can toss a lead-filled discus. (Photo by Steve Kiepe)

the base hub) and its related wireless LAN cards that fit in the *iBook* ($99) enable 11Mbps data transfer rate at over 150 feet, through walls, ceilings and across rooms. The Airport base hub has a 56Kbps modem built in, as well as a 10/100 baseT ethernet port. The *Airport* base station retains all customized setup preferences including internet setup, default printers, and the like. With the Airport base station installed, a user can walk within range of the base and be immediately connected (assuming user privileges are granted) to the network at speeds surpassing wired systems. The network is secure, with 40 bit encryption and cross platform capability (can operate with Lucent's *WaveLan II* system or other IEEE 802.11 compatible systems). Apple's *Airport* is the only system of its type currently being offered by any company featuring the high data transfer rate, ease of use and low cost. Just as importantly, the Airport base hub is not required for networking; multiple *iBooks* equipped with the inexpensive networking card can set up a wireless network and in turn be connected to wired networks or a dial in system through one of the laptop's hardwired ports.

JD took his show on the road as he walked around the room with a standard PowerBook loaded with a wireless LAN card and a small video camera. The video captured by the camera was transmitted, in real time, to the iBook on the stage through its wireless LAN card. As the crowd watched their full frame, filmed images being transmitted to the stage, JD explained Sorenson Broadcasting and Quicktime streaming. The capabilities were immediately obvious and led several members of the WAP board of directors to discuss the potential for live streaming of WAP general meetings to the web for those unable to attend the meeting locally.

The final phase of JD's presentation continued with new information and a hook for the future. He demonstrated or discussed several different items now available or in production for USB equipped Macs including the VST external floppy drive loaned to the group for the demo (~$90 retail), and an iRez *Critter Camera*. He also discussed the over 150 USB devices now available ranging from USB to SCSI adapters through USB all-in-one scanner/printer/copier bundles. The acceptance of USB as a new standard interface for both Macs and WINTEL machines means that most devices should be cross platform, requiring only creation of Macintosh specific software drivers. Just when we thought there was nothing left to say, JD gave a quick teaser on Mac OS 9, and offered to return for the October meeting to demonstrate its new capabilities soon after it is released to the public.

"Apple's *Airport* is the only system of its type currently being offered by any company featuring the high data transfer rate, ease of use and low cost. Just as importantly, the Airport base hub is not required for networking...."

Time to go

As the meeting came to its official end, the giveaways began and there were a lot of happy winners. A whole slew of folks walked out with various Apple t-shirts including Mary Ann Murphy, Jay Darmstadter, Karyn Thompson, Jack McCalman, Bob Wilbur, Vernice Christian, Joyce Slaton, Georgia Sadler, and John Bechtoldt. Other winners included Jan Bailey who won a video entitled "Master the Internet on a Mac," Kevin Adler who picked up a book on "Form Z," Tom Witte and Robert Langer who took home books on "Create cool HTML Web Pages," and Kevin Clare, the winner of the "Mac 3D Handbook."

With that, the meeting was closed but the crowd regathered around the iBook and it's accessories. It was almost another full hour before JD could retrieve the iBook from the last grasping, envious hands of those who hoped that somehow it too might join the list of giveaways! ■

September General Meeting Notes

By Steven Kiepe, Vice Presidents for Macintosh Programs

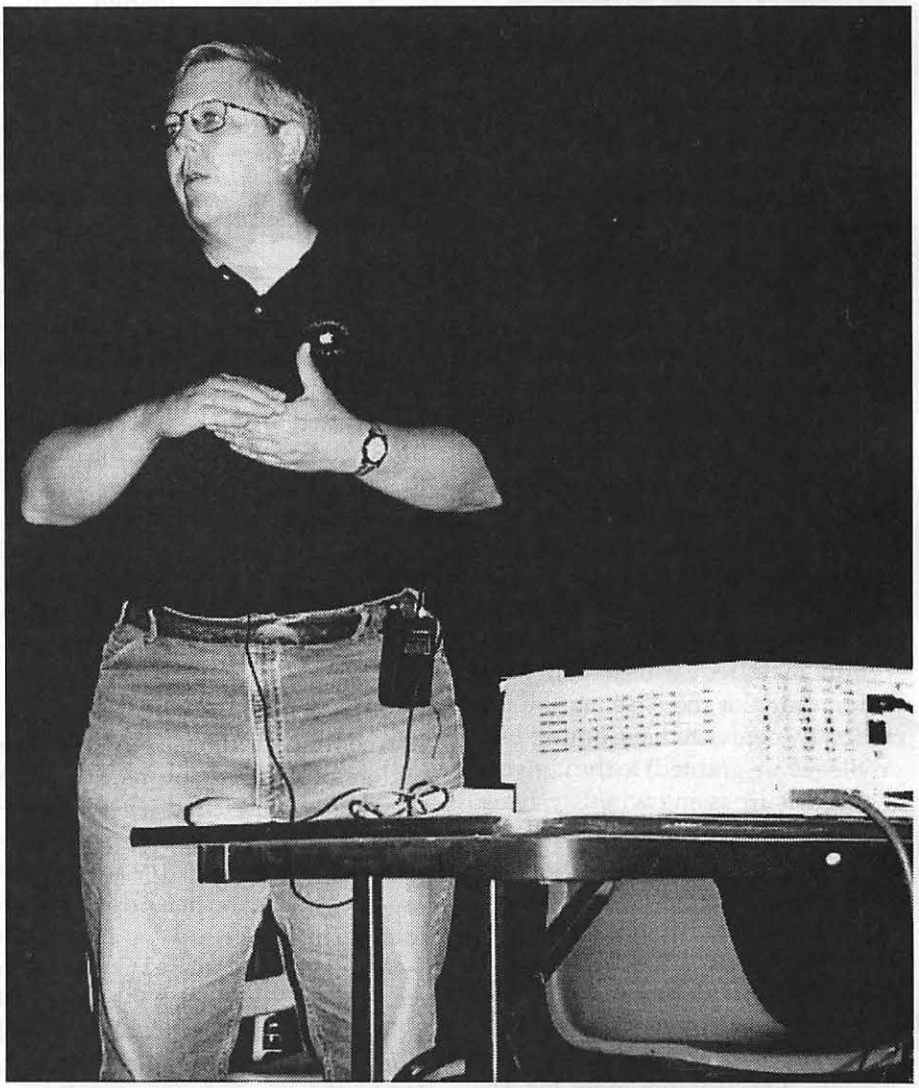
SEPTEMBER 25th was forecast to be clear and sunny but storm clouds loomed on the horizon as we approached the beginning of our general meeting. Confronted with the prospect of not having a commercial developer available to make a presentation to our group, I followed the lead of the Cowardly Lion in the *Wizard of Oz* and panicked! Not to worry though, a stalwart group of highly skilled WAP leaders came to the rescue and turned a potential disaster into a rout.

Disk Repair 101

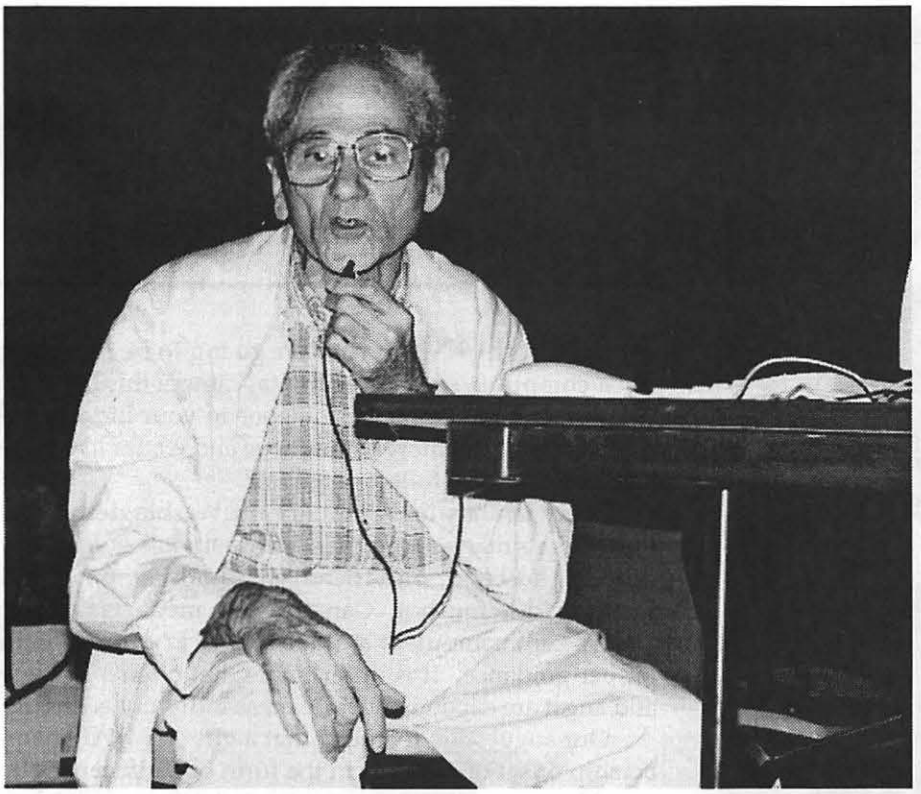
After kicking off the meeting with Lawrence Charter's traditional question and answer session, we moved to more formal presentations. Tom Witte began with a series of discussions on hard drive maintenance tools. Tom emphasized over and over his primary rule for hard drive and system health; run Apple's *Disk First Aid* weekly! Tom demonstrated the program's intuitive interface and fairly rapid disk check capability.

Next on the list was a demonstration of Alsoft's *DiskWarrior*, a directory recovery and repair utility. DiskWarrior catalogs the location of every file on an entire hard drive and then creates a new directory. This directory is then substituted for a corrupted directory, restoring access to files that otherwise may have been unrecoverable by competing repair utilities.

Tom's final demonstration was of MicroMat's *Techtool Pro 2*. This utility is the Swiss Army Knife of repair utilities, offering a complete suite of tools to analyze and repair not only disk based data structures, but also to troubleshoot the full spectrum of computer hardware and peripherals. Techtool Pro combines the data repair tools of *Norton Utilities* with the Apple's System Profiler analysis utility and the *MacBench* test suite. It is truly the jack of all trades in Macintosh system analysis and has no peer in breadth of testing or depth of repair capability.



Long-time Pi member Tom Witte discussed Apple's Disk First Aid *and two commercial utilities,* TechTool Pro *and* DiskWarrior, *at the September meeting. His presentation was equal measures a review, a tutorial and a demonstration. (Photo by Steve Kiepe)*



Pi member Stuart Bonwit talked about his latest QuickTime masterpiece at the September meeting. Working with Ray Dream, Poser *3.0 and 4.0, and some supporting* QuickTime *utilities, Stuart created a 37-megabyte clip of an aria, complete with beautiful diva, stage, props and music. Even playing on one of the Pi's tutorial machine (a Power Mac 7200/75 is a pale shadow of Stuart's Power Mac 8600/300), the clip was one of those rare pieces that make you pause and gaze in wonder. (Photo by Steve Kiepe)*

Animation Master

After Tom ceded the floor, our next speaker was Stuart Bonwit. Stuart, an opera aficionado and animation master, presented an aria that he constructed in Poser over a five-month period. The crowd was blown away as his QuickTime video of an animated character singing one of his favorite opera pieces was projected onto the screen. Stuart broke the creation of his masterpiece into discrete steps, demonstrating the effort required to render and animate his diva as she walked onto a computer generated stage and began to sing. His success in making his figure's facial expressions correspond to the words and tenor of the various passages in his chosen sound track was remarkable. It was a beautiful piece of animation and Stuart should be very proud.

Mac Tips and Tricks

Stuart yielded to yet another Mac guru, Pat Fauquet, for our third presentation of the evening. Pat focused her talk on Mac OS 8.6 tricks and tips. Without a guide to work by, most of us didn't know the special shortcuts built into the 8.6 update including special functions associated with simultaneously clicking the mouse while pressing either the control or option keys. Pat also led the group through the function of the Apple Favorites menu selection, and the uses of the Apple System Profiler. I was surprised to find that the System profiler could catalog the version number of all installed applications. This is a great aid for comparing your software status against the updates available on the Version Tracker website.

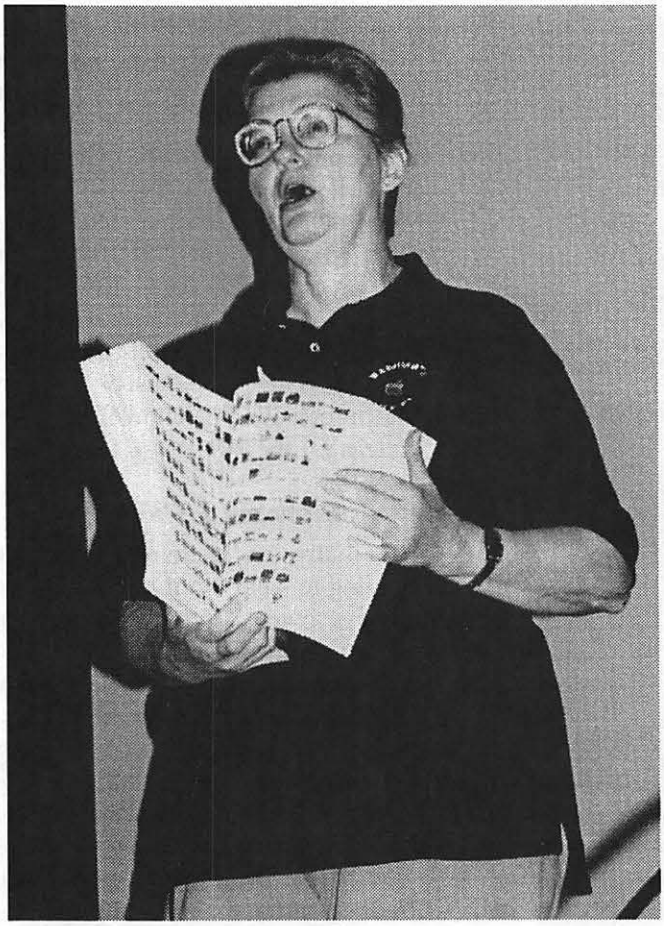
Print Explosion

Our final speaker of the night was Mary Keene with a description of one of the largest of all clip art and font collections, *Art Explosion 525,000* from the folks at NOVA Development. Mary gave a rundown on the 37 CDs filled with EPS and TIFF images, as well as over 1500 fonts. Combined with a 1500 page catalog displaying all of the art images and font samples, *Art Explosion 525,000* must be the most comprehensive collection of graphics images for the Macintosh today.

Everyone's a Winner!

Finally, it was time to bring the meeting to a close but not before the big give away. September's meeting was unusual in that there were so many freebees that almost everyone went home a winner. In addition to dozens of CD ROMS containing Apple's QuickTime 4 installation program, there was a big bonanza of books, T-shirts and other miscellaneous items. In compressed fashion, the loot and associated happy winners follow.

T-shirts: R. Clifton Bailey, W.S. Pickens, Hal Deeley. **Casady & Greene *Fun Bundle CD II***: Helen D. Barsalou, Mark Zolenas, Allen Denette, Andy Werthmann, Eric L. Mackenzie, Sidney M. Koss, Gerald Klis, Pat Garvey and Catherine Raveia. ***Real World Photoshop 3*** book: Bud Uyeda and Stuart Bonwit. ***Looking Good with Quark Express*** book: Mary Keene. ***Photoshop Wow*** book: Dave Myslinski and Glenn Rounsevell. **Adobe *Acrobat 3.0*** software: Bob Ketchel. **Illustrator Wow** book: George C. Quist and Ethan Labowitz. **Photoshop Special Effects** book: Needham Langston. ***Real World Photo Illustrator*** book: Larry Schwartz. ***Word 6*** book: Mike Myslinski. ***Mac Bible*** 6th Edition: Doug McNeill. ***Creating Cool HTML 4***: Vernice Christian. **Miscellaneous other prizes**: Bob Jarecke, Charlie



Pi Board member Mary Keene talked briefly about Nova Development's Art Explosion *at the September meeting. With over half a million pieces of artwork, plus photos, fonts and other goodies, she called it an "exceptional value," all 37 CD-ROMs full of information. You will soon either become intimately acquainted with the printed index or find a good excuse to go out and buy a 36 gigabyte hard drive. (Photo by Steve Kiepe)*

Stancil, Edwin C. Jordan, David Nicolson, Frak Lockhart, Michael Hottman, Thomas Hahler, Robert Langer, and Ken Clare. What a list!

Future Programs

We're hard at work trying to attract the kind of leading edge Macintosh developer talent that WAP has come to expect. Our rough schedule is shaping up like this (all meeting topics tentative): October – Apple and *OS 9*. November – Adobe In Design. December – the big garage sale and show! January – Gemulator and MacSpeech. February – Asante networking solutions and 3Dfx video solutions. We'll add more as the schedule fills out. In the interim, see you next month! ■

Holiday Gift Giving Opportunities

IS SOMEONE in your life go ing to be receiving a computer, scanner, or digital camera this holiday season? Do you have someone in your life who already owns one or more of the above and would like more help using it to its fullest potential?

Every January and February the Washington Apple Pi office gets many phone calls from lost souls saying "My children (husband, wife, friend) gave me a computer, and I am afraid to touch it. Can you help me?" We almost always can; computers are not such scary things with proper guidance. It is unfortunate that often a lot time and angst are expended before these individuals find us.

Our suggestion to you is that a gift of a WAP membership or set of tutorials in the form of a gift certificate could be one of the most appreciated gift any friend or family member receives this holiday season.

Our **Introduction to Macintosh** course, taught in two 3-hour segments by our gifted teachers Pat Fauquet and Jim Ritz, is geared toward getting beginners past their initial fear of the machine and on to understanding how it works and how to easily take advantage of it. Once this initiation takes place new computer owners can begin to really enjoy their new toy.

Our **iVisit iMac** course can take new users one step further with a thorough review of the software that comes with the iMac or iBook. This dispels the mystery of the computer and what can be done with it.

Another choice, the **Introduction to the Internet** class will help them access the huge array of possibilities on the World Wide Web. In addition, we are introducing new classes on scanners and digital cameras to assist new users in using those fun and useful items to best advantage.

So, "what kind of WAP gift can I give?" you ask.

- Tutorial Gift Certificates: these come in $35 increments, the member price of a 3-hour class. You may want to select a $70 certificate since many of our beginning classes are two sessions long. For a full listing of tutorials, check the article later in this journal or go to our web page (www.wap.org).
- Basic Membership to Washington Apple Pi: costs $49

and brings with it the journal, access to the hotline, and significantly reduced rates on classes. Also, it comes with a copy of Pi Fillings - The CD.

• Classic Membership: costs $69, bringing all the benefits of basic membership along with our TCS bulletin board system. This includes e-mail, access to an active online community, and an extensive library of available downloads.

• Explorer Membership: costs $220 and beyond the classic membership the new user would receive a year of Internet service. This special gift would open up the new world of the Internet to someone for an entire year.

This article has only touched on a few of the many benefits of Pi membership. Many possible gifts are available ranging from membership to many different tutorial offerings. Just consider the happy looks on the faces of your friends and family as they say, "I got a new computer, and now I can really use it!"

(To purchase a tutorial gift certificate, please fill out the accompanying Tutorial Gift Certificate Order Form. To purchase a gift membership, fill out the Gift Membership Application (on page 94). With either you may also call the office at 301-984-0300 with a Visa or Mastercard. For more information on tutorials or membership, check out our web page at www.wap.org or read the tutorial offerings starting on page 56 of this journal.) ■

"Every January and February the Washington Apple Pi office gets many phone calls from lost souls saying 'My children (husband, wife, friend) gave me a computer, and I am afraid to touch it. Can you help me?' "

Washington Apple Pi
Tutorial Gift Certificate Order Form

Washington Apple Pi
12022 Parklawn Drive
Rockville, MD 20852 301-984-0300

Your Name _____

Address _____

City/State/Zip _____

Phone (day) _____ (evening) _____

Member Number _____

Recipients Name _____

Ship to address: _____

City/State/Zip _____

Amount of gift: (1) 3 hour class $35 ____ (1) 6 hour class $70 ____ Other ____

Payment method:

☐ Check/Money Order ☐ Visa/MasterCard

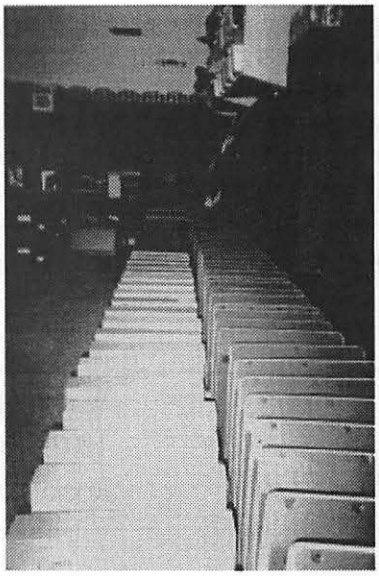
Card Number _____

Card Expiration _____ Signature _____

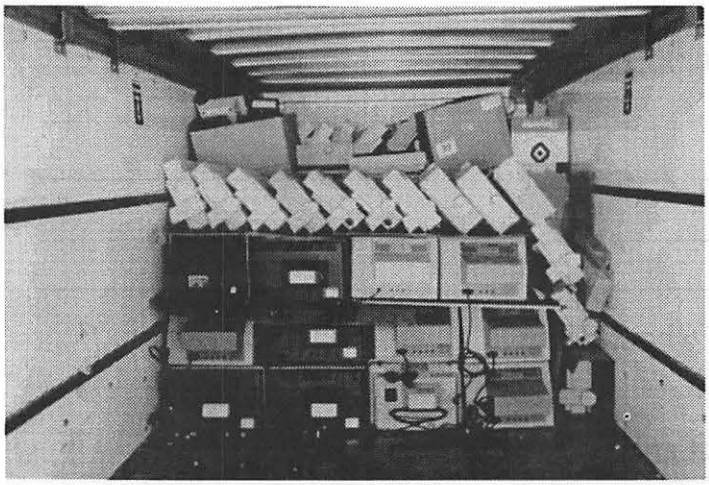
Old Apples for a New Generation

Photos by Lorin Evans and Beth Medlin

WASHINGTON APPLE PI does not need donations of old, broken down and abandoned computer equipment. The Pi would be best served by a massive donation of state-of-the-art Power Macintosh G4 computers. But others have different needs, so earlier this year the Pi donated a big truck full of fully functional Apple computers, monitors, printers, software and cables to schools in West Virginia. ("A Hundred Apple IIs," *Washington Apple Pi Journal*, May/June 1999, pp. 7-9)



ImageWriter II printers to the left, Apple IIGS computers to the right, marching off into the distance.



Question: how do you load a hundred computers, plus printers, monitors and other gizmos, on a truck. Answer: very carefully.

By the time the truck was filled, it contained over a half million dollars of computer equipment, based on original purchase price.

September Women's SIG meeting

THE NEW DC WEB WOMEN was the topic for the Women's SIG meeting on September 23, 1999.

SIG members enjoyed the presentations from DCWW Technology Chair Leslie Forte and Public Relations Chair Laura Taylor. Ms. Taylor gave the history of the newly reorganized Internet group. It had started as DC Webgrrls in 1995. This past spring the community established a nonprofit status and changed its name to DC WEB WOMEN.

The community has now grown to 2000 members, mainly in the Washington DC locality. Members have access to a free electronic mail list, workshops, networking events, and an outreach program. DC Web Women is a different kind of women's professional organization. DCWW does not have a central office; monthly meetings are held at restaurants and donated meeting rooms.

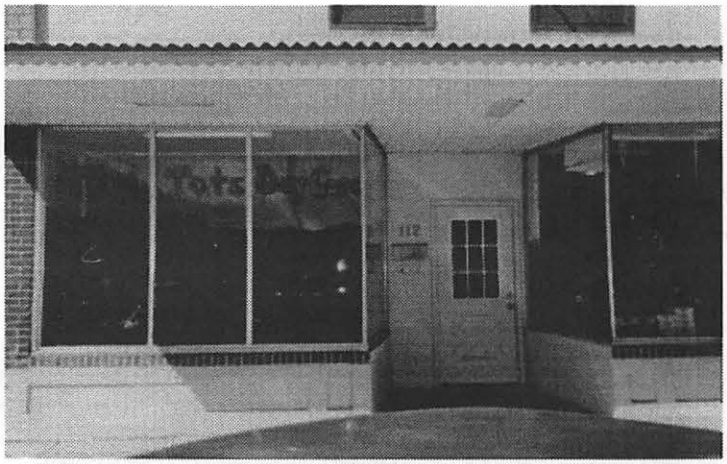
Leslie Forte is the Technology Chair for DC Web Women, and also the list administrator. She spoke about of the outreach program. One of the biggest events is "Take Our Daughters to the Net Day". Part of the focus of this event is to introduce girls to the Internet, then teach them to build a Web Page, and counsel them how to safely use the Internet.

Women's SIG members were quite interested in the idea of helping with workshops for after school hands-on computer-based training, not only for girls, but also for boys.

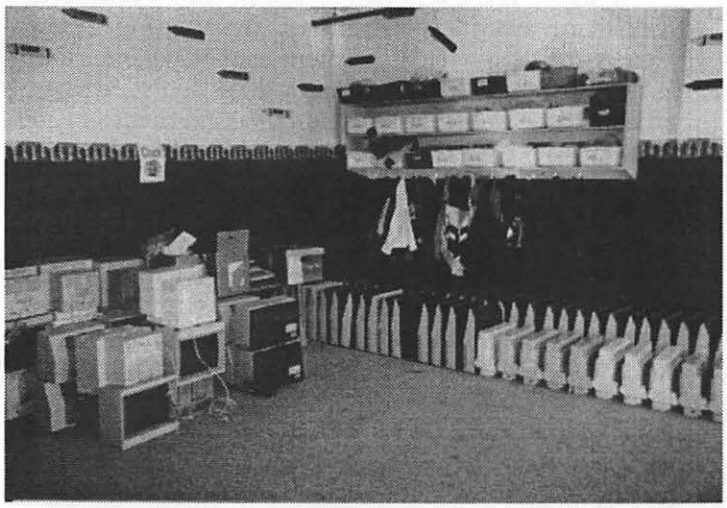
To reach the Website for DC Web Women, go to http://www.webwomen.org

Marje Cleveland 301-926-7109 mwcleve@aol.com

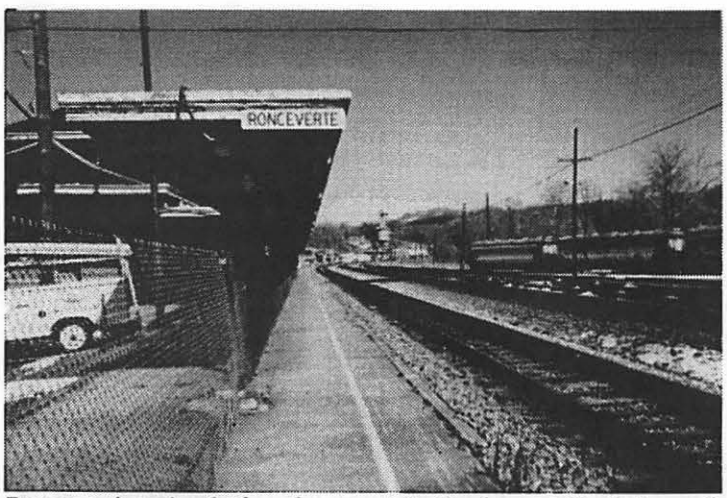
Members present: Marilyn Barr, Jean Koike, Mary Ellen Kostelnik, Pat Goddard, Pam Rockx, Ann Aiken, Dick and Marjorie Cleveland ■



The former Tiny Tots Day Care Center was the staging point for computer distribution. You can just make out the name in the window on the left.



In the corner, clothing tubs from the day care and pictures on the wall add an interesting contrast to the assembled equipment.



Roncevert's train platform has a certain timeless quality to it, much like an Apple II.

September Genealogy SIG Meeting

THE MEETING convened at the scheduled time, ten o'clock on the second Tuesday of the month, in the WAP office, with nine members present. In lieu of a program, there was a general discussion.

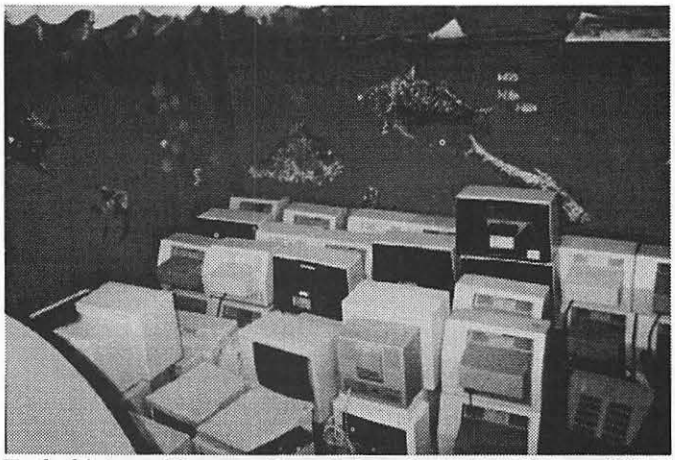
C. J. Dwinell has been searching Civil War and Pension records at the Archives Bldg. He found that the Soundex Code for his name is the same as that for his relatives called Dunnell. One can only draw 3 or 4 files each day. He recommends you use the copy machine and read the files later at home, to save time at Archives. He found a Civil War diary by a Navy enlisted man, a fireman in the boiler room of a Federal warship, very complete and with a picture of the man included. He also found a Spanish American War soldier discharged disabled in Cuba who then enlisted under an alias for service in the Philippines, and who apparently got two pensions.

There was a discussion on enlisting, recruiting, and retention rules in the Civil War, including the practice of paying someone to take your place when drafted. This led to a request for information on how recruiting was handled in the Revolution. Were there quotas for each town? The records at the DAR might help. They have lists of membership applications that show the ancestor chains. The National Society of Colonial Dames, 17th Century, 1300 New Hampshire Ave, NW near Dupont Circle, (202-293-1700) is another possibility.

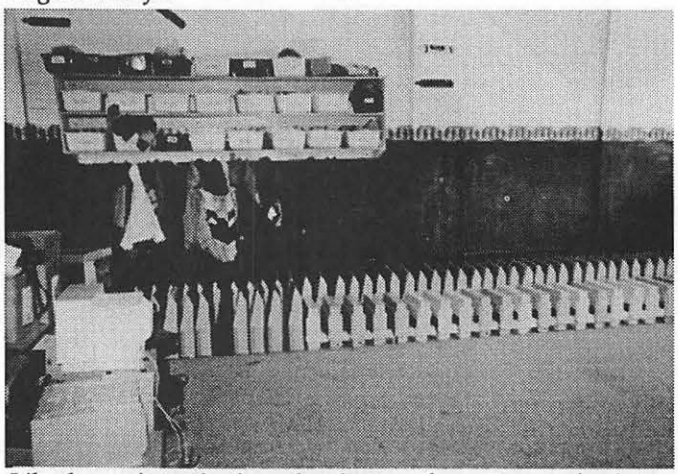
The Sons of the American Revolution are believed to be locally oriented, so that a local chapter may not be of much help if your interest is mostly in another locality.

There was a brief discussion of two magazines: Family Chronicle at $24.00 per year is published bimonthly in Canada. It has an article on 'Using FamilySearch' by the LDS Church. The next issue will include 'How to Publish' and 'Research on the Internet.' One can buy early volumes bound as a single issue. Heritage Quest costs $26.00 or $28.00. Both magazine can be bought at the larger Borders book stores.

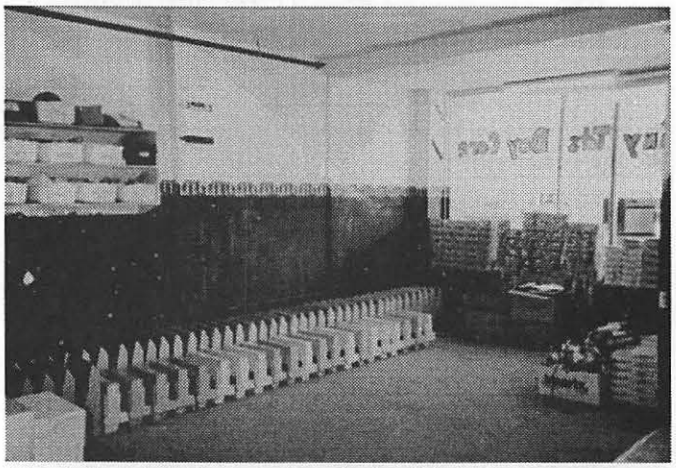
Of nine people at the SIG meeting, five are using the genealogical program Reunion 6. Beth Medlin, our Office Manager, has been drafting an agreement to allow Reunion 6 to be used in the WAP Training room. Ed Jordan has just received a copy for review and possible discussion with



Tucked into a side room, the monitors have a good view of West Virginia sealife.



Like dragon's teeth, the ordered rows of compters and printers are ranked across the floor.



The stacked disk drives in the window fail to blot out the former tenant's name painted on the glass. It was fun watching passersby try to figure out what was going on inside.

Leister Productions.

The 1860 Census is typically prone to errors of detail. The enumerators sometimes lied, sometimes guessed, and sometimes used unreliable sources. In Dukes County, Martha's Vinyard, Mass. an enumerator found at one house only a small child left at home on a weekday and used her answers to questions about the family. There was only one enumerator for all the then 1,000 inhabitants of the island.

In Germany, it was not uncommon to find siblings with the same first name. Following the death of a child, the next child born might be given the name to perpetuate the name. In Norway, there was a case where both grandfathers had the same name. To honor each of them, two children were given the same name. Also in Germany, a farmer might use the name of the farm as his last name, and change it if he moved to another farm. Middle names began to appear in the US after 1800.

In recent years, acid rain and other causes have been obliterating tombstone inscriptions. The Maine Old Cemetery Association records tombstone engravings and makes location charts. The DAR lists cemeteries and somewhere on the Internet are lists of cemeteries and lists of names found in them.

There followed a discussion of scanners, primarily for putting pictures into records like Reunion. Several members use the UMAX Astra 1200 series scanners. Adobe Photo Deluxe should come with it, or may come with the computer, and is more useful than Photoshop. OCR software is necessary to convert a scanned image of text into text that can be edited. Most scanners scan opaque copy by reflected light. To capture transparent film negatives or slides, the scanner must transmit light through the film. When scanning newspaper or other halftone pictures, the Moiré effect may produce dark wavy bands across the picture. This can be somewhat reduced by twisting the source picture so that it is copied at a slight diagonal.

—Alex Maish, Acting Secretary

Above right: Our fearless leader, Washington Apple Pi President Lorin Evans, accidentally captures himself on film, reflected off the glass. For those not familiar with obsolete computer technology, the boxes on the other side of the glass are two different types of floppy disk drives (still included as standard equipment on some Windows PCs).

Graphic Arts SIG Report, August & September Meetings

by Blake Lange

THE AUGUST Graphic Arts SIG set record attendance with David Helmley, the Dynamic Media Specialist at Adobe demonstrating the soon to be released InDesign. He started the meeting off with an amusing QuickTime movie about the difficulty of producing publications (or perhaps not so amusing to some of the graphic artists) as it showed a final publication missing both the photographs and the correct type. He explained that the target audience for InDesign is designers. One statistic that was interesting is that reportedly PageMaker outsells Quark somewhere between 10 to 15, to 1 and that Adobe expects PageMaker to outsell InDesign by similar numbers for some time to come.

The InDesign program is relatively small, just over 2 MB, for a major program. All the work will be done with plug-ins. If there is a problem with the program then they plan to just replace the troublesome plug-in. They, at Adobe, have more confidence with how it works than they have with PageMaker. Programming of PageMaker was compared to the difficulty of doing Jinga block. Putting in one piece or taking one out can collapse the whole thing.

Features of the program that make it stand out from PageMaker were plentiful. It has Illustrator's layers pallet; Photoshop's navigator, and Quark 4's and custom shortcuts. There are fill and stroke commands. Can create outline fonts. Can "Place" Bezier points on text frames. And it supports a two-button mouse.

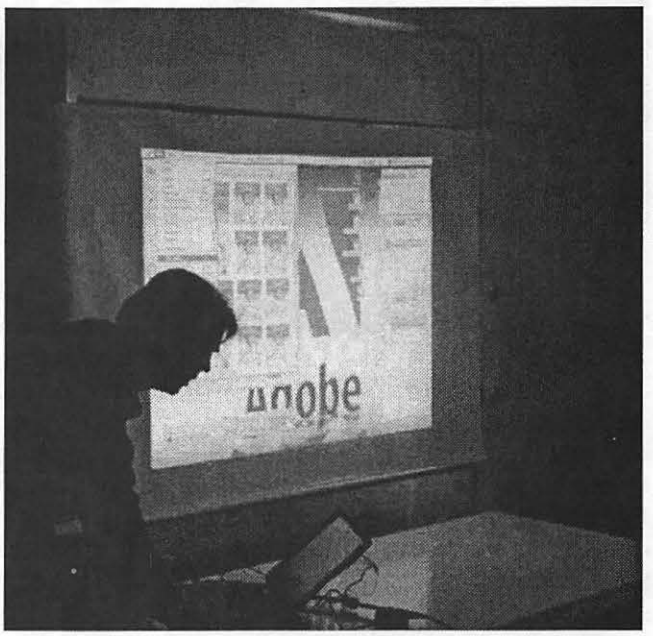
Although the program is relatively small and will run in 22 MB, much more RAM is recommended, especially if InDesign is running simultaneously with Photoshop and Illustrator. In that case a PPC with a minimum of 128 MB is recommended.

David discussed the importance of the PDF format recommending that designers get on the pdf bandwagon. It will be a major part of the printing industry of the future according to the Printing Industries of America (PIA). One will be able to place PDF files into InDesign and export both PDF 3 and 4. It will also be able to bring in all versions of files created in PageMaker and Quark. In response to a question as to whether it could save in PageMaker or Quark, David said, "Why would we ever want to do that?" It will also be able to import web pages and export to html.

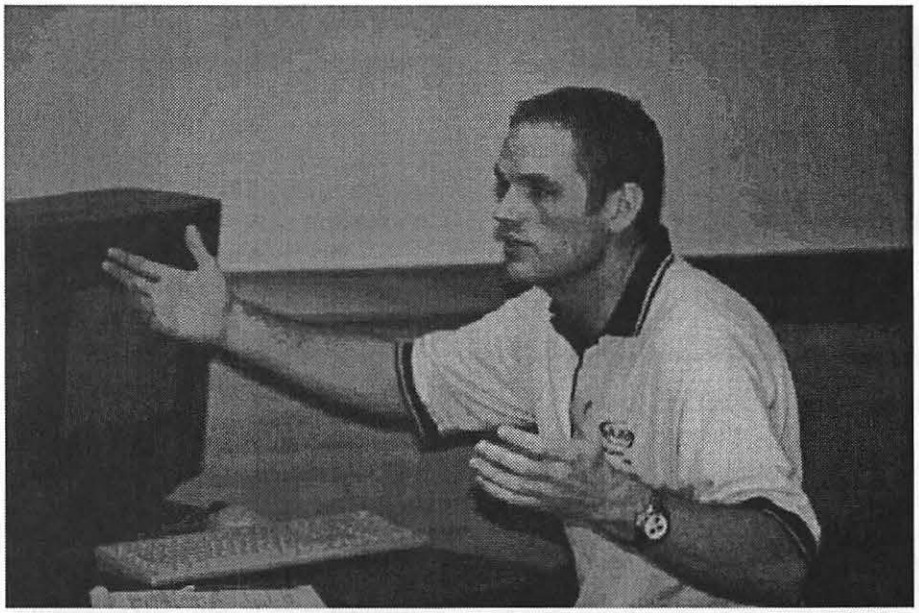
One final feature which got cheers from the geekier members of the group. InDesign will be fully AppleScript capable and recordable. If this turns out to be true it will be very useful for processes that could lend themselves to automation.

A few minutes at the end of the meeting were spent going over the new features of Photoshop 5.5. It has an amazing new Extract plug which greatly simplifies isolating a critical part of an image. It also has many features that make it more useful for preparing graphics for the web such as inclusion of the program ImageReady 2.0.

Attending the August meeting were Blake Lange, Valerie Burghardt, Bob Russell, Carol Sky, Bob Everett, John W. Laughlin, Linden Tucker, Helen Dilley Barsalou, Stuart Bonwit, Attila Horvath, Ann Aiken, Mary Keene, Harald Hoiland, Etana Finkler, Charlie Romero, Kim Stark, Charles A. James (Chuck), Virginia Sheard, Rob Kleinsteuber, Arthur Hoiland, Tom Teague, Eileen Flink, George L. Venable, Kathryn A. Perrin, Ritz Balick, Jean Koike, Cherie Worth, Esta Gladstone, Laura Leigh V. Palmer, Gene Haddon, Paul Schlosser, David Keene, Jamie Brouse, George Copley Jr., Amy McDonald, Rima Regas, Paul Davis, Bobbi Simmons, Bobbi Kittur,



David Helmley of Adobe demonstrates InDesign.



Charlie Romero discussing cardinal rules of web design

Linden Tucker at the September meeting

Yvonne Pover, Carie Schaffer, and Kelly Valentine

The Graphic Arts SIG members attending the September meeting had the fortune of enjoying a presentation by one of our own members, Charles Romero, Director of Corporate Development for the Jump Internet company. Charlie has been a Washington Apple Pi member since 1985.

He talked about the workflow and decision-making process and the interaction between the graphic team and the development team, working with the web service provider, dynamic web pages including site search engines, ecommerce, memberships, and use of templates, software tools, what costs more and what costs less, and cardinal rules of web design. It was a great opportunity to be shown an overview of the web production process and receive expert answers to our questions.

> "It was interesting to note that when it comes to security the Mac is 99.99 percent secure, while Unix can only be that secure with a full time, very capable engineer. WindowsNT can only be up to 97 percent secure with two full-time engineers. (Recently the Army has reported switched to using the MacOS for serving their site for just the very reason.)"

The Cardinal Rule, as best I understood it, is that one should always design to the lowest common denominator. Charlie often finds that the top decision-maker frequently has the computer with the least capability: 256 colors and a 14-inch monitor. When the work is completed and the final demonstration of the site takes place it will take place in this office on this machine. If it doesn't look good there the person who signs the check is going to wonder what kind of idiots did the work. For this reason Charlie always recommends building for a 640 x 480 monitor (580 pixels fits the width allowing for the other aspects of the display window).

At the very beginning of the process it is important to build a foundation. It is important to know the major categories of the site ahead of time. Putting it down in a flow chart is helpful. It is also a good idea to put the things you can do into a portfolio.

Plug-ins such QuickTime, Flash, MediaPlayer, and RealPlayer are very

dangerous to use. Most people do not know the first thing about setting these up. So do not try to force their use down the users throats. But it is very important to know your audience. If your primary audience is teenagers surfing for music files then they will probably be set up with every plugin on the planet.

Database support for the site opens up new possibilities. One of those is the use of Dynamic Pages. These allow the customer to change the content without knowing html. Other uses are site search engines and ecommerce. Software has to be installed on the server which will talk to the database. While FileMaker Pro will work as ones database program for low traffic sites it does not cut it for larger businesses. Setting up database capability can be relatively inexpensive which means from $20K to $50K.

Questions came up about streaming video. Charlie spoke well of the MacOS X server. The Mac driven Avid systems have put other systems out of business. Charlie said it was each to integrate this with the rest of ones site. In preparing the video Charlie said it was important to spend about $1500 for professional software. He recommended Media Cleaner Pro, Sorenson Pro, and Q-design Pro. A professionally processed and compressed video clip a half hour long would be the same file size as an amateur video clip of just a few seconds.

Extra bandwidth from ones service provider is not something to worry about unless the site is getting over a million hits a month, except when video is being served. Even then it is possible to have the video being served from somewhere else. It is not necessary that one's whole site be served from one location. The site could be on one machine, a database on another, and video served from somewhere else that could handle the bandwidth. During his demonstration Charlie pointed out that different parts of web pages were being served from different computers.

It was interesting to note that when it comes to security the Mac is 99.99 percent secure, while Unix can only be that secure with a full time, very capable engineer. WindowsNT can only be up to 97 percent secure with two full-time engineers. (Recently the Army has reported switched to using the MacOS for serving their site for just the very reason.) Charlie also talked quite a bit about issues related to search engines which was seen as quite valuable by those in attendance.

At the end of the meeting Charlie actually developed a database application for ordering business cards from the ground up complete with logs and real database capabilities. This gave those in attendance more of a "hands on" sense of how the differing systems work together.

Attending the September meeting were Blake Lange, Valerie Burghardt, Carol Sky, Bob Everett, John W. Laughlin, Linden Tucker, Helen Dilley Barsalou, Ann Aiken, Diana Buell, Mary Keene, Karen Howe, Charlie Romero, Kim Stark, Russell Kirsch, Karen L. Klein, Robert Allen, Tom Teague, Kathryn A. Perrin, Ritz Balick, Joshua Limbaugh, Jean Koike, Cherie Worth, David Grusin, and Tammy Ward.

Schedule

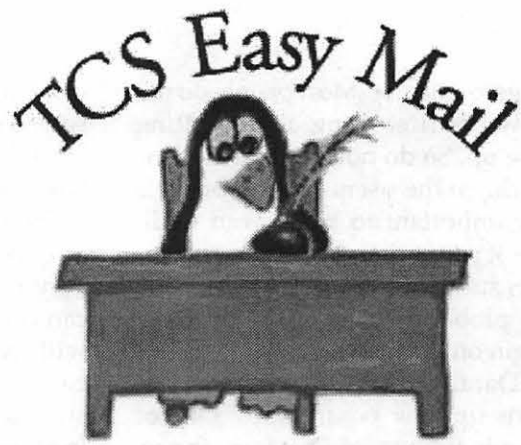
The schedule for the Graphic Arts SIG over the next several months is Saturdays November 13, December—no meeting, and January 8. We will not have a SIG meeting in December so we can support the Computer Show and Sale. Each meeting will be from 10:00am to Noon. The rule of thumb, in case you want to figure out when there will be a meeting, is that the meetings are scheduled the second Saturday of each month except when the Washington Apple Pi has a major activity scheduled for that day.

Directions

Mac Business Solutions is located at 9057 Gaither Road, Gaithersburg, Maryland 20877. The phone number is 301-330-4074. From Interstate 270 and Shady Grove Road go East two lights, make a left onto Gaither Road, then almost immediately turn into the second entrance on the right from the Shady Grove Metro stop it is just a short taxi ride. ■

September's speaker got plenty of attention from SIG members in attendance.

Introducing — TCS Easy Mail: Internet mail without the Internet



Copyright ©1997 Washington, Apple Pi, Ltd.

Would you like to send and receive e-mail, but think it would be too hard to get onto the Internet? Or, do you have relatives or friends who fit this description? Welcome to **TCS Easy Mail**, a new service available to Pi members old or new. It uses the Internet mail program Eudora Light, but without having to learn the Internet. With a simple telephone call, send or receive mail through your Macintosh and modem.

This holiday season some of you may be getting new Macs, and want to pass on your older one to a relative or friend. We can show you how to set up **TCS Easy Mail** on the "previously owned" Mac. So long as it has a hard drive, 4MB of RAM, and a modem, you can use it with **TCS Easy Mail**.

Simple printed instructions will show how to set up **TCS Easy Mail** and how to use Eudora Light. In some cases we may even help you find a modem that is adequate for sending and receiving e-mail. If you know someone who wants e-mail but doesn't even have a Macintosh, we may be able to help find that too. All that they need is a subscription to the Pi's TCS Classic or Explorer service.

Interested? Contact David Harris (david.harris@tcs.wap.org for those who already have e-mail), or call the Pi office (301-986-0300) before the holiday season, or even after it, when the new Mac is actually in your hands. Share the wealth!

*"When I got my first Mac, we had to rub two mice together to send messages. It didn't work at all, and the smoke got in my eyes. But now, with **TCS Easy Mail**, I can use that old Mac to send scanned pictures of my vacation in Newark to Uncle Fred!"*

— A user endorsement from someone just as real as most commercials

From HTML to PDF

Adobe Acrobat Captures the Web

By Dennis Dimick

IMAGINE HAVING a web browser that captures into a single file on your Mac every web page you view, or if you choose, every page of a website. Also imagine opening that captured file in Adobe Acrobat and seeing something that looks and acts just like a website. The links work, the text, images, and graphics all are rendered properly.

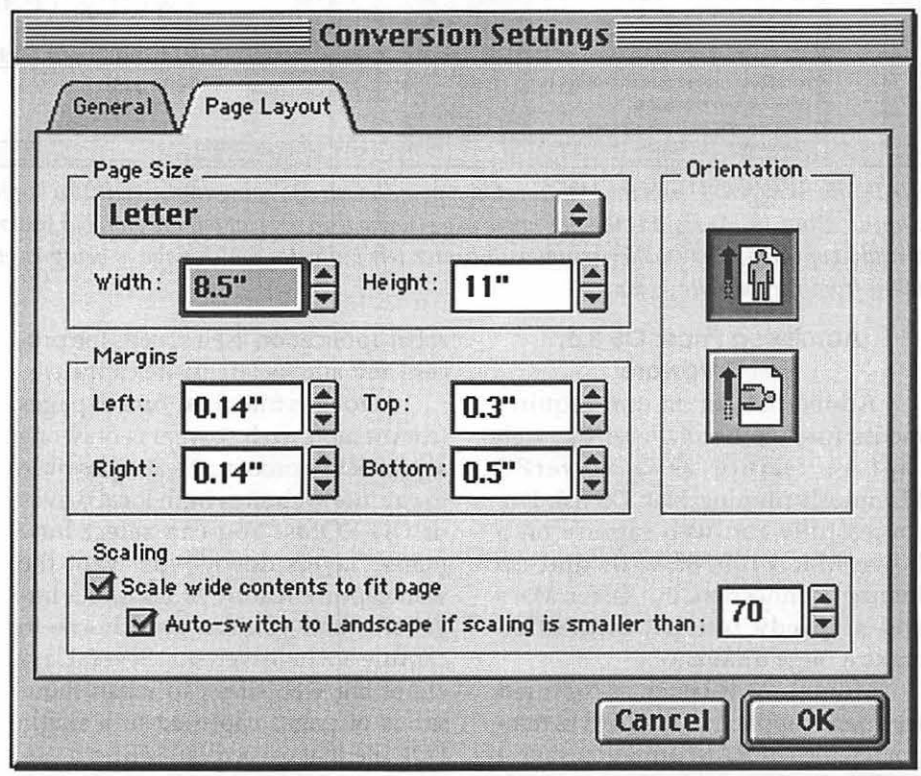
That's what Adobe Systems has finally come up with in a promised set of enhancements for Acrobat 4.0. This new set of free plug-ins for Adobe's electronic document system may change the way you think about and work with the World Wide Web. Further, Adobe has just released a "Create Adobe PDF" desktop printer utility that now allows drag-and-drop creation of PDF from most any program via Acrobat 4.0.

As of this late September writing, a pre-release set of plug-ins available at Adobe's website, www.adobe.com, now allows capture of whole or partial web sites to Acrobat's increasingly ubiquitous PDF (Portable Document Format) files. Of course there are limitations, and these beta plug-ins aren't totally stable. But they do work, and work fairly well.

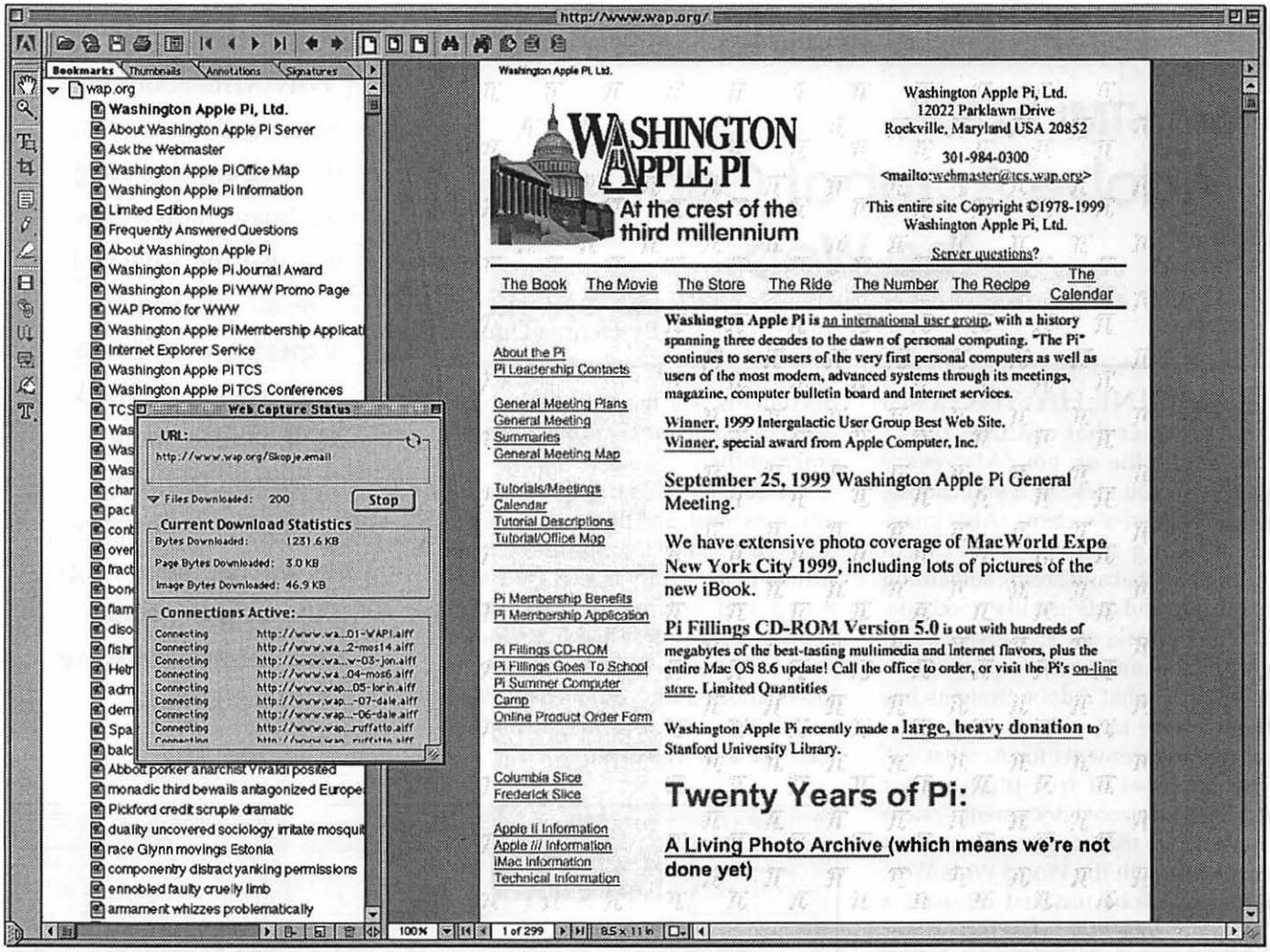
The new plug-ins also enable you to add "digitally-verified" signatures to Acrobat files, to compare versions of PDF documents side-by-side, and to automatically attach PDF files to e-mail. The digital signature verification feature opens the way to creating PDF files on the Mac that can substitute for paper-based legal and commercial documents. All these features have been available on Windows for several months.

Acrobat's "Web Capture" feature intrigues most, and that's what I'll detail here. I'll also describe the "Create Adobe PDF" utility that was just released, and look briefly at its usefulness. If you're interested in the other plug-in features, Adobe's web site has lots of information you can download to a PDF file on your Mac using Acrobat 4.0 and web capture.

"Why write about beta software? In this case the web capture plug-ins may change how you use and save web resources, and my experience so far has shown them to work well, despite an occasional crash. My anecdotal experience shows that these plug-ins are more stable than 'release' software I've owned."



Capture to Fit: When you set up Acrobat's Web Capture Plug-In, you can configure margins and page orientations. It's also possible to scale contents of the captured pages so everything will fit into the page dimensions you set.



WAP Site Snagged: Here's the Washington Apple Pi web site being captured into a single PDF file by Acrobat 4.0 and the new Web Capture Plug-In. At right is the Pi's home page (www.wap.org), at left are Acrobat bookmarks with the title names of every web page already captured. The smaller window at center left indicates which page is being captured, and how many KB of data have been taken from the web site so far.

Admission Price: OS 8.6, Fast Hardware

Adobe lists minimum requirements for Acrobat 4.0 and the web capture feature as a PowerPC Macintosh running Mac OS 8.6. I've successfully run web capture on a PowerMac 7100/80 with dial-up Internet connection, but faster Macs and a speedy Internet connection make a huge difference.

More RAM is better, as captured web pages apparently are held as temporary files in RAM until you save a PDF file to disk. Like other demanding tasks, more RAM given to the Acrobat application itself speeds the process and allows larger site captures.

Acrobat's initial capture of pages from remote web servers is only one aspect of this process. It's also possible to capture web sites from local drives or CD-ROMs. You can select how many "layers down" you want the web capture feature to go into a target site, and you can also choose to capture a whole web site. Several layers of big web sites can mean thousands of pages captured to a single PDF file that exceeds 50 MB.

To understand "layers" of a web site, envision a pyramid. The home page or opening page of a site equates to the single pointed stone at the top of a pyramid. Each layer of stones down from the point stone equates to each layer of a web site behind the home page. The deeper you go, the more information is stored in each descending web layer, just as the lower layers of a pyramid contain more stones, and area, than the layer just above.

If you choose to capture just one layer of a web site, typically all you get is one page, the home page. A two-layer capture will also get all other pages that can be linked to directly

from the home page. A three-layer capture will also bring in pages directly linked to from pages on the second layer, and so on. The lower into a site you dig, the more pages you typically find in each layer.

As a web capture test, I set up a PowerMac G3/333 to grab a five-layer deep piece of the site of The Sierra Club, a San Francisco-based environmental advocacy group. (www.sierraclub.org.) Acrobat had reeled in 6883 pages when I stopped the capture after two hours. It then took this G3/333 four hours to save the PDF to disk. The Mac had 90 megabytes of RAM allocated to Acrobat 4.0 and the resulting PDF file was 56 MB in size.

Despite the time involved, the links on the PDF-based pages do work, and the pages look just like Sierra Club's real web site. Apparently the excessive time required in saving these files is so Acrobat can compress captured data and weave together thousands of hypertext links from captured pages into one file.

Over a couple of weeks, part or all of at least 10 other sites were subjected to this Acrobat web capture treatment. In general, smaller sites converted quickly, but bigger captures took longer, often much longer as the number of captured pages rose into the thousands from sites.

If you have an existing web capture PDF file and click on a link for a page not already captured, web capture will automatically add the new page or pages to the existing PDF file if you have an open Internet connection. Web capture can also be set up to go back to the site and update, in your PDF file, all pages that have changed since the original web capture.

Not a Total Save

That said, Acrobat web capture has limitations. It can easily handle HTML pages with embedded graphics like JPEG and GIF files, and pages with PDF files attached. Only one frame of animated GIFs will be brought in, and web capture appears incapable of handling pages with Macromedia Shockwave files. If a QuickTime movie is embedded in a web page, the page will capture but the movie will not. Perhaps there is a way to configure Acrobat web capture to recognize these file types but I could not find a way to set this up.

I've found two problems, no doubt due to web capture's "pre-release" status. After a site capture is complete all menu bar titles in the Acrobat program may gray out and the only solution is to quit and restart Acrobat. Also, if you click on a link in a captured web file that links to a web page outside the PDF file, your Mac may crash if it's not hooked to an open Internet connection.

One-Stop PDF Creation

Until now it's been a several-step process to create PDF files from existing documents on the Mac. For example, if you have a Quark layout or Word document, the process typically has been to "print" to a Postscript file and then manually take it to Acrobat Distiller for final creation of a PDF file.

This new Create Adobe PDF simplifies the process. It's an extension to the Adobe PS 8.6 printer driver and Acrobat 4.0 package, and if you have both of these installed, all you need to do is drag-and-drop an existing document on the "Create Adobe PDF" desktop printer icon. The next thing you know there is a perfectly rendered PDF file on your desktop.

Adobe's PS 8.6 printer driver comes with the Acrobat 4.0 package and must be used in preference to the Apple LaserWriter printer driver if you plan to use Create Adobe PDF software.

Web Capture Shows Promise

Why write about beta software? In this case the web capture plug-ins may change how you use and save web resources, and my experience so far has shown them to work well, despite an occasional crash. My anecdotal experience shows that these plug-ins are more stable than "release" software I've owned. For example, did you ever try Mac OS 7.5.2, Adobe Premiere 5.0 or Bryce 3.0?

Of all features in Mac Acrobat 4.0, web capture is the one I was most disappointed about not having in the original release last spring. Many Macintosh users, including me, wrote Adobe Systems to complain about the lack of this new feature. It is heartening to know they listen, and are trying to fix Mac Acrobat's shortcomings.

As long as you remember the Mac OS 8.6 and hardware and RAM demands of Acrobat 4.0 web capture, and you can be patient when time comes to save potentially huge, complex captured files, you will find this new addition to Adobe Acrobat a useful trick indeed. ■

Acrobat 4.0
Adobe Systems, Inc.
San Jose, CA
www.adobe.com

Street Price $ 230
Upgrade $ 90

Web Capture Plug-Ins: Free Download
Create Adobe PDF software: Free Download

—Power Macintosh with Mac OS 7.5.3 for Acrobat 4.0
—Power Macintosh with Mac OS 8.6 for Web Capture
—12 MB application RAM recommended, 60 MB hard disk space
—CD-ROM required.

WAP member Dennis Dimick wrote about the limited feature set of Acrobat 4.0 in the July-August issue of the Journal. He also has written on QuickTime and imaging-related topics. He can be reached via email at ddimick@aol.com.

washington Apple pi general meetings

November
Adobe InDesign
November 20, 1999

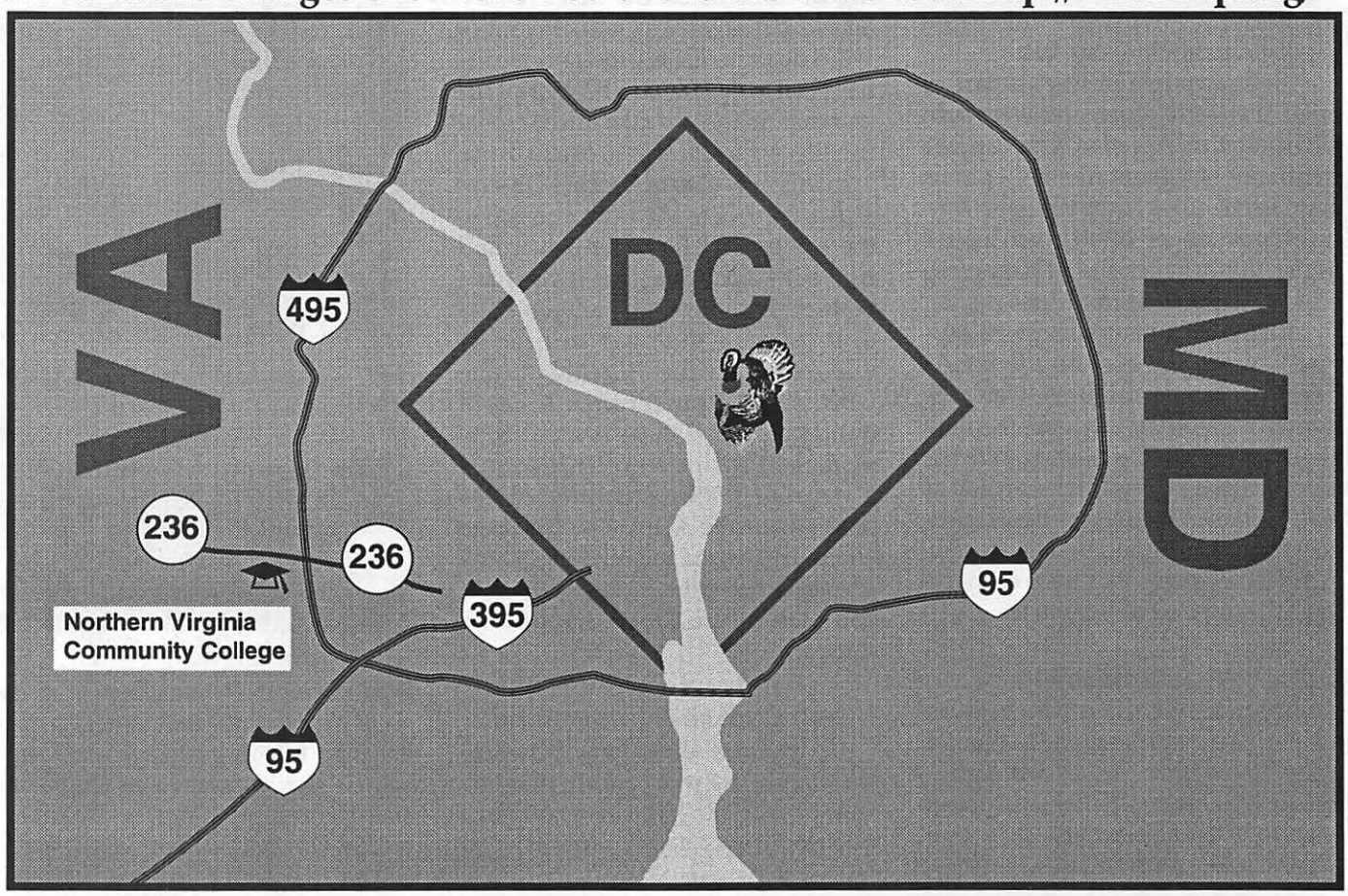
December
Computer Show & Sale!
Dec. 11, 1999

Northern Virginia Comm. College
Community & Cultural Center Aud.
8333 Little River Turnpike
Annandale, VA

Getting to NoVa:
take Exit 6 West
onto VA 236
(Little River Turnpike)

2000
Toward a new century with
Washington Apple Pi

For schedule changes check the TCS or the Pi's Website at http://www.wap.org/



Spells for Wizards: A Review of Books

© 1999 Lawrence I. Charters

WITH JUST OVER a year left of this millennium, the world seems to be both rushing forward and looking back at the same time. We are rushing forward into an era of pervasive computing, with multiple microcomputers in the home, microprocessors in almost every electrical gadget at home and work, and a steadily declining number of programmers and engineers who can claim to understand what these machines are doing. At the same time, we are looking back, a year too early, at the "past millennium," with a sense of wonder over what we have done, and a sense of dread over some of those same deeds.

A Deepness in the Sky

Vernor Vinge, a professor of mathematics when he isn't writing science fiction, has long been one of the most startling visionaries on the subject of people and computers. Almost twenty years ago he wrote *True Names*, a novella that so perfectly described the coming on-line, role-playing, virtual reality world that other writers were forced to either imitate the story or come up with fuzzy, muddled alternatives. Nominated for both the Hugo and Nebula awards, it is in theory something of a murder mystery, but is also about AOL, Netscape, Microsoft, and other things that hadn't been invented when the story was written.

Now jump ahead a couple thousand years. Vinge's latest work, *A Deepness in the Sky*, is another visionary work. On one level, it is about a galaxy-spanning, loosely defined family of traders who bind civilization together through goods, services, gossip and information. It is also a story about a rare "on/off" star that has puzzled scientists for thousands of years with bursts of activity and long periods of cold quiet. Throw in a very unusual race of hyperactive spiders, a clutch of geniuses (human and spider), and some tyrants who radically redefine the idea of micromanagement and you have a heck of a story.

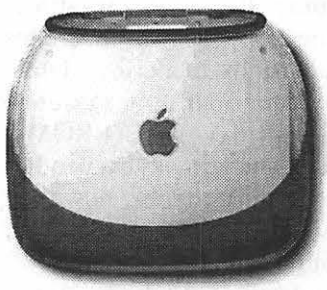
But behind all this, and binding it all together, is the concept of information as an asset. Managing information is at the heart of *A Deepness in the Sky*, using networks and communications webs, and some truly small microcomputers. Information management is used as a tool for the ultimate evil, as well as for a resplendent good. You'll learn a lot about computers and information theory, with far better plot, setting and character than most such works on the subject. Highly recommended for anyone interested in the future.

Sad Macs, Bombs and Other Disasters

For those impossibly practical souls more interested in the present, Ted Landau's *Sad Macs, Bombs and Other Disasters*, 3rd ed., is one of those rare books that you may need to buy more than once. At nearly a thousand pages, it is intimidating at first glance, and the character development isn't nearly as impressive as Vinge's work. On the other hand, the sheer genius and scope of the volume becomes more impressive over time; this is a book that you use until it falls apart, and then you get a replacement.

Of what value, you might ask, is a book that predates Mac OS 8? The glib answer is: most of the world predates Mac OS 8. A more relevant answer is: there are millions of Macs out there that are covered by this book and, until an update is released, no other volume offers such a wealth of material on keeping such machines happy and healthy. In glorious detail, Landau covers operating systems, utilities, disk drives, CD-ROMs, video, sound, and virtually every other subject, explaining not only how they work but also how they fail to work, and what to do about the failure.

The genius of the book, aside from the sheer weight of knowledge, is the organization. The detailed Table of Contents fills a dozen pages. An excellent Symptom Index fills sixteen pages, and these pages are printed on gray paper so they are easy to find. Another 28 pages are devoted to the superbly cross-referenced main index, properly located at the back of the volume, with no irritating pages of commercials cluttering it up. One of the best-known Mac Web sites, MacFixit (http://www.macfixit.com) is essentially an electronic extension of the book.



If you, or a friend, or a relative, have an "older Mac" (say, from a Power Mac 7200 clear back to the dawn of the Mac world in 1984), you need to track down a copy of this book. Sooner or later, you'll have a need for information on, say, the mysterious CUDA button, documented here and almost nowhere else. Plus, if you memorize all 18 Fix-It chapters in the book (each chapter is only a few pages), you'll be fully qualified as a Mac guru.

The Macintosh Bible

Not quite as impressive is Sharon Zardetto Aker's *The Macintosh Bible*, 7th edition. With over a million copies in print, the various editions of *The Macintosh Bible* are, obviously, huge sellers, as well as being, well, huge. While they contain some troubleshooting information, it is far less extensive than Landau's book. Instead, the emphasis is on descriptive material.

Technically speaking, it is really an encyclopedia of "things Macintosh," explaining how to do everyday tasks ranging from formatting a floppy (obviously not for recent machines) to arranging icons on your desktop. The breadth of information is impressive, though at times the depth is somewhat shallow.

If this praise seems a bit faint, keep in mind that this is an excellent book. The reservations are mostly philosophical: do users really need massive, all-encompassing books that cover all aspects of a computer to some degree? Or are they better served by more focused volumes? Sales figures indicate that *The Macintosh Bible* and similar works, such as the massive *Macworld Mac Secrets* books by IDG Books, are huge commercial successes. But, without the concentrated focus of more specialized works, few people seem to use these books once they leave the bookstore.

HTML Master Reference

One book that aims for heavy use is Heather Williamson's *HTML Master Reference*, a massive volume (over 1300 pages) issued in hardcover. The move to hardcover is probably a good idea; IDG books have a reputation as "bag books" because, due to flimsy spines, the paperback versions often need to be stored in a paper sack after moderate use.

As the title suggests, the book aims to be *the* comprehensive reference on HyperText Markup Language. This is a goal not without controversy; HTML was originally intended to open up the Internet to non-specialists, and was supposed to be vendor neutral, equally at home with every hardware and software product.

In practice, Netscape and Microsoft, the two leading commercial vendors of HTML tools, have created different "dialects" of HTML, and neither dialect follows the published standards. To take but one example, Netscape Communicator 4.7 has only modest support for Cascading Style Sheets (CSS), which are supposed to be part of HTML 4.0. Microsoft has fairly extensive support for Cascading Style Sheets in Internet Explorer 4.5 and later — but Microsoft's dialect doesn't even try to follow the HTML 4.0 specification. Instead of working towards a true World Wide Web, Microsoft, at least, appears to be trying to carve out a gigantic private, proprietary network.

Unfortunately, these sectarian wars are given insufficient attention in Williamson's book. Endless pages are spent describing, in alphabetical order, every single tag and tag element. Rarely, however, does she mention how the two main camps differ in how they interpret, or fail to interpret, various tags and tag elements.

When she does note such differences, they are at the end of an entry, as are cross-reference notes. While special icons are used to denote cross-reference entries, JavaScript entries, important notes and tips, it is still frustrating to plow through several pages covering a complex tag, only to discover that Internet Explorer, or Netscape, or both, don't pay any attention to the standard syntax.

Another major irritant is the index. Or, rather, the lack of an index. The CIP (Cataloging In Publication) entry on the verso of the title page states the book "Includes index." IDG's own promotional material indicates it has an index. But there is no index of any sort. And no, arranging the entries in alphabetical order is not a substitute.

What you will find at the back of the book (instead of, ahem, an index) are several pages describing Internet Explorer color names and values (with no mention of the fact that they are not, strictly speaking, standard HTML). Yet another 56 pages are devoted to describing unicode character codes (with no mention of the fact that almost nothing supports displaying the listed characters). Padding the

book with such tables is probably easier than providing an index, but not nearly as useful. Stuck to the back cover of the book is a CD-ROM with working and trial copies of various Windows and Mac HTML tools, most of which you can obtain from other sources for free.

This had the potential of being a valuable reference, but it fails in many, very annoying little ways. For example, the Contents page is a masterpiece of uselessness: it states that "HTML Master Reference" begins on page 1. The next entry is listed as simply "Appendix A," on page 1263, with nary a hint of what this might contain or what might occupy the 1261 intervening pages, followed by the equally anonymous and obscure Appendices B through F. What was the point?

Apache Server Administrator's Handbook

So far, we've looked at 4,000 pages of material, ranging from science fiction to HTML references, and all arguably aimed at general readers. Our last entry, *Apache Server Administrator's Handbook*, by Mohammed J. Kabir, is directed toward a more specialized audience. Apache, arguably the most popular Web server in the world, normally runs on UNIX, Linux and (occasionally) Windows NT, so why would Macintosh readers even care about administering an Apache server?

Mac OS X Server is the answer. This awkwardly-named software release, which Apple aims at software developers and systems administrators, is a complete UNIX environment, designed to run on desktop Power Macintosh G3 computers. Included in Mac OS X Server is, among many other things, a copy of Apache. Also included is the full set of Apache documentation in the form of hundreds of Web pages, written in the typically terse, cryptic style for which UNIX is infamous.

Kabir assumes, reasonably so, that you already know how to operate the host operating system, be that Windows NT, Linux or UNIX (or, unmentioned, Mac OS X Server), so he ignores that subject entirely. Instead, he details exactly how to install and configure Apache, how to use the many server side includes (SSI) bundled with Apache, and delves into common, uncommon and suggested administrative tasks.

There are quite a number of books on Apache (including the frightening *Apache for Dummies*), but Kabir's volume is unique: it is actually useful. It doesn't try to cover every little piece of trivia, nor does it brush over the hard parts in favor of the highlights. Instead, as the title suggests, it is a handbook for an Apache administrator, a resource designed for frequent reference.

The organization is excellent, and the volume has a good index and table of contents. True, the table of contents lists the appendices in a less than useful manner ("Appendix A," "Appendix B," etc.), but this is an exception. Who knows, maybe it is an IDG policy...

As Arthur C. Clarke (among others) has noted, the difference between magic and technology is mostly one of knowledge. For those who treasure the sense of wonder that magic offers, be sure and read Vinge's book. For those who want to cast their own spells and inspire others to wonder, read Vinge's book — as well as the others.

The world needs all the wizards it can get.

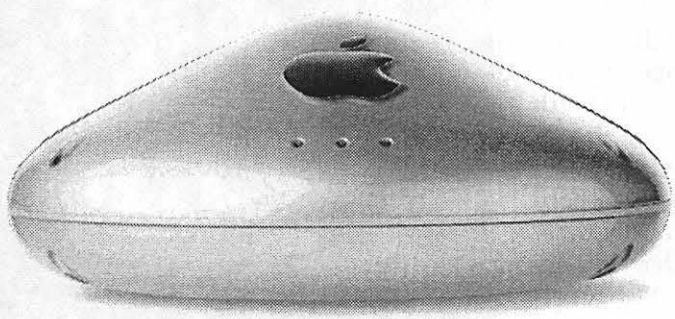
Vernor Vinge, *A Deepness in the Sky*, TOR, 1999, 606 pp., $27.95, ISBN 0-312-85683-0

Ted Landau, *Sad Macs, Bombs and Other Disasters*, 3rd ed., Peachpit Press, 1997, xxviii, 964 pp., $29.95, ISBN 0-201-68810-7

Sharon Zardetto Aker, *The Macintosh Bible*, 7th ed., Peachpit Press, 1998, xiv, 1024 pp., $34.99, ISBN 0-201-87483-0

Heather Williamson, *HTML Master Reference*, IDG Books, 1999, 1362 pp., $59.99 (includes CD-ROM), ISDN 0-7645-3256-1

Mohammed J. Kabir, *Apache Server Administrator's Handbook*, IDG Books, 1999, xxviii, 547 pp., $29.99, ISBN 0-7645-3306-1 ■



Our thanks to Apple Computer for the photos in this article.

Starry Night: Deluxe and Pro

by David. L. Harris

IN THE September/October *Journal* I described how to track spacecraft with *Starry Night Deluxe*. When at MacWorld Expo in July I mentioned to a Sienna Software representative that I had written that article, I was given an evaluation copy of the new Starry *Night Pro*. *Pro* is sort of an industrial-strength version of *Deluxe*. This article describes a few differences I have found between the two programs, although it will not be a thorough review, as I have not fully explored either program (and probably never will, considering how much there is to explore).

Pro vs. Deluxe

Starry Night Pro has complete Hipparcos and Tycho stellar databases, which include star properties that *Deluxe* does not include; this makes possible displaying the Hertzsprung-Russell diagrams (about which more later) for stars in the field of view in *Pro*. *Pro* includes more Earth satellites, comets (but not Halley nor Hyakutake—I suppose they were more in the news when *Deluxe* came out), and asteroids than *Deluxe*. Because *Pro* uses text files for data rather than *Deluxe*'s proprietary format, it has the ability to update orbital information for multiple objects from widely available sources, rather than only making it possible to manually update them one-at-a-time, as with *Deluxe*. The Planets palette in *Pro* is more conveniently organized than in *Deluxe*: when you add interplanetary spacecraft, they go automatically into a (solar) "Satellites" folder. If comets are added they go into the Comets folder. *Pro* allows you to import pictures of deep-space objects, which will automatically size to fit into its sky view. You can view not only from the vicinity of the solar system, but also from anywhere up to 20,000 light years from it—that's a good fraction of the galaxy radius. Printing charts is said to be more advanced. The local scene that appears in your Earth-based viewing window is more customizable. *Pro* requires a PowerPC, although *Deluxe* does not.

Back to the past

Readers of my earlier article may remember that the prediction made by *Starry Night Deluxe* of the time of the spacecraft Cassini's encounter with Earth, as seen from my vantage point at 25 AU north of the sun, was several hours later than the Jet Propulsion Laboratory's prediction and actual time of flyby. I had thought this was due to my data being obtained before the occurrence of most of the mid-course corrections (rocket firings) to be made to Cassini's trajectory between its Venus and Earth encounters. However, with later and later data, *Starry Night*'s predicted time did not change much. Then I discovered that if I changed the observation point to Earth or to Cassini, *Starry Night*'s predicted encounter time was very close to the actual time. I did not understand the difference until I got an e-mail reply from Tom Andersen, one of Sienna Software's people. He explained that *Starry Night* took into account the finite speed of light, and that my observation point at 25 AU away from the event meant that it would be seen there more than three hours later, the time it takes for light to travel that distance. It was something that had not occurred to me, and I did not know that Starry Night would take it into account. But it must do so if it is to give an accurate portrayal of events from any point in space!

"However, with later and later data, *Starry Night*'s predicted time did not change much. Then I discovered that if I changed the observation point to Earth or to Cassini, *Starry Night*'s predicted encounter time was very close to the actual time."

Pro

Here are some of the differences between *Pro* and *Deluxe* that I noticed.

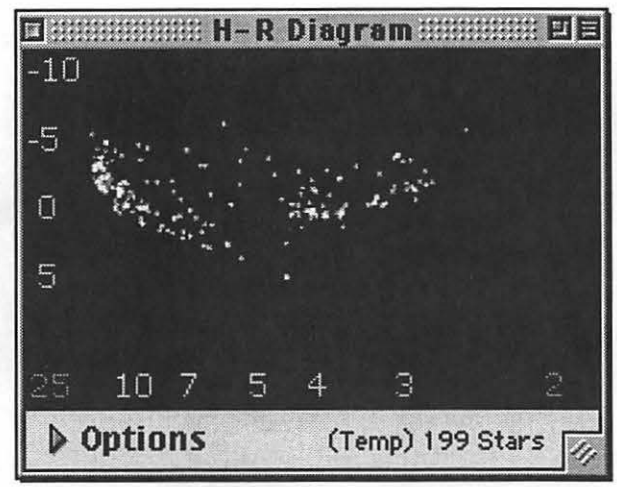


Figure 1: basic Hertzsprung-Russell diagram

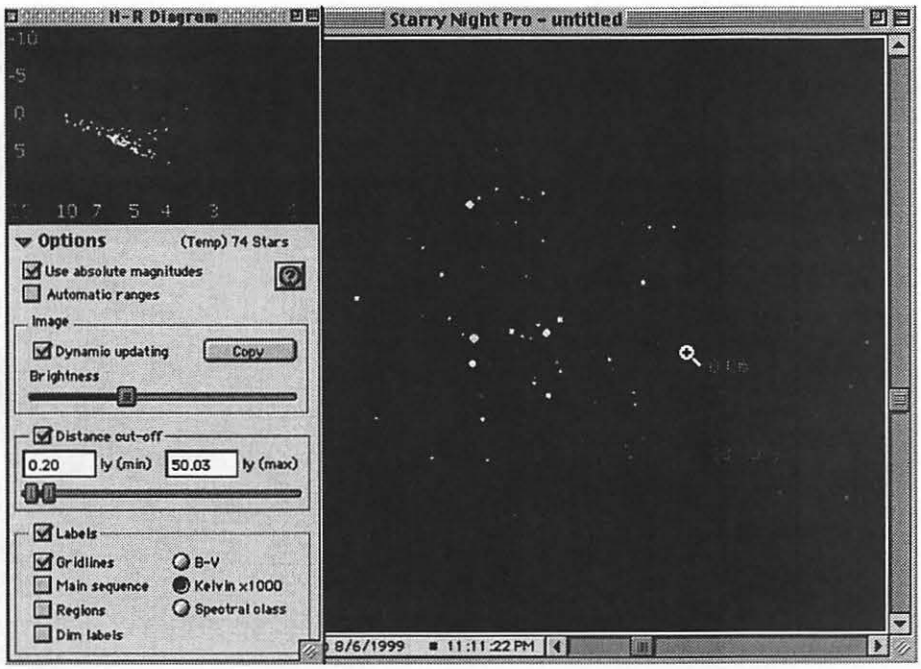


Figure 2: H-R diagram for nearby stars (Capella)

Manual

I personally found the printed manual that came with *Deluxe*, where it covered the same topics as the one that accompanied *Pro*, generally to be easier to understand. Somehow *Deluxe*'s explanations were more straightforward and better-illustrated. *Pro*'s manual also had a mistake in describing the Time functions; that will probably be corrected in a future manual.

H-R diagram vs Mouse tools

In *Deluxe* the tool window has a Mouse tool that shows position and other information for the onscreen cursor. As you move the cursor, this updates. *Pro* has no such tool; it is replaced by a Hertzsprung-Russell tool. Some of the pointer information is available in other ways in *Pro*, but not in such an easily-seen fashion (as far as I explored). A Hertzsprung-Russell diagram is a plot of absolute magnitudes (intrinsic brightness) versus temperature (or spectral color) for whatever stars are within the field of view. Danish astronomer Ejnar Hertzsprung and American astronomer Henry Russell discovered that a pattern emerges when you plot star properties this way. Most stars that we see in the night sky fall along a specific region of the H-R diagram called the "main sequence." See Figure 1, where the main sequence runs diagonally from lower center to mid-upper left. Cooler, redder stars are to the right; brightness increases towards the top. Other stars fall outside the main sequence; they may be red giants, white dwarfs, or other oddballs. Astrophysicists have developed theories which predict the "travels" of stars within a H-R diagram during their lifetimes; the courses they will take depend on their masses, and to some extent on their compositions, when they were first formed. Average, ordinary stars such as the sun will mostly stay on the main sequence, until very late in their lives, while other stars will rapidly move off of it into regions where they are less stable.

In order to put a star in its place on a Hertzsprung-Russell diagram, you must know its spectral type (from the spectrum of its light) and absolute magnitude (brightness). To know its magnitude, you must know how far away the star is, since only then will you be able to determine its intrinsic brightness from how bright it appears from Earth. Determining, or estimating, distances in space is not easy, nor entirely reliable; it gets harder the farther the object is from us. Only with the large database of star properties obtained with detailed surveys, which *Starry Night Pro* has, can a H-R diagram be shown.

The Hertzsprung-Russell tool in *Starry Night Pro* produces more than just a static diagram. Figure 2 shows a H-R diagram for all the stars within 50 light years of the sun; when you click on a star shown in the window on the right (Capella, in this case), that star's location in the H-R diagram is shown (on the left) by a red dot. Conversely, if you click on a dot in the H-R diagram, a red circle will flash a couple of times around the star in the picture to the right. You can see that Capella is not a main sequence star. Figure 3 shows that our sun is.

I am not sure how I feel about the

"*Pro* is sort of an industrial-strength version of *Deluxe*. This article describes a few differences I have found between the two programs, although it will not be a thorough review, as I have not fully explored either program ..."

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replacement of *Deluxe*'s mouse tool by *Pro*'s H-R tool. It seems to me a rather esoteric item for most people who will use the program. I thought it might be useful to show the differences in star populations between a wide field of stars and something like M13, the globular star cluster in the constellation Hercules, as seen from Earth. That is because a globular (globe-like) cluster might be expected to consist of stars all formed at about the same time, and having similar histories. Such a group might have a different (and more uniform) spectral signature than an average field of stars. With this in mind I tried to examine the H-R diagram of M13 in *Starry Night Pro*, by zooming in on it to exclude other stars from the field of view. No diagram. Why? Because M13 in *Starry Night Pro*, like other such objects, is a **picture**. There is no star information in it. Arg.

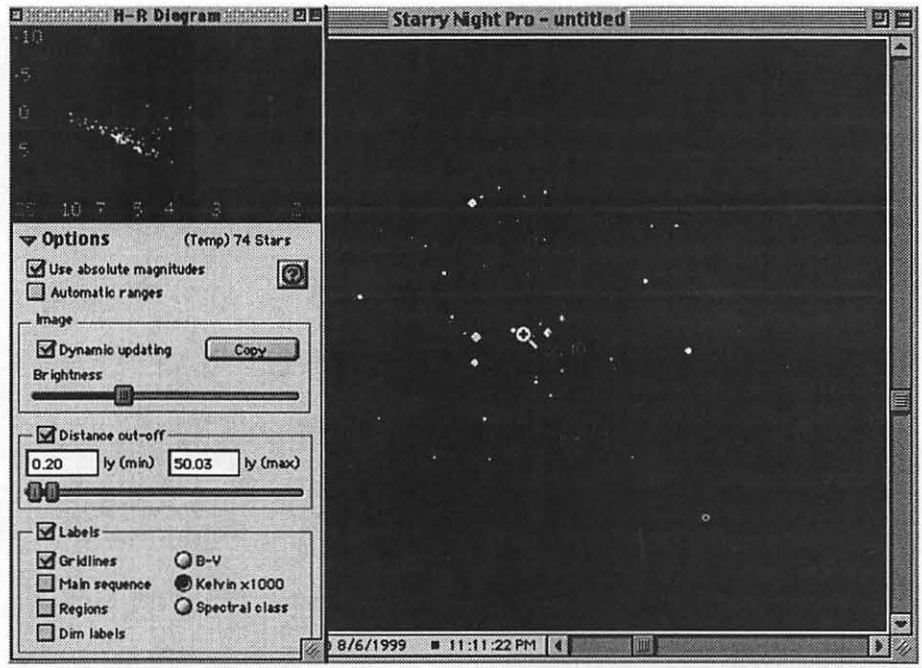


Figure 3: H-R diagram for nearby stars (sun)

QuickTime movies

In both *Pro* and *Deluxe* you can create QuickTime movies, and choose among several varieties of compression modes (or none) to make the resulting movie files smaller. However, with my copy of *Pro*, the two Intel modes have problems (confirmed by Sienna Software, at least for QuickTime 4). When you choose an area of the screen to turn into a movie, the actual area captured in the movie is offset to the left of what you chose, so much so that if your area is too small, the object you thought you were filming is entirely offscreen to the right. In addition, those two compression modes produced false colors. No such problems were evident with *Starry Night Deluxe*. The solution in *Pro*, until Sienna fixes it, is to use another compression method, of which there are several.

Another QuickTime movie change is that, in *Deluxe*, movie preferences, where you select the compression type as well as several other parameters, is accessed simply by double-clicking on the movie tool. In *Pro*, by contrast, doing that selects the entire front window as the subject of a movie. To change movie parameters you must go to the File menu, to Preferences, to Movies... in order to change settings. It is not as convenient, especially when you are testing different compression modes to determine the quality of the resulting movies.

Satellites up close

Starry Night Pro comes with a large complement of Earth satellites already installed. If you select Mir (with the original satellite text file in *Pro*'s Data folder) and zoom in on it, you will see a nice picture of that soon-to-be-history space station. You cannot observe the station from different angles, though. If you select the new ISS (International Space Station) you will see a nice picture of it. But if you select any other satellite and do the same, you will see the same ISS picture. Evidently *Pro* only has two different pictures of Earth satellites.

Incidentally, if you observe the Earth from a few thousand kilometers, and let the time run, many little blue dots (satellites) will be seen orbiting. It is amazing how many of them there are!

Finally

These are just a few of the areas of *Starry Night Pro* where I explored and found differences with *Starry Night Deluxe*. Three versions of *Starry Night* are actually available: *Basic*, which can be downloaded from <http://www.siennasoft.com/>, *Deluxe*, and *Pro*, both of which come on CDs. If you have a PowerPC, and are willing to spend the extra money, you should buy *Pro*. Although I found a few bugs, and a few places where its interface didn't suit me as well as *Deluxe*'s, if you had never seen *Deluxe* you wouldn't even notice those. And *Pro* includes more data and has more capabilities than *Deluxe*. *Basic*'s list price is $34; *Deluxe* is $89.95, *Pro* is $149. ■

Army Adopts Macintosh for World Wide Web

The following article is taken verbatim from ArmyLink, the Official Web site of the Office of the Army Chief of Public Affairs (OCPA).

Web page hacker arrested, government sites becoming more secure

by Sgt. 1st Class Connie E. Dickey

WASHINGTON (Army News Service, Sept. 1, 1999) - Working from information provided by the U.S. Army's Criminal Investigation Command, FBI agents arrested a 19-year-old Wisconsin man Aug. 30 for malicious altering of a U.S. Army Web page.

The agents identified the Green Bay man as the co-founder of a hacker organization known as "Global Hell."

The arrest capped a two-month investigation led by Army CID agents, after an unidentified intruder gained illegal access to the Army Home Page June 28 and modified its contents. The intruder also gained access to an unclassified Army network and removed and modified computer files to prevent detection.

Since the case is still ongoing, Christopher Unger, web site administrator for the Army Home Page, didn't want to talk about specifics of what the hacker did to the web page or what the Army is doing to protect its sites from future hackers. However, he said the Army has moved its web sites to a more secure platform. The Army had been using Windows NT and is currently using Mac OS servers running WebSTAR web server software for its home page web site.

Unger said the reason for choosing this particular server and software is that according to the World Wide Web Consortium, it is more secure than its counterparts. According to the Consortium's published reports on its findings, Macintosh does not have a command shell, and because it does not allow remote logins, it is more secure than other platforms. The report also said the Consortium has found no specific security problems in either the software or the server.

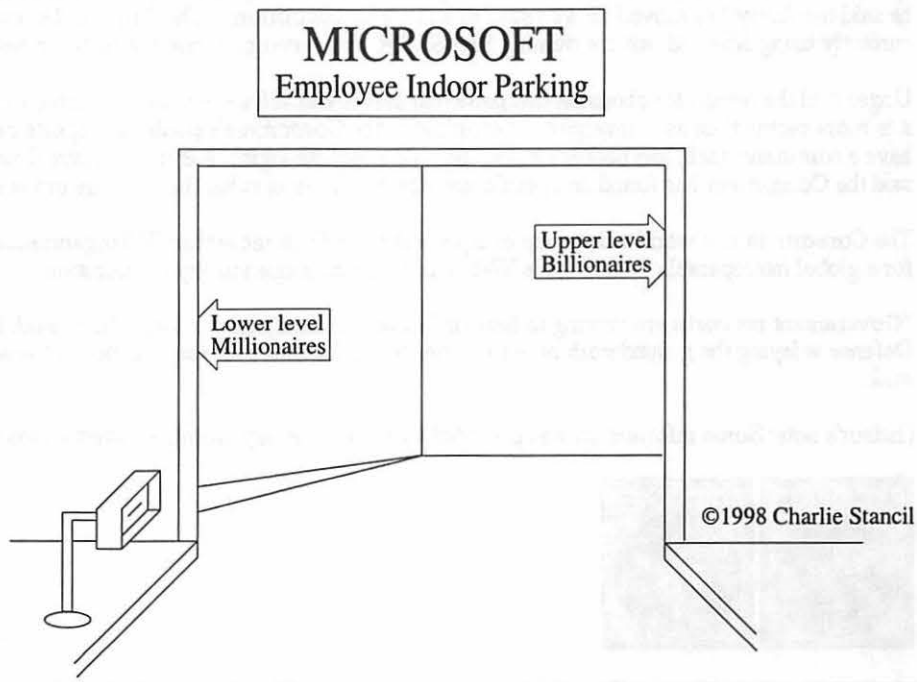
The Consortium is a worldwide group of representatives from more than 350 organizations that provide the infrastructure for a global interoperable World Wide Web. Membership is open to any organization.

"Government networks are inviting to hackers because of their high profile," Unger said. However, the Department of Defense is laying the groundwork now for more secure Internet sites that will prevent unauthorized access to information, he said.

(Editor's note: Some information was provided by the U.S. Army Criminal Investigation Command.)

From: http://www.dtic.mil/armylink/news/Sep1999/a19990901hacker.html

[Note: Washington Apple Pi Labs verified via the Internet that the U.S. Army Web site, http://www.army.mil, is running WebSTAR 4.0 on Mac OS. The article quotes Christopher Unger, Web site administrator for the Army home page, as referring to a World Wide Web Consortium finding that the Macintosh operating system is more secure; a brief discussion of this can be found on the Consortium's Web site at: http://www.w3.org/Security/faq/wwwsf1.html#Q3 and http://www.w3.org/Security/faq/wwwsf8.html#Q84]



Netscape: Web page hacker arrested, government sites becoming more secure

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ArmyLINK Army News

Networking Made Simple: Ethernet Networking

© 1999 Lawrence I. Charters

Episode XXI: Crossover Cables

Q: I have a Power Macintosh G3 and a StarMax 3000/160, and I want them to talk to each other. Someone told me they both needed an Ethernet card, so I went out and bought two [name brand] 10/100BASE-T PCI cards. Now what?

A: Most StarMax computers shipped with an Ethernet card, and all Power Mac G3s have built-in Ethernet, so take at least one of the cards back to where you bought it and get a refund. Use the refund to buy a 10BASE-T Ethernet hub.

Q: [Pant, pant] OK, I got the refund. But they said what I really needed was a crossover cable, so they sold me one of those. They said it was cheaper.

A: There are things that are cheap, and there are things that are easy, and there are things that are flexible. Aside from chewing gum, few things are all three. Take the crossover cable back and get an Ethernet hub. Oh, and get two CAT5 Ethernet 10BASE-T cables.

Q: [Pant, pant, pant] OK, I did that. It cost more money than the crossover cable. It better be worth it.

A: It is.

Q: Now what?

A: Plug the power cord of the Ethernet hub into power. If your hub has blinky lights (most do) a green light should come on, somewhere. Now plug one end of both cables into the hub. Then plug the other end of one cable into your Power Mac G3 and the end of the second cable into your StarMax.

Q: Plug it in where?

A: On the hub, you should find three or more jacks that look like oversized telephone cable jacks. Plug one end of each cable into a jack. The cable can only go in one way (unless you use way, way too much force).

On the back of both your Power Mac G3 and your StarMax, you should find a single jack that looks just like the ones on the Ethernet hub. Plug the other end of the cable into this jack. It is usually labeled (on Macs) with an icon that looks something like <•••>.

Q: Aha! OK, I did that, but now I have some leftover jacks on the Ethernet hub.

A: That's fine.

Q: Should I plug a telephone cord into one of the leftover jacks?

A: No! Never plug a telephone cord into an Ethernet jack. Never.

Q: Just asking. Are the computers talking to each other yet?

A: Not unless you've told them to do so. Let's assume you haven't and go through the steps.

1) On the Power Macintosh G3, go to the Apple Menu, then Control Panels, then AppleTalk.
2) Set the **Connect via:** menu to Ethernet, then close the AppleTalk control panel.
3) Now go to the Apple Menu, then Control Panels, then File Sharing.
4) Under Network Identity, type your own name as Owner Name.
5) Type something as a password. Remember what you type. Do not leave the password blank.
6) Type in a name for the computer. Call it whatever you want. Close the File Sharing control panel.

Then repeat these steps on the StarMax.

Q: This worked on the G3, but the StarMax says there is already a computer named "Lady Godiva." How does it know that?

A: I'm guessing you named the G3 "Lady Godiva," right? You can name the StarMax anything you want as long as it is *different* from the G3.

Q: OK. Now what?

"There are things that are cheap, and there are things that are easy, and there are things that are flexible. Aside from chewing gum, few things are all three. Take the crossover cable back and get an Ethernet hub."

A: On the Power Mac G3, go to the Apple Menu, Control Panels, File Sharing, and press the Start button under **File Sharing off.**

Q. But the files I want to share are on the StarMax.

A: Trust me.

Q: OK, I did that. Now what?

A: It may take a few minutes for file sharing to start, especially if you have lots of files on the Power Mac G3. While it is starting up, go back to the StarMax and do the following:

1) Go to the Apple Menu, and select Chooser.
2) In the Chooser, select the AppleShare icon.
3) Your G3 ("Lady Godiva") should show up in the right-hand panel of the Chooser.
4) Double-click on "Lady Godiva."
5) Enter your name and password.

Q: I got a message that said something about "Unknown user or incorrect password."

A: You need to type, exactly, the same name and password that you entered in the File Sharing control panel on the Power Mac G3. The password is also case-sensitive.

Q: [Pant, pant, pant] I don't remember what I typed as a password. What do I do?

A: Go back and type a new password in the File Sharing control panel on the G3.

Q: [Pant, pant, pant] This is tough. OK, I did that.

A: Now, on the StarMax, go back to the Chooser, select AppleShare, double-click on "Lady Godiva," and enter your name and password.

Q: OK. [Pant, pant] I did that. A box popped up and had "Macintosh HD" in it.

A: That's the hard drive on your Power Macintosh G3. Double-click on it.

Q: I did that. Nothing happened.

A: If you look at the desktop on your StarMax, you should see the Power Mac G3 hard drive.

Q: [Pant, pant, pant, pant] Oh, wow! Something's wrong: I now have two hard drives named "Macintosh HD."

A: One of those probably is for the StarMax, and the other is for your G3.

Q: How can I tell which is which?

A: The one closest to the top of the screen probably belongs to the local drive, and the other is from the G3. I highly recommend that you rename your hard drives to anything *but* Macintosh HD. Name them after your cat. Name them after a favorite color. Name them the same thing you typed in as the Computer Name in File Sharing.

To rename a hard drive, just click on the name, select the whole name, then type over the top.

Q: Oops. My StarMax now has the name of "MacintChocolateosh HD."

A: You need to erase the old name first, then type in the new name.

Q: OK, I did that. [Pant, pant] But now it won't let me rename the hard drive on the G3.

A: You can't rename a hard disk if File Sharing is turned on. Rename it later.

"You need to type, exactly, the same name and password that you entered in the File Sharing control panel on the Power Mac G3. The password is also case-sensitive."

Q: Fine. [Whine] But none of this solves my problem: I have files I want to share on the StarMax, not the G3, so why did I turn File Sharing on for the G3 and not the StarMax.

A: There are two reasons. Reason Number One: the Power Macintosh G3 is a heck of a lot faster than your StarMax, and since File Sharing slows a machine down, it will slow down the G3 far less than it will slow down the StarMax.

Reason Number Two: you can now "push" the files you want shared from the StarMax to the G3. So: find the files you want moved, and then drag them and drop them on the icon for the G3's hard drive.

Q: Uh, I don't think this is working. I did that, but the files are still on the StarMax.

A: It worked fine: it put copies on the G3. Go over to the G3 and look.

Q: You are right! How did it do that?

A: You did that.

Q: You are right. Say, this was easy. But you didn't tell me how to use a crossover cable.

A: That's right. ■

Interface Hall of Shame

QuickTime 4.0 Player

by Brian C. Hayes

The Interface Hall of Shame is an irreverent collection of examples of common interface design mistakes run by Isys Informatrion Architects. Their hope is that by highlighting these problems, developers will avoid making similar mistakes.

QuickTime 4.0 Player

AMID MUCH fanfare, Apple recently released a beta version of the QuickTime 4.0 Player. Intended to showcase the technological improvements of the QuickTime 4.0 multimedia technology, the QuickTime 4.0 Player sports a completely redesigned user interface. The new interface represents an almost violent departure from the long established standards that have been the hallmark of Apple software. Ease of Use has always been paramount to Apple, but after exploring the QuickTime 4.0 Player, the rationale behind Apple's recent "Think Different" advertising campaign is now clear.

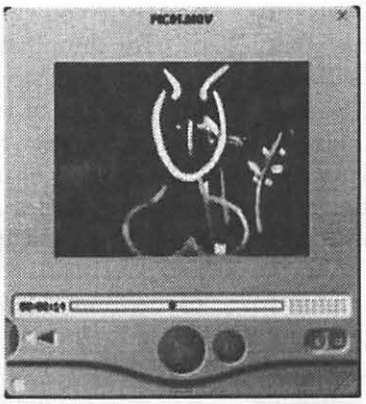
While there are some who would conclude that the revised interface represents innovative thinking at Apple, we would have to conclude otherwise. There is nothing innovative about the user interface of the QuickTime 4.0 Player; the developers adopted the same misguided principles employed in IBM's RealThings, copied some of the same features we critiqued in our reviews of IBM's RealPhone and RealCD, and added a few new follies of their own.

We recognize that some visitors may disagree with our assessment of particular features of the application and we invite your feedback. Comments can be sent to quicktime@iarchitect.com.

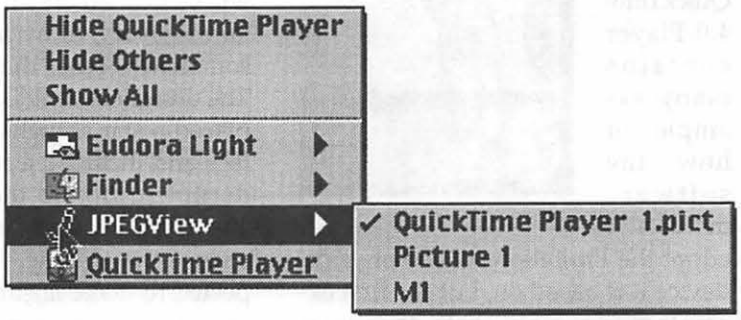
For the sake of accuracy, it should be noted that the following is a review of the user interface of the QuickTime 4.0 Player, not the QuickTime technology itself.

Inducted 25-May-1999

One look at QuickTime 4.0 Player and one must wonder whether Apple, arguably the most zealous defender of consistency in user interface design, has abandoned its twenty-year effort to champion interface standards. As with IBM's RealThings, it would seem that appearance has taken precedence to the basic principles of graphical interface design. In an effort to achieve what some consider



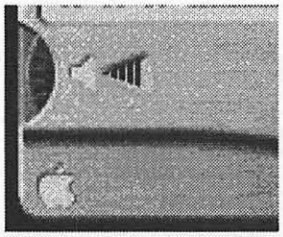
to be a more modern appearance, Apple has removed the very interface clues and subtleties that allowed us to learn how to use GUI in the first place. Window borders, title bars, window management controls, meaningful control labels, state indicators, focus indicators, default control indicators, and discernible keyboard access mechanisms are all gone. According to IBM's RealThings, and apparently to Apple, such items and the meaningful information they provide are merely "visual noise and clutter". While the graphical designer may be pleased with the result, the user is left in a state of confusion: unable to determine which objects are controls, which are available at any point in the interaction, how they are activated, where they may be located, and how basic functions can be performed.



The QuickTime 4.0 Player sports a consumer interface, designed so that it "looks like" a physical consumer product. Apologists for this design philosophy maintain that users will more readily be able to transfer their knowledge of real-world objects to the software. Unfortunately, the apologists fail to recognize that there are two likely consequences of this approach: (1) the user is unable to transfer his or her existing knowledge of computer interaction, and (2) the software becomes needlessly subject to the limitations of the physical device.

The decision to eschew the existing interface controls provided by the operating system creates a variety of problems. The decision not to provide a title bar, for example, resulted in the loss of the standard window management controls. Windows users will find the the player offers no visual indication as to how to move, minimize, or maximize the player window. Similarly, Mac users will find that

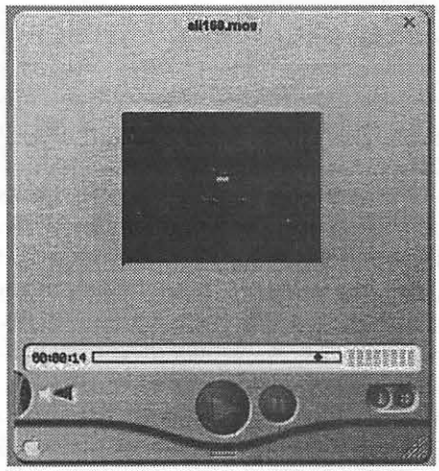
the loss of the title bar necessarily means that they have lost the ability to use the Mac's WindowShade and Zoom features with the player. Because the player does not utlize the operating system's standard means of managing windows, the designers had to develop their own; as a consequence, the user cannot rely on the established system conventions to determine, for example, the active player window. A further consequence is that third-party software that relies on the standard window management functions of the operating system will not function appropriately with the QuickTime 4.0 Player. App | Windows, for example, a Mac control panel that creates a navigation menu based on the titles of applications and any child windows each contains, cannot extract the names of open QuickTime Player windows.



The QuickTime 4.0 Player contains many examples of how the software must adopt the limitations of the physical device it is based on, but the first example the user is likely to discover is the volume control. Since a real-world hand-held electronic device typically employs a thumbwheel to control the volume, the designers concluded that it would work just as well in a software application. What the designers failed to realize is that a thumbwheel is designed to be operated by a thumb, not a mouse. Watching new users try to adjust the volume can be a painful experience. The user invariably tries to carefully place the cursor at the bottom of the exposed portion of the control, then drags it to the top of the control and releases, then carefully positions the cursor again at the bottom of the control, drags upward, and well, you get the picture.

The thumbwheel is the control of choice for physical hand-held devices for a variety of reasons: it functions in direct relation to the potentiometer used to vary the electrical signal, it is inexpensive, it is unobtrusive and unlikely to get snagged on other objects, and it responds well to a simple move of the thumb. None of these reasons relate to the interaction between a user and an image on the screen. It was selected merely to mimic the appearance of the physical device, and in this case, was a poor selection for the human-computer interface.

At some point, the designers realized their error, and therefore added other means by which to adjust the volume. The user can click the player just about anywhere near the thumbwheel and drag the mouse in any direction to control the volume. Unfortunately, there is no visual indication that this is possible, thus, it will be learned only through accidental discovery, or by learning it from somewhere other than the interface. The designers could just as well have placed a star anywhere on the interface and included a statement in the documentation to the effect: "Click and drag anywhere near the star to change the volume." The user is expected to make linear movements to operate a rotary control. This is the reason that most properly-designed applications utilize linear slide controls for similar functions.

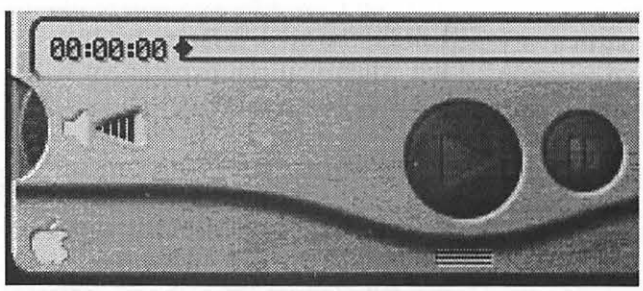


Another example of the inappropriateness of applying characteristics of physical devices to the design of software is the very size of the player. The image above illustrates the size of the player as it appears using the default size of the movie window for the selected movie. As seen in the image, the QuickTime 4.0 Player appears as though it might fit very comfortably in one's hand. That would probably be an important requirement for a hand-held device, however, this is not a hand-held device; it is a piece of software, one that must coexist with other pieces of software. The design results in an extraordinary waste of screen space. In effect, the designers have replaced the "visual noise and clutter" of useful controls with white noise: blank space that interferes with the user's ability to view and access other information on the screen, and as will be shown later, with the user's ability to interact with the player itself.

Perhaps in an effort to emulate the design of a real-world device or to avoid potential color clashes with any of the available colors for iMacs, the designers decided to give the player a brushed-metal appearance with dark gray controls and a pale yellow progress meter. If that particular color combination does not appeal to you, too bad; the designers of the QuickTime 4.0 Player were only concerned with their aethestic sense, not yours. Windows users will discover that the application ignores the user's preferred color settings, and does not provide a means for the user to specify his or her preferences. Similarly, Mac users will find that the program does not respond to changes made through the Appearance Manager. The designers did in fact adopt the user's color preferences for the transient secondary dialogs, but not for the omnipresent player window. Fortunately, the designers did not pre-

fer purple buttons against a hot pink background, or diamond-plate to brushed metal.

The color scheme of the QuickTime 4.0 Player not only represents a complete disregard for the user's color preferences, but the particular scheme selected leads to a number of important interface problems. Most notably, all of the controls appear to be unavailable. In a properly designed application, muted colors are used to provide a disabled appearance to any controls that are unavailable at a given point in the interaction. The designers made no effort to distinguish between controls that are available and those that are not. As shown below, the image on the left was captured before a movie had been loaded, and the image on the right was captured after a movie had been loaded (or was it the other way around?). The Play button is available in one scenario but not the other. Unfortunately, the designers felt that providing subtle cues to guide the user's interaction would have amounted to "visual noise." The designers were apparently unaware of one of the basic rules of GUI design: A GUI should provide GUIdance.



The designers were not unaware of the information that subtle color change can provide; they just seem to employ such changes at curious times. This image illustrates the appearance of the Play button after it has been clicked and released, that is, while a movie is playing. The change reflects two possible intentions of the designers: (a) they wanted to let the user know which button had been clicked, or (b) they wanted to let the user know that a movie is currently playing. Whatever their intention might have been, the net effect is that the Play button now appears enabled, while the Stop button appears disabled. The designers have the means to provide control state information

to the user; they just need some direction in when that information should be provided.

Curiously, a different color change is occasionally used in the QuickTime Player to indicate the post-click state of other controls. For example, after the user has opened the "Advanced Controls Panel," the controlling button (in the upper right-hand area of the image) takes on a darker appearance, presumably to indicate that the panel is open. We would have thought that the very appearance of the panel itself would be sufficient to indicate that the panel is ... open.

Based in part on the selected color scheme, the user cannot distinguish between actual controls and incidental images. None of the standard affordances are provided to indicate which objects on the screen are indeed controls. Moreover, certain controls have the exact same visual characteristics as incidental graphics. There is nothing about the image of the speaker, for example, to indicate that clicking on it will have some effect; nor is there anything about the Apple logo to indicate that clicking on it will not have an effect. Such distinctions would have interfered with the designers' sense of aethetics.

The color scheme dictated by the designers has one additional potential consequence that should not be ignored. Because of the lack of contrast between the gray symbols and gray backgrounds of the controls, it can be reasonably expected that certain users will have difficulty locating a control of interest. Older users, and those with even slight visual difficulties will be needlessly disadvantaged when using the software. Those designers

(continued on page 79)

"The new interface represents an almost violent departure from the long established standards that have been the hallmark of Apple software. Ease of Use has always been paramount to Apple, but after exploring the QuickTime 4.0 Player, the rationale behind Apple's recent "Think Different" advertising campaign is now clear."

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Tightly Wrapped Expertise: A Review of Books

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HARDWARE and software publishers used to include tons of documentation with their products. Almost 20 years ago, the Osborne-1 (the first transportable computer) included somewhere between 15 and 20 full manuals for the word processors, spreadsheets, database programs, utilities and operating system packaged with the machine. By weight, they were a large fraction of the considerable weight of the Osborne-1 itself.

But those times have changed. Extensive study of millions of computer users reveals that the users don't pay much attention to the included documentation. Over 90% of all help calls to hardware and software manufacturers concern issues that are clearly documented in the manuals provided with the product. Apple, along with most other computer manufacturers, has tried to adjust to this fact by including electronic documentation pre-installed on their computers, in the form of extensive context-sensitive help and Acrobat files, and getting rid of the paper manuals. Cost, of course, is also an issue, since manuals that people won't read cost money to write, edit, print, and ship.

But if you wander into almost any good-sized bookstore, you can't help but notice ever-growing computer book sections. Why, if people won't read computer manuals, do they buy computer books?

Peachpit Press, a leading computer publisher, made a gamble: they believed that many computer manuals took too long to get to the point, and didn't include enough examples. So several years ago they created *the Visual QuickStart* series, with some common characteristics to each volume: (1) the book has a finite subject (one application program or suite of programs), (2) the book has a good table of contents and cross-referenced index, and (3) the book is broken down into illustrated, step-by-step instructions aimed at accomplishing specific tasks. None of the *Visual QuickStart* books have lengthy narratives talking about theory or philosophy or market trends or the author's pet elephant.

The gamble paid off: the *Visual QuickStart* series is a hit. Almost every computer book section in every bookstore has an extensive selection of these pastel-colored volumes. All the books that follow belong to this series, so keep in mind that all have a nice table of contents, good index, extensive illustrations and tight subject matter focus, unless otherwise indicated. Also, mentally insert the phrase *Visual QuickStart Guide* before each book title.

AppleScript for the Internet

Ethan Wilde's volume is something of a curiosity: he isn't tackling just AppleScript, which is by itself a worthy cause, but a more specialized subset: AppleScript for the Internet. Over the past decade, Apple's scripting language has grown up, and been applied to increasingly larger tasks. There are few subjects larger than the Internet, but even in the "early days" AppleScript was used to construct CGI (Common Gateway Interface) routines, the "glue" programming between a Web server and some more specialized task, such as verifying a credit card number or displaying the time.

Wilde approaches the subject with enthusiasm, showing you how to use AppleScript for a variety of tasks. In the beginning, these almost all involve routine desktop tasks for your Mac; he doesn't get around to discussing the Internet until Chapter 5. CGIs — the most prominent application of AppleScript on the Internet — aren't covered until Chapter 11. By the time he gets to Chapter 24 (all the chapters are relatively short), he has managed to apply AppleScript to everything from *QuarkXPress* and *Windows NT* to *Netscape* and *Eudora Pro*.

On a personal note, I purchased this book in an airport bookshop, while waiting and waiting and waiting for a plane to take off. Without a Macintosh handy to try some of the scripting, the book was quite frustrating. Don't do this; buy a science fiction novel or a murder mystery unless you have a PowerBook or iBook handy. The book is far more interesting when you can experiment with some of Wilde's scripts.

AppleWorks 5 for Windows and Macintosh

AppleWorks is included with every iMac and iBook, but without any printed manual. True, there are various help files, but the help files are comically short of examples of how to do various things. Like most help files, they are also linear in nature: they assume the user is fairly "normal" and tends to concentrate only on "normal" tasks.

C. Ann Brown makes no such assumption: she assumes you want to do everything under the sun with *AppleWorks*. After covering every module of the program, and showing

some clever interactions between the modules, you'll begin to believe it can do everything, too.

An important note: this book was reviewed in Washington Apple Pi Journal once before, under its former name of *Visual QuickStart Guide: ClarisWorks 5 for Windows and Macintosh*. Aside from an extensive search and replace edit (obliterating *ClarisWorks* in favor of *AppleWorks*), the books are identical; if you have the earlier version, this version will add nothing at all.

Claris Home Page 3 for Windows and Macintosh

Much like *AppleWorks 5*, *Claris Home Page 3* is a program often bundled with a computer or another piece of software, usually with minimal documentation. This is a pity since some of the best features of *Home Page*, such as the *FileMaker* Connection Assistant, are none too obvious.

Sad to say, Richard Fenno doesn't spend much time on the Connection Assistant or *FileMaker*. He does, however, cover the rest of *Home Page* quite thoroughly, and virtually any user should have no difficulty using the program to create Web sites. *Home Page* is a strange gem in the rough; now sold by FileMaker, Inc. and in need of an update, it is slower than it should be and not as sexy as, say, *CyberStudio*. But it pumps out nice, clean HTML (HyperText Markup Language), with no strange compatibility problems. This also describes Fenno's book: with it as a guide, you should have no trouble pumping out nice, clean Web pages.

The index, however, is unimaginative, and it frequently takes quite a bit of searching to find what you need. While the essence of the *Visual QuickStart* series is nice, lean text, Fenno should have tried for a bit more gentle padding.

Eudora for Windows and Macintosh

Though it was published two years ago, *Eudora for Windows and Macintosh* is still a useful book as both an introduction to E-mail and a reference to a constantly-surprising program. While *Eudora* started life on the Macintosh and only later moved to Windows, the interface for the program isn't particularly "Mac-like" and has never been its strength, and even veteran users are forever discovering hidden talents.

Adam Engst, the author of this *QuickStart* guide, brings a lengthy resume to the task of explaining Eudora. Years ago, when the Internet was not exactly young but before it "went commercial," Engst and his girlfriend started *TidBITS*, one of the oldest electronic magazines. Each week, they sent out a newsletter to an E-mail mailing list that started with hundreds of names and eventually grew to tens of thousands of names. Drafting, polishing and mailing E-mail messages is something that Engst can honestly claim to have rare expertise.

Aside from a repetitive style (in part demanded by the coverage of both the Macintosh and the similar, but not identical, Windows versions), the book does thoroughly cover both the Lite and Pro versions of *Eudora*. Particularly valuable are the illustrations showing how to fill out the almost inexhaustible range of options — for everything — that the program offers.

In the introductory material, Engst briefly credits Steve Dorner, the University of Illinois programmer who created the first versions of *Eudora*, back in the days when the program was free (and before Steve joined Qualcomm, the current publisher). How quickly time flies...

Recommended if you use Eudora for E-mail.

Excel 98 for the Macintosh

Microsoft *Office 98 for the Macintosh* includes three applications: *Word 98*, *Excel 98* and *PowerPoint 98*. Two of these — *Word* and *Excel* — are the de facto standards of the corporate world, but all are poorly served by the sparse Microsoft documentation which, while tastefully done, says almost nothing.

Maria Langer's volume on *Excel 98* is, bar none, the best compact reference and introduction to *Excel*. If you know how to use *Excel* (or any other spreadsheet, for that matter), you can quickly find the information you need to get up to speed in *Excel 98*. If you've never used a spreadsheet before, she can take you from raw beginner to a confident beginner in just a few pages, and to journeyman status by the end of the book.

A great many people never really learn how to use *Excel*, misusing it as a database program, or as a nifty way to draw grids on the screen. A fairly large number of users have never tried to set up even simple calculations with this, one of the world's premier calculators. If you fall into this category (and over half of all *Microsoft Office* owners do), this book can open up an entire new world, quickly and clearly. Highly recommended.

Adobe GoLive 4 for Macintosh and Windows

When *GoLive CyberStudio 3.1* disappeared from the scene, swallowed by Adobe, it took a few months for *GoLive* to emerge in its new Adobe colors, with a new version number: 4.0. What was the big change between 3.1 and 4.0? The version number.

Which may actually be a good thing. *GoLive* has a very steep learning curve, so adding a bunch of new features would probably be counterproductive. With more palettes than a veteran artist and more icons than an old Russian Orthodox church, GoLive requires at *least* two monitors and a couple months in solitude to master.

Sadly, reality is rarely this accommodating, so if you find yourself with a short deadline, a large Web site, and

a copy of *GoLive 4*, grab this book. Shelly Brisbin approaches her topic with enthusiasm and common sense: while the title mentions Windows, virtually all the screen shots and examples are from a Macintosh. (*GoLive* works the same way, for the most part, on both platforms, but most users of the program prefer to use it on Macs.)

One great surprise: the book really is a new edition. Brisbin had written a *QuickStart* guide for *GoLive CyberStudio 3.1*, and given the fairly minor differences (beyond modifying the name and changing the publisher) between 3.1 and 4.0, I was expecting few differences in the text. Such is not the case; the book has been extensively reorganized. A fairly useless chapter on working with color was dropped, and chapters on DHTML and style sheets were added, with extensive reorganization and rewriting of virtually everything else. One further change would make the next edition even more interesting: some clear icons or other visual indicators alerting users to differences between *Netscape*, *Internet Explorer*, Windows and Macintosh dialects of HTML.

HTML 4 for the World Wide Web

Elizabeth Castro does explicitly address the browser and computer dialect problem in the latest version of her best-selling guide to HTML. While users of graphical HTML editors, such as *Home Page*, *GoLive*, *Dreamweaver* and others, may never need to see what is "under the hood," most advanced and professional Web designers, and all site managers, need to know far more about HTML.

HTML is actually nothing more than text: simple, unformatted text. Equally simple "tags" act as commands to your browser to load pictures, change the background color, display paragraphs and other simple tasks. A page full of such tags looks intimidating, and can take a while to dissect and see how it works but, in the end, it is just text. And all the high-end graphical HTML editors do little more than create text files.

Once you understand this, the value of Castro's book is much more apparent. She takes the HTML 4 specification (and yes, there were HTML 3.2, 2, 1.1 and 1.0 specifications before it) and explains how to use it to good effect. Forms, tables, lists, images, multimedia and other topics each have their own chapters. Icons are used to alert the reader to *Netscape* or *Internet Explorer*-specific differences. While she doesn't take sides in the browser wars, she does drop hints on things the reader should devote more than the usual amount of care and attention.

There are appendices on the usual subjects: lists of HTML editors and other tools, and lists showing how to embed color codes and special characters in pages. But one real gem is her nicely organized list of tags, with brief descriptions of their use and, most important of all, a code listing their status as being HTML 4 supported, deprecated (supported but discouraged), or *Netscape* or *Internet Explorer* specific. This appendix is extremely handy when you are struggling to find out why a page looks different, or doesn't display at all, when using different browsers.

True gurus will also want to track down and keep the previous version of this work, since it is devoted to HTML 3.2. A vast number of Internet users are using machines that lack the memory or horsepower to run an HTML 4-compliant browser, so if you want to provide universal access, you may wish to stay with HTML 3.2 for some time to come.

Illustrator 8 for Windows and Macintosh

Way back in the days when Apple introduced the original PostScript printer, the Apple LaserWriter, there were very few tools for doing things with the PostScript language. Few applications really understood PostScript, and in fact almost all books on PostScript were devoted to programming: how to write PostScript programs and send them directly to the printer for execution and printing. Adobe *Illustrator* changed all of this: as the first commercially successful PostScript editor with a pure graphical interface, PostScript left the world of programmers and entered the world of graphic artists and designers.

The early versions of *Illustrator* were, unfortunately, brutally obscure. Yes, the program had a graphical interface, but it wasn't all that easy to actually do something. People who knew how to draw found it baffling; those who didn't know how to draw found it baffling, too. When *Freehand* was first introduced, its major claim to fame was that it was easier to use than *Illustrator*.

Either through familiarity over time or genuine improvements, the current version, *Illustrator 8*, seems vastly improved. But it still needs a good, solid, step-by-step guide to help the non-experts absorb some aspects of the program, and Elaine Weinmann and Peter Lourekas do an excellent job of providing that guide.

This *Visual QuickStart* guide, however, is not a quick replacement for talent and skill. The introduction to Chapter 11 has this sobering statement: "Mastering the pen tool — *Illustrator's* most difficult tool — requires patience and practice." How discouraging. Fortunately, you can do wonders with filters, type tools and a few well-defined tricks using nothing more than *Illustrator* and this book; talent, skill, practice and patience are optional. The excellent index and internal cross-referencing aid in skipping over the hard parts.

Java for the World Wide Web

One of the weakest Visual QuickStart books is Dori Smith's volume on Java. Part of the weakness is due to the subject — Java is a programming language, and doesn't lend itself to a visual guide for non-specialists —

and part of it is due to sectarian violence.

Over the past couple of years, much has been written about Microsoft's allege plot to sabotage any and all potential competitors. One serious allegation concerned Java: Microsoft signed an agreement with Sun Microsystems that allowed Microsoft to develop Java programs, for free. In return, all Microsoft had to do was make sure the programs followed the Java standard. Microsoft almost immediately violated this agreement by creating proprietary versions of Java that wouldn't work outside of their Windows operating system.

Well, it turns out: the allegations were true. Federal prosecutors supported their recent anti-monopoly case against Microsoft by introducing truckloads of evidence showing the company willingly violated their agreements with Sun. Sun, in separate legal proceedings, succeeded in having a lengthy restraining order placed on Microsoft, prohibiting the company from calling programs "Java" unless they actually met the Java standards.

Meanwhile, many companies have grown disenchanted with Java. Senior managers attended seminars touting Java's "write once, run on many platforms" promise. Then they read critical press reports saying the promise was overblown. Without really understanding the issues, they decided the naysayers were right and backed away from the Java Holy Grail.

None of this, of course, has a thing to do with Java as a programming language. It still has some outstanding advantages over other languages and, when used appropriately, is often the best possible tool for many tasks. But Smith's book is not the appropriate vehicle for teaching people how to use this tool.

While the book does have value to people who might be familiar with programming concepts, it really doesn't have enough depth to act as an introductory programming book. The examples are well written and presented well, but they tend to teach you how to write a particular Java servlet — that servlet — without the breadth necessary to write other, different servlets.

If you know how to program, it is worth considering. If you don't, you'll probably find it inadequate.

JavaScript for the World Wide Web, 3rd ed.

Often considered a sister of Java, or perhaps a different cousin, JavaScript has nothing to do with Java other than the first four letters of the name. Developed by Netscape as a browser scripting language, JavaScript is very useful in its own right. It just isn't Java.

Tom Negrino and Dori Smith do an excellent job covering JavaScript in this, the third edition of a best-selling book. One of the first subjects they cover is: JavaScript isn't Java. Then, towards the back of the book, they cover a related topic: not all versions of JavaScript are equal. While Netscape created JavaScript, Microsoft created their own version, which often isn't compatible with Netscape's, and called it JScript. Meanwhile Netscape submitted JavaScript to ECMA, an international standards body, and ECMA came up with a standard they call ECMA-262, better known as ECMAScript. ECMAScript is very close to Netscape's JavaScript, but not identical.

Given these constraints, Negrino and Smith do an excellent, entertaining job of showing how to develop programs (or scripts) in JavaScript, and warning the reader as necessary that some things don't work quite the same with different browsers. The result is a cross between an introductory programming book (focused on JavaScript, of course) and a gourmet cookbook.

Highly recommended for the more technically inclined Web authors, the companion Web site is also well worth a visit. Among other things, it contains source files for all the scripts in the book, which should save you many hours of typing and debugging typing errors.

Mac OS 8.6

By the time you read this, Mac OS 9 should be released, and Mary Langer may well have a new version of this book in the works. In the meantime, Langer's book on Mac OS 8.6 is an excellent reference.

Let's face it: when you bought Mac OS 8.6, you received next to no printed documentation. If you were a new user and followed Apple's on-screen instructions, you may have found the excellent electronic help stored on your hard drive. If you are a veteran Mac user, you probably ignored the help and plunged into doing whatever you wanted to do. In either case, you probably barely scratched the surface of what Mac OS 8.6 has to offer.

Langer approaches Mac OS 8.6 (and 8.5) very systematically, with chapters devoted to Finder basics, file management, using applications, using various included utilities, understanding the various things in the Apple menu, printing, networking, the Internet and troubleshooting. There is even an entire chapter — a surprisingly interesting chapter — on *SimpleText*, the ubiquitous text editor that seems to replicate itself, rabbit-like, in every folder on your Mac.

At least half, or more, of all questions posed at the Pi's monthly General Meetings could be answered by referring to this book. While it lacks the encyclopedic heft of some of the "Bible" or "Secrets" books, it also lacks the blatant padding typical of those volumes. In short: this book is highly recommended. Based on Langer's past performance, I'm even willing to recommend her *Visual QuickStart Guide: Mac OS 9*, even though I'm not sure she's writing one.

Microsoft Office 98 for Macintosh

For those who may detect a certain anti-Microsoft bias to this series of reviews, let it be known the reviews were written with Microsoft *Word 98*. The most commonly used component of *Office 98*, *Word 98* gets first billing in Dan Henderson's guide to *Office*, and he covers it rather well.

Considering the dearth of written documentation supplied with *Office*, it is no surprise that Henderson's book is, to be brutally frank, much better. In discussing *Word*, he not only talks about its features, but also mentions more general topics, such as automatic text flow, automatic versus manual page breaks, and other issues of value to computer novices.

Similar coverage is given to *Excel 98* and *PowerPoint 98*, and an additional section is devoted to using them in concert. The *Excel* coverage is not nearly as comprehensive as Langer's (mentioned above), nor is the *Word* coverage as comprehensive as a book devoted to the task. Novice users probably won't notice any lack, however, as he does cover virtually every major function.

For *PowerPoint 98* users, his coverage is about as good as it gets; this sorry piece of software seems to have been boycotted by other authors. Clearly the weakest member of the *Office* family, Henderson avoids telling you how bad *PowerPoint* really is and instead tells you how to make it do useful things when it isn't busy crashing, hanging your machine, or mangling your presentation. For example, he reminded me that *PowerPoint* can do org charts, a capability I'd forgotten about after numerous losing battles with the application.

There are many other books on Office, but you'll actually read this one. Recommended.

Search Engines for the World Wide Web, 2nd ed.

Alfred and Emily Glossbrenner have been writing computer books for some time, and in fact wrote some of the first mass-market books on the Internet. Their first edition of this volume, however, was unsuccessful; it rarely covered anything a Web user couldn't discover on their own after a few minutes.

This second edition is a vast improvement. They cover a wide range of search engines, ranging from the general (AltaVista) to the highly specialized (such as Liszt Directory, an index of Internet mailing lists). Some of the "search engines," such as CDnow and Amazon.com, are commercial catalogs as much as search engines but, because of their usefulness, are properly included.

General search strategies and methodologies are discussed first, and then a chapter is devoted to each of the general-purpose search engines: AltaVista, Excite, HotBot, Infoseek, Lycos, and Yahoo. The chapters on the major search engines are filled with useful tips on how to use them, as well as a general overview of how that particular search engine works.

There are, however, still some major oversights. The discussion of AltaVista doesn't cover the wonderful **host:** and **link:** options, both of great value to Web site managers. There is no mention of Macintosh computers at all, and all the screen shots are from Windows. While not a sin in itself, this also means there is no mention of *Sherlock*, one of the best Internet search tools available, though several Windows-specific search tools (of lesser utility) are mentioned.

Despite the limitations, the book is recommended for advanced Web users and Web site managers.

UNIX

Unlike most Visual QuickStart books, this volume has almost no graphics. Instead, the examples are command-line listings and text listings, in theory lacking the sex appeal of the graphical user interface. In spite of this "flaw," this is easily one of the best-written *Visual QuickStart* volumes, sprinkled with impish humor buried deep in its examples. Authors Deborah S. Ray and Eric J. Ray are, presumably, married to one another, and you get the impression the marriage is not boring; there are frequent, very subtle and very funny references the authors.

The topic, UNIX, is also unusual, since it is an open-ended universe rather than a compact, self-contained subject typical of other *Visual QuickStart* books. The authors freely admit there are multiple ways to do almost everything in UNIX, and that the book barely scratches the surface of what can be done.

What can you do with this book? You can learn enough to do common user tasks on a UNIX machine, from logging on and setting up your account preferences to copying files, directories and volumes. Particular attention is paid to some of the more useful and ubiquitous UNIX utilities; if you've ever wanted a short coarse in **tar** or **ping** or the basics of **chgrp** and **chown**, this is the book.

But why, you might ask, would a Mac maven want a book on UNIX? Aside from learning more about Mac OS X Server (which is, under the hood, UNIX), the Internet is built on UNIX: electronic mail, file transfer (FTP), the World Wide Web and many other things you commonly do with your Mac on the Internet were first done on UNIX. The largest Internet hosts, in fact, are still based on UNIX.

We all know that Macs are fun. With this book, UNIX seems like fun, too.

Ethan Wilde, *Visual QuickStart Guide: AppleScript for the Internet*. Peachpit Press, 1998, x, 339 pp., $17.95. ISBN 0-201-35359-8

C. Ann Brown, *Visual QuickStar Guide: AppleWorks 5 for Windows and Macintosh*. Peachpit Press, 1998, vii, 216 pp., $17.99. ISBN 0-201-35403-9

Richard Fenno, *Visual QuickStart Guide: Claris Home Page 3 for Windows and Macintosh.* Peachpit Press, 1998, xviii, 203 pp., $16.95. ISBN 0-201-69647-9

Maria Langer, *Visual QuickStart Guide: Excel 98 for the Macintosh.* Peachpit Press, 1998, xvi, 262 pp., $17.95. ISBN 0-201-35360-1

Shelly Brisbin, *Visual QuickStart Guide: Adobe GoLive 4 for Macintosh and Windows.* Peachpit, 1999. xii, 340 pp., $18.99. ISBN 0-201-35477-2

Adam C. Engst, *Visual QuickStart Guide: Eudora for Windows and Macintosh.* Peachpit Press, 1997. Xvi, 195 pp., $16.95. ISBN 0-201-69963-0

Elizabeth Castro, *Visual QuickStart Guide: HTML 4 for the World Wide Web.* Peachpit Press, 1998. 336 pp., $17.95. ISBN 0-201-69696-7

Elaine Weinmann and Peter Lourekas, *Visual QuickStart Guide: Illustrator 8 for Windows and Macintosh.* Peachpit Press, 1999. Xvi, 362 pp., $19.99. ISBN 0-201-35388-1

Dori Smith, *Visual QuickStart Guide: Java for the World Wide Web.* Peachpit Press, 1998. Xiv, 221 pp., $17.99. ISBN 0-201-35340-7

Tom Negrino and Dori Smith, *Visual QuickStart Guide: JavaScript for the World Wide Web, 3rd ed.* Peachpit Press, 1999. Xii, 292 pp., $17.99. ISBN 0-201-35463-2

Maria Langer, *Visual QuickStart Guide: Mac OS 8.6.* Peachpit Press, 1999. xviii, 330 pp., $17.99. ISBN 0-201-35472-1

Dan Henderson, *Visual QuickStart Guide: Microsoft Office 98 for Macintosh.* Peachpit Press, 1998. xvi, 283 pp., $18.95. ISBN 0-201-35351-2

Alfred and Emily Glossbrenner, *Visual QuickStart Guide: Search Engines for the World Wide Web, 2nd ed.* Peachpit Press, 1999. xiv, 274 pp., $17.99. ISBN 0-201-35385-7

Deborah S. Ray and Eric J. Ray, *Visual QuickStart Guide: UNIX.* Peachpit Press, 1998. xii, 354 pp., $17.99. ISBN 0-201-35395-4. ■

Adobe Acrobat 4 Second Look at the Electronic Publishing Future

"PDF VS. HTML in an E-Book Battle Royal," the headline screamed in the Publish Magazine (the Magazine for Electronic Publishing Professionals) in the August 1999 edition.

Daniel Munyan, the Everybook's Founder, stated that Acrobat PDF offers publishers the easiest route to E-Book (electronic) publishing. Also, Munyan stressed that Adobe Acrobat supports expert layout, navigation and typography. In addition, Adobe Acrobat is the standard in portable document format (PDF).

Simple Formula

Companies use the simple formula: "Reduced Expenses=Company Success." Businesses do this by eliminating printing hard copies of software manuals, instead they print them as PDFs. Companies have since embraced the new Adobe Acrobat technology and helped distribute the free Adobe Reader on their software CDs.

Real World Adobe Acrobat 4 Comments

At MacWorld Expo in July 1999, at the Apple User Group breakfast, I asked several Apple members what they thought about the new Adobe Acrobat 4 program.

"Is Adobe Acrobat 4 worth the upgrade?" Colin Phillips, from the Apple User Group in Waterloo, Canada made an interesting observation. "Right out-of-the box, using Adobe Acrobat 4, QuarkXpress is easier and saner to use for making PDFs."

The other Apple User Group members agreed with Colin. They told me "Adobe Acrobat 4 is definitely worth the upgrade."

What's New in Adobe Acrobat?

First, there are new tools for graphics professionals in Acrobat 4. These new features are designed for graphic designers, production artists, and pre-press and printing professionals.

The new Touch Up Text tool lets users make last-minute text edits to a PDF file or edit images embedded in PDF documents by way of the new Graphics Select Tool.

Easily convert files to PDF with Acrobat 4.0

It's now a snap to convert files in other formats to PDF. The user can drag and drop a graphic, spreadsheet, text, HTML, or other file onto the Acrobat icon. The file will automatically open as a new PDF file with Acrobat.

"It's now a snap to convert files in other formats to PDF. The user can drag and drop a graphic, spreadsheet, text, HTML, or other file onto the Acrobat icon. The file will automatically open as a new PDF file with Acrobat."

New Ease-of-Use Features

Adobe has also added new ease-of-use features to Acrobat 4.0 software, including drag-and-drop conversion of Microsoft Word and other formatted files into PDF format.

Yellow Highlighting Annotation Tools

Acrobat 4.0 adds a set of new annotation tools: Yellow highlighting pen and a pencil tool. Now, adding changes to an Acrobat document is as easy as making corrections to a paper document. (Previously Adobe Acrobat 3 users could only place digital sticky notes and video clips in an Acrobat document.)

Highlight Text

Adobe Acrobat users can now emphasize words, sentences, or entire paragraphs in an Acrobat document using a digital yellow highlighter pen. The user can change the yellow to pink, blue, or a custom color.

The electronic highlighting marks in Acrobat 4.0 show up when the document is photocopied or faxed. By comparison, highlighting marks made on paper documents do not show up when faxed or photocopied.

* Underline Text. Another way to call attention to a word or sentence in Acrobat 4.0 is to underline it.

* Strike through Text. Acrobat 4.0 users can now suggest editing cuts more explicitly by drawing a line through unwanted text.

Forms in Acrobat are Easier

Creating forms in Acrobat is easier because it comes with built-in functions for data calculations, validation and formatting. You don't need programming experience to create forms.

Adobe Acrobat's simple "point-and-click" works together with pull-down menus and dialog boxes making form creation fast and easy.

Acrobat allows you not only to design forms in Microsoft Word or Adobe PageMaker, and convert them to PDF. Now you make them dynamic documents that recipients with Acrobat or the free Acrobat Reader can fill out and return to you Online.

Pro Reaction

Adobe Acrobat easily creates and reviews PDF files. Now, you can publish PDF files anywhere. With free Acrobat Reader software, you can view, navigate and print PDF from Mac, Windows and UNIX computers.

Transfer PDF files to service bureaus and printers electronically. You can easily make brochures and presentations accessible worldwide. Also, you can post PDF documents such as HR forms online complete with links and bookmarks without reauthoring in HTML.

Page Capture for importing scan pages and OCR recognition is now available in Adobe Acrobat 4 version using Mac System 8 or greater.

Con Reaction

Digital Signatures cuts paperwork costs. The Adobe digital signature framework extends the use of Acrobat beyond document publishing and distribution. Unfortunately, Digital Signature is available only in the Windows version. Hopefully, Digital Signatures will be available in the next Mac upgrade.

Companies misuse Adobe Acrobat by not making bookmarks or text links to navigate through their help software PDF manuals. In addition, two and three columns text PDFs are difficult to read on the computer screen.

Personal Observation

I have always liked working with Adobe Acrobat. Most of my presentations were made using the slide show portion of Adobe Acrobat for cross-platform PC and Mac clients. I enjoyed using the bookmarks and links in Adobe Acrobat and would recommend Adobe Acrobat as "the Program" to have for making cross-platform presentations and Client Proposals.

System Requirements:
Power Macintosh
* Power Macintosh
* Apple System Software version 7.5.3 or later for Acrobat
* Apple System Software version 7.1.2 for Acrobat Reader
* 6 MB of RAM for Acrobat (12 MB recommended)
* 16 MB of RAM for Distiller

Paper Capture plug-in (32 MB recommended)
* 60 MB of available hard disk space
* CD-ROM drive

Adobe Acrobat's by mail order is $230 and their upgrade is $90 (US).

Paul Gerstenbluth is President of the ARIE Foundation. The ARIE Foundation's mission is to provide VA hospitalized patients with hobby materials and computers that helps in their stay and recovery. ■

Telecommunications Help Sheet

A quick reference sheet for use while on the TCS

TCS Phone Numbers:
—301-984-4066
(for 300, 1200, 2400 bps)
—301-984-4070
(for 9600, 14400, 28800 bps)

Main Menu

<B> ..... Bulletin Boards
<C> ..... Change Conferences
<E> ..... E-Mail
<F> ..... File Transfer
<L> ..... General Library
<M> .... Membership Search
<N> ..... Now On System
<O> ..... Off the System
<P> ..... Public Library
<T> ..... Time and Date
<U> ..... User Preferences
<W> .... Read Welcome Bulletin
<X> ..... eXamine Weather Forecast

File Transfer Menu

<A> ..... Adjust Pointers
<G> ..... Global Read New Descs
<L> ..... List All Available Areas
<N> ..... New File Descriptions
<O> ..... Off the System
<Q> ..... Quit to Main Menu
<R> ..... Read All New Descs
<Z> ..... Zelect File Areas

File Area Menu

<A> ..... Alphabetical List
<B> ..... Batch Functions
<C> ..... Change File Area
<D> ..... Download a File
<F> ..... Find File Descriptions
<H> ..... Help With File Transfer
<I> ..... Info on File Contents
<L> ..... List All Files
<M> .... Mark Files for Downloading
<O> ..... Off the System
<Q> ..... Quit to Main Menu
<R> ..... Read File Descriptions
<T> ..... TitleScan Descriptions
<U> ..... Upload a File or Files
<W> .... Welcome Bulletin

Editor Menu

<A> ..... Add to File
<C> ..... Clear File in Memory
<D> ..... Delete a line from File (#)
<E> ..... Edit a Line (#)
<F> ..... Find a String
<G> ..... Global Search & Replace
<I> ..... Insert Lines into File (#)
<L> ..... List the File (#)
<M> .... Toggle Reply Mode
<N> ..... Line Numbering Mode On/Off
<P> ..... Purge Temporary File
<Q> ..... Quit - Clear File & Exit
<R> ..... Read back from Temporary File
<S> ..... Save File and Exit Editor
<T> ..... Write File to Temporary File
<U> ..... Upload Mode Toggle (No Reply Mode)
<V> ..... View Temporary File
<X> ..... Exchange a String within line (#)
<"> ..... Modify Reply Mode Characters

Change Conference Menu

<1-8> ... Choose Conference Number
<L> ..... List Conferences Available
<Q> ..... Quit to Main Menu
<1> ..... General Conference
<2> ..... Apple II Conference
<3> ..... Macintosh Conference
<4> ..... Classified Conference
<5> ..... Global General Conference
<6> ..... Global Apple II Conference
<7> ..... Global Macintosh Conference
<8> ..... Global Miscellany Conference

Conference Menu

<A> ..... Adjust Pointers
<C> ..... Change Conference
<G> ..... Global Read All New Msgs
<L> ..... List All Available Boards
<O> ..... Off the System
<Q> ..... Quit to Main Menu
<R> ..... Read All New Msgs
<W> .... Welcome Bulletin
<X> ..... Xfer All New Msgs
<Z> ..... Zelect Boards of Interest

Bulletin Board Menu

<A> ..... Alter/Edit an Existing Message
<B> ..... Blind Reply to a Msg by Number
<C> ..... Change Boards
<D> ..... Delete Msg From or To You
<E> ..... Enter a Message
<F> ..... Find Message by Keyword
<L> ..... Library for this Board
<O> ..... Off the System
<Q> ..... Quit to Main Menu
<R> ..... Read a Msg or Msgs
<S> ..... Scan Message Headers
<T> ..... TitleScan Msg Headers
<W> .... Welcome Bulletin for Board
<X> ..... Xfer (Download) a Msg or Msgs

User Preferences

<A> ..... Alter Password
<E> ..... Emulation Mode
<F> ..... File Transfer Protocol
<P> ..... Prompt Character
<Q> ..... Quit to Main Menu
<R> ..... Reply Mode Prefix
<V> ..... Video Length
<X> ..... Expert/Novice Prompts
<Y> ..... Your Current Status

Electronic Mail Menu

<B> ..... Blind Reply to a Letter
<D> ..... Delete Letters
<E> ..... Enter a Letter
<F> ..... Find Letters
<H> ..... Help/Brief Tutorial
<I> ..... Info on Letters
<K> ..... Keep Letters
<L> ..... List Letters
<O> ..... Off the System
<Q> ..... Quit to Main Menu
<R> ..... Read Letters
<S> ..... Scan Headers of Letters
<T> ..... TitleScan Letters
<X> ..... Xfer (Download) Letters

Please see page 50 for the TCS Help Hotline phone numbers.

π

Best of the TCS

compiled and edited by John Ludwigson

Trouble in Paradise

TCS message threads tend to roll on and on, metamorphosizing in the process. Here, a plaintive plea ("Say it ain't so, Hal!") turned into a discussion of the protagonists' favorite ways of accessing the TCS.

THE PLEA: A few minutes (like five, max) ago when I tried to dial in to explorer, I got the dreaded "no menu prompt" message. So, I tried dialing with OT/PPP using the terminal window. Got a request for username, and then password, then nothing.

Will keep checking from time to time....but I don't think it's just me....or is it?

A-1: Ditto here. "Modem Reliable Link Established," then something like, "Menu script failed."

[*At this point, a few minutes passed....*]

A-1: Tried logging onto Explorer service a few minutes ago and was successful. That was a quick fix. Thank you, whomever is looking out for us cybernauts....

A-2: > Will keep checking from time to time.... but I don't think it's just me....

Two excellent thoughts.

The authorization server stopped taking people in at around 9:30pm, and sat that way until I was able to clear it (thankfully from home) at 12:30am. Further, it was sporadic throughout the day as we did some work on security and new features. I made every effort to work around people and avoid their getting kicked offline or prevented from getting in, but some people would've still run into trouble while we had the hood up and our elbows dirty.

I won't know what happened tonight unless it happens again during the day and I can get in to do some sleuthing. So if it does, I'll greatly appreciate your continued patience. Thanks!

A-3: >while we had the hood up and our elbows dirty.

It was not a pretty sight: piles of used bits and bytes all over the place, plus an occasional nibble from one of the Apple IIs.

Fortunately, the restroom at the Pi has soap and water.

P: > ...unless it happens again during the day and I can get in to do some sleuthing. So if it does, I'll greatly appreciate your continued patience.

Ahhhhh....darn! Right now it looks like it may be happening again. I'll check with ZTerm (good ol' ZTerm!) and see...

Thanks immensely for your willingness to mess with this. I'm sure [A-3] is right: all those bits and bytes lying around can't be a pretty sight! I can see a new product for geeks: DEE-lyte, deletes those pesky binary stains from hands and clothes.... ;-){{{

A-2: > Right now it looks like it may be happening again.

As simulated, "in the lab", and only for a few minutes. I figure if I stand here and stress it, strain it, throttle it, and make it unhappy now — we'll be less likely to be surprised by its actions late in the evening...

P: Aha! That would explain why it's working again now. Naturally, I assumed _I_ had done something....

Good Luck! ...checking in via BetterTelnet, which I installed when I couldn't stand Nifty Telnet any longer...de gustibus non disputandum!

A-4: via BetterTelnet...

Why do you like BetterTelnet better than Nifty Telnet?

P: I like BetterTelnet better because it has a ton more options. Capture, macros, a plethora of commands, most of which I don't yet understand, are just a few of the options. Nifty works OK, but is annoyingly simplified...at least to my fevered brain. It's a personal preference for things that _do_ things. Probably why I like computers in general....

A-5: >Fortunately, the restroom at the Pi has soap and water.

So how did you get the mess from the data streams cleaned up? Did you have to scrub very hard or did a little bit of Norton do the trick?

A-2: > I like BetterTelnet better because it has a ton more options... Nifty works OK, but is annoyingly simplified...

Should the day ever come that I need to do something complicated and difficult as you do with telnet, I'll look into complicated and difficult programs as well. ;) Thus far, though, I've been well served by the well-designed.

P: > I've been well served by the well-designed.

Me Too!

A-2: > I've been well served by the well-designed.
> Me too!

Remind me sometime to spell out how BetterTelnet was designed... back in the 1980's... for Mac SE's and II's... prior to the, er, MacTCP revolution.

I understand that its code for being an ftp server has been hacked out, as has its custom implementation of TCP/IP. Indeed, it draws in color now, and Open Transport's emulation layer for MacTCP allows it to be used with PowerMacs — albeit switching into and out of 68K emulation a couple times for each character typed and for every incoming line or two. These are important improvements! But they're hardly shining examples of software design.

That said, I don't really mind feature creep and cluttered interface in obtuse tools such as BetterTelnet and Windows 98. That's a personal preference thing, and some people really like these guys for what they are. I get it. I do.

My biggest objection has really been to the unfortunate name — "better" refers to the improvements made over NCSA Telnet 2.7b4, which dubiously enough was brought back from the dead... long-after-having finally been supplanted by a new modern Open Transport-native program that's clean both inside and out.

I don't have this objection with "Telnet3", which also drags out the tired old carcass of NCSA Telnet for better or for worse or for better than worst.

And if, for all the terminal emulation work that I do from day to day — if one day I feel I need a feature that Nifty Telnet lacks, I'll get F-Secure SSH or possibly PacerTerm or ProTerm. But in all this time of looking for one, I still haven't identified a need. I live in Nifty Telnet, BBEdit, Navigator 4, and a bunch of programming tools on various platforms. <shrug>

P: Well, you knew I couldn't resist replying any more than you can <G>!

> ...obtuse tools such as BetterTelnet and Windows 98.

Ooooh! Ouch!

> I don't have this objection with "Telnet3..."

OH? Where might I find that? Might some kind soul have uploaded it to the FTA where an adventurous telnetter could snag it for a trial spin? (Info-Mac, huh?)

I'm with you as to BBEdit (Lite in my case) and Navigator 4...add in iCab and URL Manager Pro, and Claris Emailer 2.0v3 and things are wonderful. But I was using Nifty for a while, mainly because you recommended it so highly. It may be just a quirky thing ("de gustibus....etc."), but it has been a relief to install BetterTelnet and use it. Even if I think I do see what you are talking about with switching into and out of 68K emulation.

A-6: Have not been able to connect since about 10:40 pm. When I select "connect", I get the phone buzzing interchange which usually indicates a connection, but the timer never starts. When I try to connect via the Remote Access control panel, I get an indication that the connection was made, then a message"no menu prompt",then "connection attempt failed. the modem file returned the message "HSRESET (-6002). Please select another modem file or connect script" Any idea as to what's going on? Never had this problem before. Using OS 8.6 on an iMac.

A-7: My specific problem is that between 11:15 pm and midnight on 9/23/99 I was unable to connect to Explorer despite repeated tries. My configuration is a IIci running 7.5.5 and MacPPP v2.2.0 using a Magnum Fax Modem 288. This configuration worked fine on 9/22/99 but today it consistently failed, 10% of the time "Waiting for Text: name" and 90% of the time "Waiting for Text: choice".

After repeated failures to connect, almost always while waiting for "choice", I suspected that I was always connecting to the same answering computer and that it's software or hardware was failing. To test this I used my other phone line to call up Explorer and tie up the failing unit by whistling off-key into the telephone. Meanwhile I clicked on Config PPP to Open a connection. The response from Config PPP/MacPPP was always "Busy", even when I tied up the other line through 5 redial attempts. As soon as my whistling failed to keep the other line tied up, the next redial attempt by Config PPP would result in the original problem, "Waiting for Text: choice".

At the risk of displaying my considerable ignorance, my analysis of the problem is that all the incoming lines to Explorer were busy between 11:15 and midnight except for the one line that was failing to create a connection and I was always being assigned to that line except when I tied it up by whistling (in which case the result was a "Busy" message followed by a redial attempt).

I've occasionally had this problem in the past and accepted the explanation that it was my old and funky software but perhaps there really is a problem

on the TCS end and my problem is just another facet of the connection difficulties experienced by others (using newer software) during this past month.

A-8: What song were you whistling?

p.s. I couldn't connect either, at 12:30am

A-2: > Any idea as to what's going on?

Yes, sorry. Same thing as last Saturday night: the authorization server stopped for a while until I spotted it and was able to get it to start up again. (But not at a time I was able to diagnose the cause.)

That's what happened. It stopped at around 9:30pm, I noticed at 1am, and got it running again then. This week I'll be able to do more experimenting during non-prime hours to get to the bottom of it.

Thanks so much for your patience!

A-4: > an adventurous telnetter

I seem to have unearthed a little feud over telnet programs! Can you download from the file transfer area using BetterTelnet? That is the only thing I would like to do via telnet that Nifty Telnet does not do. Thanks.

P: Honestly, I have no idea. I don't think so, but I have never tried it. For up and down loading to the FTA I have nearly always used ZTerm on a dial up connection. On other occasions I have used Netscape Navigator or iCab via the Explorer route. Guess I'd better go look....

A-9: ProTerm Mac. Try it. Uploads, downloads, slices bread...
A-4: > ProTerm Mac. Try it.

Is it still available? I tried Outpost.com and MacWarehouse and neither listed it.

P.S. [later...] I used Sherlock to find the company that owns ProTerm and downloaded a copy that can be used as a demo for 30 days. (I am connected via it now.) I wasn't able to download, however. I went to File > Batch > Download. I then selected "Receive" from the "Online" menu, and tried, in order Zmodem, Xmodem, and Xmodem CRC. They don't work. I seem to remember from my Microphone and ZTerm days that Zmodem was the proper protocol. I am sure I am missing something obvious. Any idea what it is? Thanks.

A-9: > I used Sherlock to find the company that owns ProTerm and downloaded a copy that can be used as a demo for 30 days.

I think that is what is on the TCS in File Transfer also.

> I wasn't able to download, however.

If you are on the TCS and tell it what file you want to download, and answer "Z" for Zmodem at the prompt for Protocol (if you don't already have it chosen as a default for the TCS) it will automatically start the download.

A-10: > I seem to remember from my Microphone and ZTerm days that Zmodem was the proper protocol. I am sure I am missing something obvious. Any idea what it is?

I know precisely what the problem is. Telnet uses certain control characters as commands. So if those bytes happen to appear in the file being transferred, they will be acted upon by the telnet protocol instead of being passed on as data. You are quite correct that Zmodem is the protocol to use. It is the only one that has sufficient control over its data stream to pass it through a telnet connection. However, you do have to exercise that control. Specifically, you must tell the Zmodem protocol to "Escape Controls".

You can do this manually, by setting both the "Send Mode" and "Receive Mode" popups on the "Transfers" panel of your connection file for the TCS (via telnet) to "Query". That way, after you have specified a list of files to send, or selected files to download on the TCS and started the TCS sending, you will get a dialog displayed on which you can set various parameters. Just put a checkmark in the checkbox by "Escape Controls" and let 'er rip. It will be substantially slower than via a dial up connection due to the telnet overhead plus a little from the escaping controls overhead. "Escape controls" converts control characters into a definite sequence that doesn't have any control characters, so telnet doesn't get itself into the act.

It's also possible to set 'escape controls' via your logon macro. Just insert:

"pref_set(1,"zctl",1);"

(less the quote marks) in your logon macro before the "end;" statement. It sets the "escape controls" variable, "zctl," to TRUE for the current session.

P: Sheesh!

Whatta lotta fussss just to do what ZTerm and iCab now do easily and fuss-freeily. Think I'll stick with the tried-and-true, at least as far as TCS down/up loads are concerned. To go back to the origins of this thread, BetterTelnet does two things Nifty (as far as I can see) doesn't: capture things to a file, and macros. I regularly use the former capability to save things for the Best of TCS column and to amaze my non-WAP friends, and the macros just make it simpler to log on at the Pi and elsewhere. Also, I just like grinning at those long menus of stuff that I can use someday to connect to my personal Cray XMP. (big GGG>

A-9: (I assume you are writing about ProTerm.)

> You can do this manually, by setting both the "Send Mode" and "Receive Mode" popups on the "Transfers" panel of your connection file for the TCS (via telnet) to "Query".

I don't have either set this way.

> It's also possible to set 'escape controls' via your logon macro. Just insert: "pref_set(1,"zctl",1);"

I don't have this either. And I both upload and download to/from the TCS by telnet.

And on downloads I get pretty much the same transfer rate these days as I used to get with a direct connection — around 1600 bytes/sec with my 33.6 modem.

And thereabouts the discussion petered out as the contenders retreated to their respective corners, personal preferences firmly in hand!

Sizing Scans

Scanning graphics can be a dicey thing, as some Pi-sters noticed recently. Workarounds can help, but expert advice usually helps more....

Q: I apologize for the newbie-ness of this question, but I'm pretty confounded by the problem. I can't seem to find a reliable, simple way to scan a given graphic...and end up with a graphic of a desired enlargement. That is, I often need to scan a simple drawing (which is say, 4 in by 6 in. in size) and print out the same drawing at say, 300% of the original drawing. In other words, I want to copy and blow up the drawing.

In PhotoDeluxe, I'm always guessing how to set the percentages. There's a percentage for the Preview, percentage for the scan (100% _always_ seems to scan way too large. Why?), etc. Is there a simple formula for these preview/scan percentages and how they relate to the original?

Until now, I have to eyeball the scan (when it comes back into PhotoDeluxe), copy it to the clipboard (or save it as a .gif), and paste it into a Drawing document in ClarisWorks. From there I can set the number of pages the drawing will encompass (tonight it was 3 x 4 pages), and scale the pasted graphic (again, through trial and error) to the closest percentage.

There's got to be a better way.

A-1: Change the resolution to 3x what you want, when you scan it in. Then size it down in PhotoDeluxe to the res you want, and the proportions should increase. Etana

A-2: > There's got to be a better way.

There is. Get Graphic Converter (now at version 3.7.1, a bug fix version).

In GC, in the picture menu, there's a selection for "sizing" which offers you the ability to change the size of the graphic to whatever you might want. You can select "linking" so the proportions remain the same at all sizes. You can change _any_ of the numbers in the little boxes and the others will shift automatically to maintain the proportions.

A-3: >I can't seem to find a reliable, simple way to scan a given graphic...and end up with a graphic of a desired enlargement.

t's easy, if you follow these steps:

1) Decide how large (or small) you want the final scan to be. For example, you might want the width to be 17" (a typical two-page spread.)

2) Measure the width of the original art. For this example, let's say it is 7".

"In PhotoDeluxe, I'm always guessing how to set the percentages. There's a percentage for the Preview, percentage for the scan (100% _always_ seems to scan way too large. Why?), etc. Is there a simple formula for these preview/scan percentages and how they relate to the original?"

3) Divide the size you want the scan to be by the size of the original art. In this case it's 17 divided by 7. Then hit the percent key on your trusty calculator. In this example it's 17 divided by 7, then the percent key, which equals out to 242.8 percent enlargement.

4) Scan the original at 242.8%, at the appropriate resolution (72dpi for viewing on a monitor, 150 for typical ink-jet output, 300 dpi for high-quality film output.)

5) That's it — you're done.

This formula also works for reduction percentages. Let's say you want the final scan to be 8" wide, the original is 20" wide. 8 divided by 20, then percent key equals 40 percent. Scan at 40%, at the appropriate resolution.

Q: Thanks. That was what I needed to know. I just figured (or misheard) that in the original scanning process you should scan at a different percentage. Oh well—I'll try this method next.

Now—for a follow-up: Will PhotoDeluxe _print_ the proper size? I mean, if I scan a 6" by 6" drawing at say, 300% (ending up with an 18" by 18" drawing?), will PhotoDeluxe tile the printed pages for me?

A-3: >Now—for a follow-up: Will PhotoDeluxe _print_ the proper size? I mean, if I scan a 6" by 6" drawing at say, 300% (ending up with an 18" by 18" drawing?), will PhotoDeluxe tile the printed pages for me?

PhotoDeluxe doesn't understand tiling. The printer driver does the tiling. so look for the tiling settings in your Page Setup or Print window.

Q: Hmm. I can't get GraphicConverter to print to more than a single page. ClarisWorks will print to multi-pages, but only when I set up the document to actually take up X-number of pages (from within CW). I'm using the same printer for either program, so I guess the "tiling" that seems to be happening isn't really a function of the printer driver.(?)

I could've sworn I've printed music from Finale that was tiled; the tiling was described as a feature of the program. Were you saying that PhotoDeluxe simply doesn't have that feature?

A-3: >I'm using the same printer for either program, so I guess the "tiling" that seems to be happening isn't really a function of the printer driver.(?)

Perhaps I'm wrong, but I always thought functions like tiling were a feature of the selected printer driver, not the active application. Maybe someone else will jump in and clarify this for us.

But no one did, so the postings ended there. Your editor's suspicion is that there are two forms of "tiling". One is the "n-up" printing function in which the printer driver offers to put 1, 2, or 4 copies of a page on each sheet of paper; the other is probably what the inquiry above was after –having the graphics application print the image across several sheets of paper....to be continued.

Macintosh Tutorials

General Macintosh Classes

Introduction to Macintosh

This class is meant not only for the new user, but also for anyone who wants to learn more about the basic operation of the Macintosh. This class is also recommended for Macintosh owners who are new to System 8.0 and above or those who have never really learned all the things that the Mac OS has to offer to the computer user. In addition to start up, sleep and shutdown procedures, the student will learn how a computer works and common Macintosh terminology. The Finder and its basic operation will be fully covered. This discussion will include the menu bar, Apple menu and the Application Switcher. Students will learn how to access and use the built-in help application on the Macintosh. Error messages, dialog boxes, icons, folders, and view options will be discussed. You will learn the basics of word processing and text formatting. Copying, cutting, pasting, dragging and dropping will also be covered. Basic system and mouse maintenance will be included. The fundamentals of searching for files will also be covered. You should review the programs Macintosh Basics and Mouse Basics prior to attending the class.

Prerequisite: None.

Number of Sessions: Two.

Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00

Instructor: Pat Fauquet and Jim Ritz

Evening Set 1

11/1/99 and 11/8/99 from 6 pm - 9 pm
1/3/00 and 1/10/00 from 6 pm - 9 pm

Day Set 1

11/2/99 and 11/3/99 9:30am- 12:30 pm

Day Set 2

11/30/99 and 12/1/99 from 9:30 am - 12:30 pm

Day Set 3

12/16/99 and 12/17/99 from 9:30 am - 12:30 pm

Day Set 4

1/4/00 and 1/6/00 from 9:30 am - 12:30 pm

Day Set 5

1/11/00 and 1/12/00 from 1 pm - 4 pm

Intermediate Macintosh

Intermediate Macintosh will follow up on the concepts taught in Introduction to Macintosh. You will learn more advanced Macintosh skills and terminology including contextual menus and advanced finder options, the custom installation of software and updating software applications. Students will learn about memory error messages and how to deal with them. Hard drive organization, archiving and backup strategies will be discussed. An introduction to managing system extensions and control panels will be covered along with virus protection, system enhancements and Macintosh "housekeeping" philosophies. Students will learn how to use Disk First Aid, how to deal with system crashes and what causes them. They will also learn to use the new Find program, Sherlock, to find files on the computer, to find text phrases in saved data and to find items on the Internet. All students are encouraged to take Introduction to the Macintosh before attending this class.

Prerequisite: Introduction to Macintosh

Number of Sessions: Two

Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00
Instructor: Pat Fauquet and Jim Ritz

Evening Set 1
12/6/99 and 12/13/99 from 6 pm - 9 pm
Evening Set 2
1/24/00 and 1/31/00 from 6 pm - 9 pm
Day Set 1
11/4/99 and 11/5/99 from 9:30 am - 12:30 pm
Day Set 2
12/2/99 and 12/3/99 from 9:30 am - 12:30 pm
Day Set 3
1/4/00 and 1/6/00 from 1 pm - 4 pm
Day Set 4
1/20/00 and 1/21/00 from 1 pm - 4 pm

Advanced Macintosh

Advanced Macintosh will follow up on the concepts taught in Intermediate Macintosh. In this hands-on class students will learn how to back up the essential data and settings files, then how to install, update and upgrade system software. They will learn the difference between clean and dirty system installations and when to use them. They will learn how to de-install software, manage system conflicts, and troubleshoot crashes. Software such as Norton Utilities, Tech Tool Pro, Conflict Catcher, Spring Cleaning, and Disk Warrior will be demonstrated and used to fix computer problems. Hard drive initialization, partitioning, defragmentation and optimization with be discussed and demonstrated. Students are encouraged to bring their CPU to use in class to actually troubleshoot and update their own computers. iMac owners should bring their computer, keyboard and mouse. All others should bring only their CPU and modem. If students own Zip Drives or Super Drives they should also bring them to back up important data. All students are strongly encouraged to complete both Introduction to Macintosh and Intermediate Macintosh prior to enrolling in this class.
Prerequisite: Introduction to Macintosh and Intermediate Macintosh
Number of Sessions: Two
Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00
Instructor: Pat Fauquet and Jim Ritz

Day Set 1
11/4/99 and 11/5/99 from 1 pm - 4 pm
Day Set 2
12/14/99 from 9:30 am - 4 pm
Day Set 3
1/13/00 and 1/14/99 from 1 pm - 4pm

iVisit iMac
Take a working tour of the software included on the iMac.

This two part, six hour class will introduce the various pieces of software included with the iMac. Students will learn how use the assistants and templates included with AppleWorks to perform tasks such as writing a letter; making a computer address book, flyer or certificate, and printing an envelope. They will learn how to send and receive a fax from their iMac and begin using Quicken to balance their checkbook. They will learn how to make a favorites list in Internet Explorer, use the address book and send a file to someone in Outlook Express. They will also learn how to edit a photo with Kai's Photo Soap, install and look up items in the World Book Encyclopedia and use the Williams-Sonoma cookbook. Students will also learn how to use Adobe PageMill 3 to make a personalized start page on their computer. Strategies to win with Nanosaur and protect children with the EdView Internet Safety kit will also be shown. **Prerequisite:** Introduction to Macintosh
Number of Sessions: Two
Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00
Instructor: Pat Fauquet and Jim Ritz

Day Set 1
11/2/99 and 11/3/99 from 1 pm - 4 pm
Day Set 2
12/7/99 and 12/8/99 from 1 pm - 4pm
Day Set 3
1/13/00 and 1/14/00 from 9:30 am - 12:30 pm

Contextual Menus and Automated Tasks

Apple Computer has added two new features, Contextual Menus and Automated Tasks to the Macintosh. In this one Sessions class students will learn how to add new items to the contextual menu and where to obtain them. They will also learn how to obtain, use and install additional Automated Tasks. Since AppleScript is at the heart of Automated Tasks, students will be introduced to the AppleScript editor and will learn how to write and edit simple scripts to automate their own computers. This class is introductory in nature and is not meant for those who are already writing more advanced AppleScripts.
Prerequisite: Introduction to Macintosh
Number of Sessions: Two
Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00
Instructor: Pat Fauquet
Call office for dates

NEW **Mac OS 9 — Installing and Using It**

Bring your CPU and Mac OS 9 disk to class and get help installing the newest operating system. Then learn to use the new features and improvements to the system software of your computer. Students should back up their data files, email files, address book and bookmark files before coming to class. In class CPUs will be checked for possible directory problems and those problems will be repaired, then students will be guided through the installation and customization process of updating to OS 9. Please bring your OS 9 disk,

CPU and modem with its cables. Bring the USB keyboard and mouse if you have them Do not bring your desktop monitor, power cables, or ADB based keyboards and mice.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. Completion of Intermediate Macintosh is recommend, but not mandatory.
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet and Jim Ritz
12/16/99 from 1 pm - 4 pm
1/21/00 from 9:30 am - 12:30 pm

Internet and Telecommunications

* *NEW** Introduction to the Internet

This three hour class, intended for users of all Internet browsers, will introduce you to the World Wide Web. Learn what the various buttons on the browser screen do. Learn to customize the browser window to meet your visual needs. Learn how an Internet address works and how to deal with error messages that appear. You will learn how to use Sherlock, search engines, directories and metasearch sites to find the information you seek. Learn how to capture pictures and text from the internet and how it print web pages. This class is appropriate for all users of the Internet including American Online customers. It is suggested that all participants enroll in one of the e-mail courses to complete their introduction to the Internet.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
12/16/99 from 1 pm - 4 pm
1/21/00 from 9:30 am - 12:30 pm

* *NEW** E-mail with Netscape Communicator

This class will deal specifically the e-mail application with Netscape Communicator. Students will learn how to send, receive, reply to and forward email. They will learn how to save mail into folders, how to use and manage the address books and how to send mail to groups of people. They will learn how to attach files to e-mail messages and how to deal with the attached files that they receive. Students will also learn where their email and address books are stored and how to back them up.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
12/2/99 from 1 pm - 4 pm
1/18/00 from 1 pm - 4 pm

* *NEW** E-mail with Microsoft Outlook Express

This class will deal specifically the e-mail application Microsoft Outlook Express. Students will learn how to send, receive, reply to and forward email. They will learn how to save mail into folders, how to use and manage the address books and how to send mail to groups of people. They will learn how to attach files to e-mail messages and how to deal with the attached files that they receive. Students will also learn where their email and address books are stored and how to back them up.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
1/19/00 from 1 pm - 4pm

* *NEW** E-mail with America Online

This class will deal specifically the e-mail application with America Online. Students will learn how to send, receive, reply to and forward email. They will learn how to save mail into folders, how to use and manage the address books and how to send mail to groups of people. They will learn how to attach files to e-mail messages and how to deal with the attached files that they receive. Students will also learn where their email and address books are stored and how to back them up.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
1/19/00 from 9:30 am - 12:30 pm

* *NEW** Downloading , Installing and Using Files and Software From the Internet and from CD's.

Learn how to find files and software on the Internet. Learn how download them, how to install and use them. Learn about Macintosh viruses, and how to combat them. This one Sessions class is intended for students who have completed Intro to the Internet and an e-mail class and who want to learn more about the various software resources that are available on the Internet. These will include software, fonts, Sherlock and contextual menu plug-ins, Applescripts, and system resources.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
1/20/00 from 9:30 am - 12:30 pm

Microsoft Office 98

Microsoft Word for Office 98

This class will introduce the student to the fundamentals of the Microsoft Word for Office 98 word processing software package. The course is designed for those with very limited or no previous knowledge of Word. Topics that will be covered include: reviewing the screen elements of a basic new Word document (the standard and formatting toolbars and the menu bar); setting default options such as spell checking and document editing choices, default font selection that are applied to a basic document; creating, editing, saving and deleting a simple Word document; using the on line help function; simple formatting using tabs and setting margins; creating a simple table; and reviewing predefined templates such as the letter template that are included in Word.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Cordell Ratner
11/4/99 from 6 pm - 9 pm
1/6/00 from 6 pm - 9 pm

Excel for Microsoft Office 98

This class will start by covering opening, saving and retrieving an Excel workbook, and then will discuss definitions of a workbook, a worksheet, and a cell. Next we will review the objects on a typical worksheet screen including those items on the menu bar, the standard toolbar, and the status bar. The student will then be assisted in creating a simple Excel worksheet that will be used to teach the concepts of entering, editing, formatting, and deleting data (text, number, time, date, and formula) in a cell, along with learning techniques on how to navigate within the worksheet and between worksheets. Other topics for which the student created worksheet will be used are for: inserting and manipulating rows and columns, creating basic formulas of addition, subtraction, multiplication and division in a worksheet using the function wizard, adding comments to a cell, using the fill command to enter a data series, making the screen easier to view using splitting and column header freezing techniques, adding, deleting and naming worksheets within a workbook, and creating headers and footers printing of selected cells and an entire workbook. Finally, we will create basic charts using pie and bar charts as examples, and will wrap up by discussing worksheet style techniques along with reviewing the set of workbook options in the tools menu.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface,
Number of Sessions: One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Cordell Ratner
11/15/99 from 6 pm - 9 pm
1/18/00 from 6 pm - 9 pm

AppleWorks (ClarisWorks)

AppleWorks and Newsletters

Learn how to use the newsletter assistant in AppleWorks to easily produce newsletters for a variety of audiences. In this class participants will produce a basic newsletter, then learn how to use the Mac OS stationery pad function to speed the production of future newsletters. Basics of graphic design, layout, typography, writing style and suggestions for economical reproduction will also be covered. This class is not an introduction to AppleWorks.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. In addition Introduction to AppleWorks class or a good working knowledge of another word processing application is suggested before attending this class.
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
Attendance in an Introduction to AppleWorks class or a good working knowledge of another word processing application is suggested before attending this class.
11/1/99 from 9:30 am - 12:30 pm
12/6/99 from 9:30 am - 12:30 pm
1/26/00 from 1 pm - 4 pm

Introduction to AppleWorks (a.k.a ClarisWorks)

This class will introduce the student to the integrated software package, AppleWorks. The course will begin with an introduction to the fundamentals of the AppleWorks environment: the window layout, the help menu, and the universal commands. Each of the six modules (Text, Draw, Paint, Spreadsheet, Database, and Communications) will be treated separately but the emphasis will be on text and draw documents. The course will conclude with an examination of some basic integrated applications.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet and Jim Ritz
11/1/99 from 9:30 am - 12:30 pm
1/12/00 from 9:30 am - 12:30 pm

AppleWorks (a.k.a ClarisWorks) Advanced

In this class we will take AppleWorks to a new level! Learn how to make easy outlines, lists, and checkoff charts. Make great slide shows and presentations right in

AppleWorks. Learn how to dress up charts and graphs, how to make specialized dictionaries, and how to have AppleWorks read to you! Learn the secrets of stationary files, how to make your own AppleWorks libraries store not only pictures, but also frequently used text strings. Learn how to write personalized form letters and how to do special layouts for newsletters. Many of the projects included will be using the capabilities of ClarisWorks 4.0 and AppleWorks 5.0 Students will receive templates, stationary files and handouts to take home. If you have any feature of the program that you would like covered in particular, please mention it when you sign up.

Prerequisite: Introduction to AppleWorks or a good knowledge of the basics of AppleWorks and its interface.

Number of Sessions: One

Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.

Instructor: Pat Fauquet

12/6/99 from 1 pm - 4 pm

AppleWorks (a.k.a ClarisWorks) for the Experienced User Workshop

This class is for those who have some experience with AppleWorks and are interested in asking questions and having specific problems discussed. The class will be a questions and answer format. You should bring along on floppy a sample of things with which you need help. The idea being that you can work on a project while the instructor is helping another with one that does not interest you.

Prerequisite: Introduction to AppleWorks or a good knowledge of the basics of AppleWorks and its interface.

Number of Sessions: One

Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.

Instructor: Pat Fauquet

Call office for dates

Networking

Networking for the Home and Small Office

Do you have two Macintoshes and one printer— or two printers and one Macintosh—or maybe even more?

Come learn the possibilities offered by the Macintosh platform to share not only printers, but also files and even modems. Learn about the built in networking software in every Macintosh and various hardware and software options available to do even more. This class will cover AppleTalk and PhoneNet connectors, AB switch boxes, serial port expanders, USB ports and hubs, ethernet, cards, and transceivers. Hubs, router and servers will also be discussed.

Learn how to install network cabling without tearing down all the walls and learn how to determine what kind of cable to buy and how to put the connectors on the cables.

In addition to talking about wires and hardware choices we will also discuss sharing files and applications between two or more computers and printers.

Prerequisite: A good working knowledge of the Mac OS and its interface.

Number of Sessions: One

Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.

Instructor: Pat Fauquet

1/10/00 from 9:30 am - 12:30 pm

Web Page Development

NEW **Preparing Graphics for the Web**

In this all-day workshop students will learn how to make and prepare backgrounds, headlines, clip art, buttons, rules, dividers and animations

Some Specifics

- **Where:** Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 12022 Parklawn Drive, Rockville, Maryland.
- **Fees:** $35 per class for members and $50 per class for non-members. Pre-registration and Pre-payment must be made to hold a seat.
- **Who:** All family members living within the household of a member, are members.
- **Class Size:** Class size is limited to 6 students per class.
- **Instructor Cancellation:** If a class is cancelled by the instructor, all students will be notified of the cancellation. Please check your home answering machine if you have not given a work number for notification.
- **Student Cancellation:** A cancellation must be received 72 hours before the class time. Cancellation may be made only via telephone during business hours or via email to the email address of office@wap.org. The office does not have an answering machine—only an announcement machine.

for web pages. They will also learn how to construct graphic sets. These will be made using Appleworks, GraphicConverter and Adobe PhotoDeluxe. Students will learn about the GIF, JPEG and PNG formats and when to use them. If you want to use these projects in an actual web page, please sign up for Web Page Workshop in addition to this class. If you have a external Zip drive, please bring it to class. If you have an internal Zip drive at home, please bring an empty Zip disk to class. This is an all day workshop. Please bring a sack lunch or money to order lunch in.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: Two.
Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00
Instructor: Pat Fauquet
1/28/00 from 9:30 am - 4 pm

Web Page Workshop

Come design a web page! In this class students will be introduced to HTML and how it works. They will learn how to use Claris Home Page or Adobe PageMill or GoLive CyberStudio Personal Edition to make a series of linking web pages using pre-made backgrounds, graphics, animations and sounds. They will learn how to plan and organize their files for easy web page maintenance. They will learn about the principles of good web page design. Their pages will be ready to upload to the web. If you have a external Zip drive, please bring it and an empty Zip disk to class. If you have an internal Zip drive at home, please bring an empty Zip disk to class. This is an all day workshop. Please bring a sack lunch or money to order lunch in. It is suggested that a good follow-on class would be Graphics and Sound for My Web Page.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: Two.
Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00
Instructor: Pat Fauquet
12/13/99 from 9:30 am - 4 pm
1/27/00 from 9:30 am - 4 pm

Consumer Graphics and Multimedia

NEW **Introduction to Scanners**

This class will cover basic scanner operation. Students will learn how to scan photos and text. They will learn how to adjust the scanner settings to produce better scan and how to prepare a photo file to attach it to an e-mail message. They will learn how to use scanned photos in text documents and how to scan directly into applications such as Adobe PhotoDeluxe and Kai's PhotoSoap. They will learn how to use OCR software to turned scanned text into a text file.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, Intro to the Internet and an E-mail class.
Number of Sessions: One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
1/25/00 from 9:30 am - 12:30 pm

NEW **Intro to Digital Cameras**

Learn how to use your digital camera to its best advantage. Learn how to download photos you've taken and how to bring them directly into applications like Adobe PhotoDeluxe and Kai's PhotoSoap. Learn about cropping and improving image quality. Learn how to decrease file size so that you can send photos via e-mail.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, Intro to the Internet and an E-mail class.
Number of Sessions: One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
1/25/00 from 1 pm - 4 pm

Introduction to Graphics

Are you confused by graphic jargon? Would you like to learn how to choose and use a scanner? Do you know the difference between draw and paint programs? Are you wondering about digital cameras? Are you baffled by PICT, GIF, TIFF BMP, JPEG, and all those other graphic formats? Would you like to learn how to send a picture by e-mail? Do you know what to do with pictures people send to you? Would you like to learn how to make your own Finder backgrounds and icons? This is the class for you! We will explore all these topics in non-technical language and show you how make graphics work for you!
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, **Number of Sessions:** One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
12/1/99 from 1 pm - 4 pm
1/24/00 from 9:30 am - 12:30 pm

Working with QuickTime Pro

Have you ever wished you could make a video from your computer instead of writing a report? Have you ever wanted to add titles, credits and/or a new sound track to your home videos? Have you ever wanted to cut or mix your own audio tapes? Have you wanted to make your own QuickTime movie, a QuickTime panorama or make QuickTime VR object? Do you know what equipment you need and how to hook it up to your Mac to make all those things happen? All these projects can be done with QuickTime 3 Pro which is included in Macintosh OS 8.5 In this class we will explore these projects, discuss what

you need to do them, and show you where to buy the missing parts without spending a fortune. If you have a external Zip drive, please bring it and an empty Zip disk to class. If you have an internal Zip drive at home, please bring an empty Zip disk to class. This is an all day workshop. Please bring a sack lunch or money to order lunch in.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, Intro to the Internet and an E-mail class.
Number of Sessions: Two
Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00
Instructor: Pat Fauquet
Call office for Dates

Introduction to Adobe PhotoDeluxe

This inexpensive program is fun and easy to learn. It can be used to edit images for the web. It also can be used to enhance digital photographs or scanned images, make calendars, posters, and cards. The only major drawback to the program is its poorly written manual with lots of neat examples but few detailed instructions. In this class students will learn how to use this program to accomplish many tasks that normally require Adobe PhotoShop.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
12/17/99 from 1 pm - 4 pm
1/24/00 from 1 pm - 4 pm

Introduction to MovieWorks

Many Washington Apple Pi members purchased MovieWorks at the November General Meeting. Come learn how this software works in a hands-on Sessions. We will make a "movie" that brings in several pictures, adds titles, has narration and an animation and transitions between pictures. We will then make QuickTime movies that can be played on a computer and over the Internet. The instructor will demonstrate how to digitize a movie on a computer with a video capture card and how to record from the computer to a VCR. We will discuss how to add video capture and video out capabilities to your computer. We will also discuss how to optimize your system to make the best possible movies with MovieWorks. Students are invited to bring their own pictures to be put into their MovieWorks projects. If you own a Zip drive or other large capacity storage device you may want to bring it to take your project home. If you do not own MovieWorks, information will be provided on where to obtain the software.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
Call office for dates

Computer Crafting Class

An informal class in a flexible format to help students combine regular art and craft skills with their computer. This combination will open many new doors for some, and make life easier for others. This will not be a class to teach a specific skill, rather it will teach how to open your creative spirit. Students are invited to bring clip art, graphic applications and projects to class. Instead of showing you new software you have to buy, this class is structured to help you get the best use out of software you own.

Learn how to create stencils, templates, silk screens, sponge patterns, etc. Using new ink jet media you can make elegant faux stained glass, personalized gifts, animated greeting cards, elegant wall hangings, memory books and quilts, jewelry, games, etc.

Requirement for attendance: imagination or a desire to imagine. New crafters may attend to learn new computer tricks and experienced crafters may attend to learn computer tricks. None of the classes require previous experience.

Creativity grows in a creative environment. Come play with us. Each class will be different based on the needs and skills of the students. Requests for specific content are invited. When you register, tell us what you want to learn, what software you want to use and anything else you want to share.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, **Number of Sessions:** One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Mary Keene
1/5/99 from 9:30 am - 12:30 pm

Home and Small Business Financial Management

Introduction to Quicken

This course will be an introduction to the personal use of Quicken 7 or 98, and will cover the following: Entering Accounts, Use of QuickFill, Split Transactions, Categories, Writing Checks, Preferences, Passwords, Help, Reconciling Accounts, Reconciliation Report, Credit Card Accounts, Transferring Money.

Students should have some familiarity with the program and made an attempt to use it before class. The class will be taught using Quicken 7 (not the deluxe version). The instructor will try to answer all questions as long as they are within the curriculum outlined above. Bring your written questions.
Prerequisite: Introduction to the Macintosh or a good knowledge of

the Mac OS and its interface, **Number of Sessions:** One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
11/3/99 from 1 pm - 4 pm
1/10/99 from 1 pm - 4 pm

Databases and Spreadsheet Programs

Introduction to FileMaker Pro and/or the AppleWorks (a.k.a ClarisWorks) Database Module

This course covers what a database is, database terms, how to plan a database, and create database fields and layouts. Searching, sorting, printing and editing information in a database will also be covered. The differences between the AppleWorks module and FileMaker Pro will be discussed as well as when and how to migrate an existing database into FileMaker Pro.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, **Number of Sessions:** One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
1/31/00 from 9:30 am - 12:30 pm

FileMaker Pro Clinic

This class is for those who have some experience with FileMaker Pro and are interested in asking questions and having specific problems discussed. The class will be a questions and answer format. You should bring along on floppy a sample of things you would like help.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
Call office for dates

Introduction to Spreadsheets

This class will introduce basic spreadsheet concepts. Students will learn how to set up a spreadsheet, how to enter and edit numbers and words, how to enter basic formulas and make basic charts and graphs. They will learn how to sort data and how to print the whole spread sheet or only a portion of it. Students will use either the spreadsheet module of AppleWorks (ClarisWorks) or Excel. This class is not meant for persons who are intermediate or advanced users.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.
Number of Sessions: One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet or Jim Ritz

12/8/99 from 9:30 am - 12:30 pm
1/31/00 from 1 pm - 4 pm

Professional Graphics and Desktop Publishing

Adobe Photoshop Part 1

Learn the basic fundamentals of Adobe Photoshop, the most widely used graphics program. Learn the proper way to configure the Photoshop preferences and how to use the tool, info, channel and color palettes. Also learn how to use each of Photoshop's tools, create new documents, define colors and manipulate text and images. Also covered will be the proper format to save your image in, and what compression will or won't do to your image. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One.

Other Educational Opportunities

Apple Computer Inc., Reston, VA 703-264-5100 or www.seminars.apple.com

Mac Business Solutions 301-330-4074 or www.mbsdirect.com

Micro Center 703-204-8400 or www.microcenter-education.com

Piwowar & Associates 202-223-6813 or www.tjpa.com

Carol O'Connor 703-430-5881, graphicsss@ao.com

Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Paul Schlosser
12/1/99 from 6 pm - 9 pm
1/5/00 from 6 pm - 9 pm

Adobe PhotoShop Part 2

Adobe Photoshop lets you isolate different parts of an image on layers. Each layer can then be edited as discrete artwork, allowing unlimited flexibility in composing and revising an image. This lesson introduces creating an image with layers, and covers the basics of the Layers palette and how to select, view, and reorder layers. The concepts are fundamental for the use of Photoshop. In this lesson, you'll learn how to do the following: Organize your artwork on layers. Create a new layer. View and hide layers. Select layers. Remove artwork on layers. Reorder layers to change the placement of artwork in the image. Apply modes to layers to vary the effect of artwork on the layer. Link layers to affect them simultaneously. Apply a gradient to a layer. Add text

and layer effects to a layer. Save a copy of the file with the layers flattened.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, and Adobe PhotoShop Part 1 or a knowledge of the topics covered in that class.
Number of Sessions: One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Blake Lange
12/14/99 from 7 pm - 10 pm
1/11/00 from 7 pm - 10 pm

Adobe Illustrator: Mastering the Bezier Curve

Illustrator has become so feature laden that current tutorials are just overviews of the product; they do not present the fundamental workings of the program in depth. The Bezier curve, otherwise known as a vector graphic, is the primary building block of Illustrator (and many other drawing programs). Mastering its use will fundamentally change your view of the power of the program. The way the Bezier curve works, however, may seem alien at first with its points and vectors, an approach to illustrating many find counter-intuitive. This class will start with creating and editing the simplest lines and curves and build up to the creation of complex illustrations. By the end of the class you should feel comfortable editing any illustration based on the Bezier curve, for example, all clip art that has the eps extension in its file name. This class serves as both a good introduction to the program and as a help for the more advanced user to become adept in its use.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Blake Lange
11/9/99 from 7-10 pm
12/21/99 from 7 pm - 10 pm

Introduction to Quark XPress

Learn the basic fundamentals of Quark Xpress, the most widely used page layout program. Learn the proper way to configure the Xpress preferences and how to use the tool, measurement, color and documents palettes. You'll learn how to properly create new documents, define four-color process and spot colors, create master pages and manipulate text and graphic objects. Learn how to correctly use Xpress font and picture usage windows and how to configure the document for the laser printer or high-resolution imagesetter.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Paul Schlosser
11/3/99 from 6 pm - 9 pm
1/26/00 from 6 pm - 9 pm

Quark Xpress Clinic

This class is for those who have some experience with Quark Xpress and are interested in asking questions and having specific problems discussed. The class will be a question and answer format and you should

Washington Apple Pi Tutorial Registration Form

Washington Apple Pi
12022 Parklawn Drive
Rockville, MD 20852
301-984-0300

Name _____

Address _____

City/State/Zip _____

Phone (day) _____ (evening) _____

Member Number _____ Non-member _____

Number of Classes ___ x Class Fee $ _____ = Total Fee $ _____

☐ Check/Money Order ☐ Visa/MasterCard

Card Number _____

Card Expiration _____ Signature _____

Please fill in the name(s) and date(s) of the class(es) that you wish to attend.

Class #1 _____

Class #2 _____

Class #3 _____

Class #4 _____

Class #5 _____

Class #6 _____

Mail registration and payment to the above address.

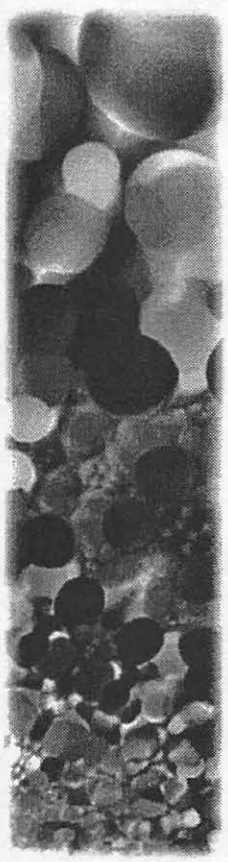
bring along on floppy a sample of things for which you would like help. Prerequisite: Introduction to Quark Xpress or a good knowledge of the basics of Quark Xpress and its interface. The price is $35 ($50 for non members).
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, and a good working knowledge of QuarkXpress
Number of Sessions: One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Paul Schlosser
Call office for dates

Introduction to PageMaker

Using the basic commands, tolls, and palettes, you will import, format, and position text and graphic elements needed to assemble a single-page, black and white flyer. This project will cover the following topics: Restoring default PageMaker settings. Changing the view of a publication. Creating a new publication. Opening an existing publication. Setting up the horizontal and vertical rulers. Displaying and hiding guides. Positioning the zero point. Using the pointer tool, the text tool, and the zoom tool. Specifying multiple columns. Locking the guides. Creating, placing formatting, and positioning text and graphic elements. Creating a drop cap. Applying a tint to text. Specifying a hanging indent. Creating ruler guides. Drawing circles, rectangles, and lines. Adjusting the stacking order of elements on the page. Range kerning text. Using the Snap to Guides option.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One.
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Blake Lange
1/25/00 from 7 pm - 10 pm

PageMaker Clinic

This class is for those who have some experience with PageMaker and are interested in asking questions and having specific problems discussed. The class will be a questions and answer format and you should bring along on floppy a sample of things for which you would like help.
Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface and Introduction to PageMaker or a good knowledge of the basics of PageMaker and its interface. **Number of Sessions:** One. **Price:** Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Blake Lange
Call office for dates ■



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Living Textbook
Computer Art Classes on CD-ROM
A unique approach to distance learning.

These 14-lesson courses feature up-to-the-minute techniques in the latest software. These lessons are HTML-based, which means that all you need to view them is the CD-ROM and a Web browser, such as Netscape, Internet Explorer or America Online. (Even view the lessons in an HTML-editor, like PageMill, GoLive, Front Page and others!)

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www.livingtextbook.com
For inquiries, email saint@livingtextbook.com

One More Year

The Year 2000 will feature one more year of sunny days and storms, successes and failures, discoveries and mysteries. Even after the Y2K scare settles down, there will be new and old challenges to meet, unfinished tasks to complete, and new technological wonders to pose both promise and pain.

Before the new century begins in 2001, help make the world of computing safer and saner by recruiting new members into **Washington Apple Pi**, and inviting old members back. Much has changed since the Pi started in 1978; technology has made the world smaller. But it has also made the task of "keeping up" much bigger.

We can help, ourselves and others. We can explore, together and separately. We can discover, and share our discoveries. We can keep personal computing personal.

2001

It is more than a new century.
It is more than a new millennium.
It is the next step to tomorrow.

iBook: Vision in Blueberry

© 1999 Washington Apple Pi Labs

IN KEEPING with an ancient tradition, handed down from punch card to floppy to CD-ROM, Washington Apple Pi Labs wanted to get its hands on an iBook as soon as they were released. For evaluation purposes only, of course.

No, we were not lusting after the no-slip rubberized covering on several edges of the case, the built-in handle, the bright display, the six hour battery life, or the lightning-fast processor. The idea of carrying around something faster than the original Power Mac G3 desktop machines, at a fraction of the price, wasn't a consideration. We aren't cattle, forever following the herd as it seeks out the latest hot processor or new technology. Our motivations were pure: we wanted to write a review from a consumer's point of view.

"You've got two hours." Two hours?!?

John Qwerty (something like that) had already written a review of the iBook from the Industry Standard point of view — without ever even touching one. He pronounced the iBook "girly," something that a Real Man would never consider. What brawny bruiser of the electronic world — strapped to a high-spirited office chair in an air-conditioned office — what would such a Real Man want with something out of a Barbie makeup kit? Would a Real Man want something that looked like an oversized woman's compact, in blue or orange? Qwerty had thoroughly covered the Industry Standard point of view, so there was no need to even comment. We were going for the user's point of view.

What does the iBook offer? We took a sampling of iBooks (a small sample of one blueberry model) and discovered, fresh out of the box, it came with the following:

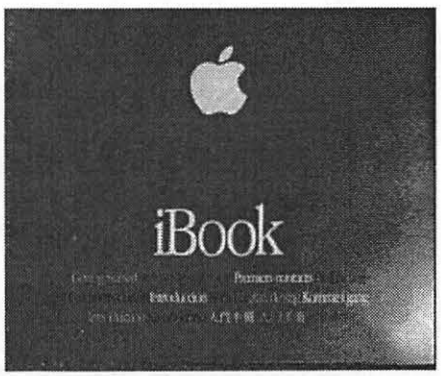
- 32 megabytes of memory installed;
- Mac OS ROM 2.3.1 (as a file on the hard drive, not as a standard ROM chip);
- IBM 3 gigabyte hard drive;
- Matsushita CR-175 CD-ROM drive;

"We aren't cattle, forever following the herd as it seeks out the latest hot processor or new technology. Our motivations were pure: we wanted to write a review from a consumer's point of view."

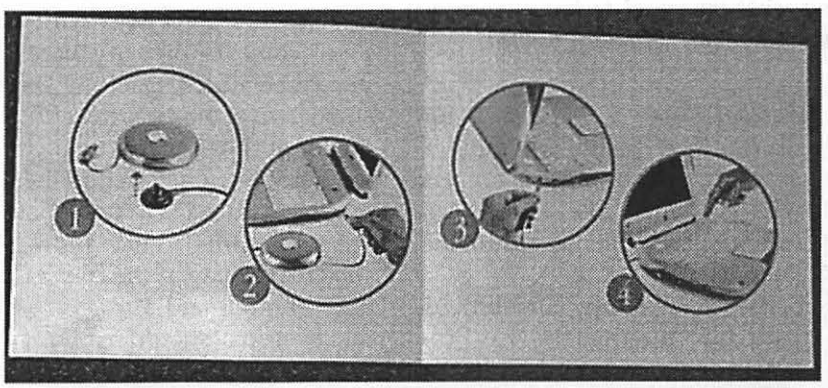
- 56K modem, built-in, with standard RJ-11 phone jack;
- 10/100 Base-T Ethernet port, with standard RJ-45 jack;
- USB port, for connecting USB hubs, printers, keyboards, joysticks, etc.;
- Headphone jack;
- Single speaker;
- Active matrix LCD screen capable of showing 800x600 pixels or 640x480 pixels.

Additionally, the following software was included:

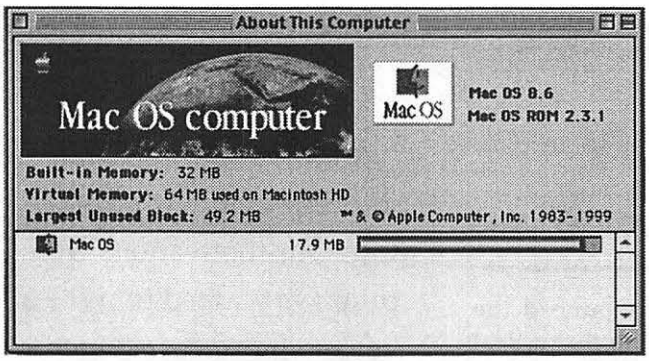
- Mac OS 8.6;
- *Bugdom* 1.0.1, a game;
- America Online 4.0f81, for dialing in to AOL;
- *AppleWorks 5.0.3*, the ubiquitous word processor, spreadsheet, database, drawing, paint and telecommunications package;



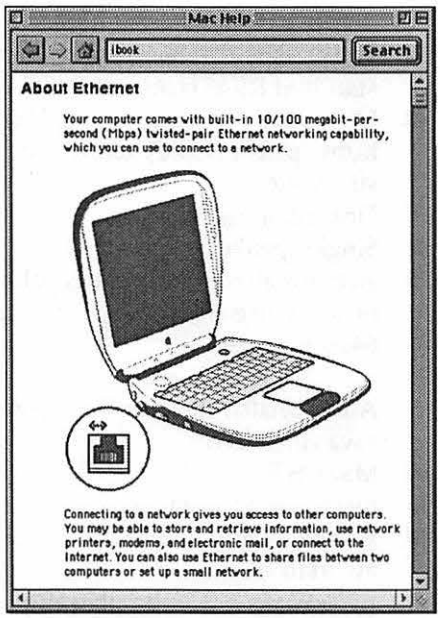
The bright red cover of the Getting Started brochure is printed in English, Japanese, Frehch, German, Italian, and eight other languages.



Inside the Getting Started brochure, you see four color pictures; there are no words.



When you select About This Computer, under the Apple menu, you discover the iBook is: a Macintosh.



Most of the written documentation on unique iBook features isn't included in the paper documentation. Instead, the Mac OS 8.6 Help menu can quickly tell you what you need to know, such as where the Ethernet port is located.

- *Acrobat Reader 3.0.1*, useful for reading PDF documentation;
- A whole bunch of stuff for use with a Palm hand-held computer, including multimedia tours of the Palm III, V, and VII;
- Software for using Earthlink as your ISP (Internet Service Provider);
- *FAXstf 5.0.9* fax software;
- *Graphing Calculator 1.1*;
- *Internet Explorer 4.5*;
- Netscape *Communicator 4.6.1* (International version);
- *Outlook Express 4.5*;
- *Pocket Quicken* (apparently for use with a Palm);
- *Nanosaur 1.1.6* (not installed, included on one of the CD-ROMs);
- *Ed View Internet Safety Kit* (not installed, included on one of the CD-ROMs);
- *World Book Encyclopedia*, Macintosh Edition Version 1.0 (not installed; included on two CD-ROMs);
- A whole bunch of new desktop pictures (some installed, most not) and beep sounds (not installed).

We decided to write the review in *AppleWorks* for two reasons: first, it was pre-installed on the iBook, and seemed a good way to test how most people would use the machine. Second, we were under severe time constraints. Severe. Time. Constraints.

Opening the box is even easier than opening an iMac box, since it is smaller. A penknife is handy for slicing sealing tape for both the outer box and an inner Accessory Kit box. The iBook comes with many pieces of paper (warranties, packing lists and such), two of which are useful: a fold-out sheet showing in four pictures — no words — how to set up the iBook, and a very attractive (complete with color pictures), very short *User's Guide*. At 32 pages, the *User's Guide* is brief enough and attractive enough that everyone should read it, right up to and including the five pages of material under "Where's the fine print?" The detailed instructions on how to dial telephone numbers with the modem in New Zealand are hilarious:

[...]
* Number to be dialed: 1; number to be entered into computer: 9
* Number to be dialed: 2; number to be entered into computer: 8
* Number to be dialed: 3; number to be entered into computer: 7
[...]

"You have one hour." One hour!?!?!

Following the step-by-step instructions (actually, we read them after the fact), we opened the box, took the plastic off the iBook, opened the top, and pressed the Power On key. Thanks to the fact that the iBook shipped with a charged battery, we were immediately off and running. Within seconds, we noticed two things we really wanted:

- More memory. Mac OS 8.6 may be a joy to use, but it doesn't work well in 32 megabytes of RAM, particularly if you want to do something more than just run the operating system. The iBook ships pre-configured with virtual memory set at 64 megabytes. Until you buy more memory, you don't have a choice: you must run

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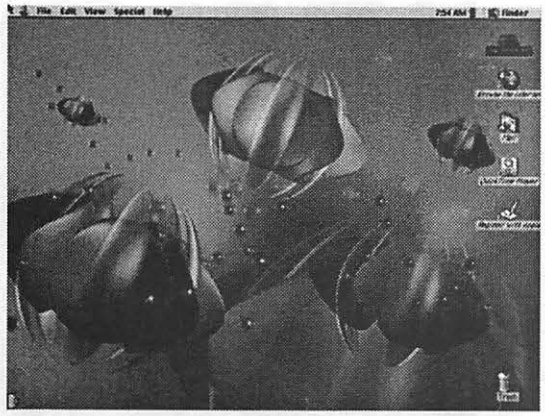
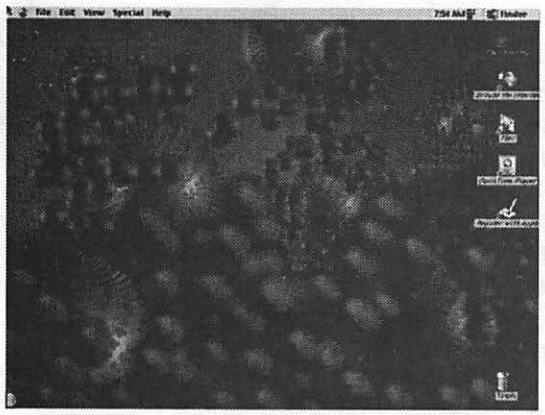
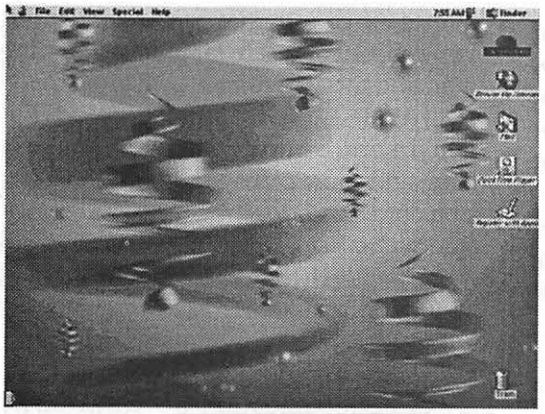
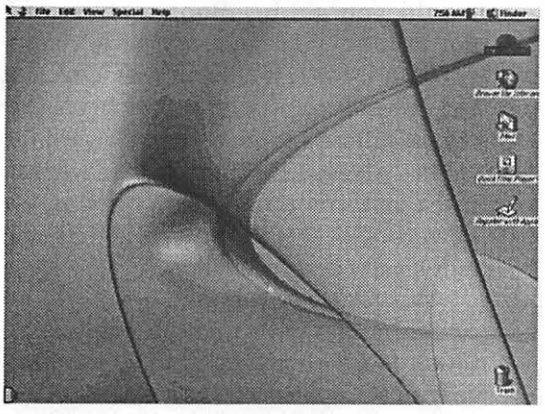
"Leaving the cafe table, carrying the iBook by the built-in handle, it became obvious there are some Very Clever People at Apple: half a dozen people stopped to ask if this blue thing with the big Apple logo was, in fact, the new Apple laptop."









The version of Mac OS 8.6 included with the iBook comes with a bunch of new desktop pictures. As a guess, some or all of these will probably migrate to Mac OS 9.

with virtual memory active in order to get anything done. Since virtual memory uses the hard drive more heavily than "normal," and since the hard drive uses more power than many other iBook components, running with virtual memory active decreases the amount of work you can get done between battery charges.

■ The keyboard is surprisingly good, but we want a forward delete key. The standard Delete key is nice, but there are times you'd like to delete things in front of the current cursor position. We didn't see any way to do this.

Other things we thought we'd mind, but didn't:

■ The trackpad is quite nice. We thought we'd need more time to adjust; we were wrong. This is a real shame, since we were looking forward to an excuse for evaluating the Kensington Orbit trackball;

■ The "inverted T" cursor control keys down at the bottom edge of the keyboard aren't that bad. We prefer full-sized keyboards but, quite frankly, admit they are kind of silly for a laptop computer;

■ The screen is outstanding. Steve Jobs is notorious for calling all Apple displays "wonderful" or "outstanding," so we were dubious. But it turns out Steve is right.

Because of severe time constraints, we didn't try out the built-in modem. Others claim it works, and we're willing to take their word for it. Instead, we plugged a 10BASE-T cable into the 10/100 BASE-T Ethernet jack (conveniently located on the left side; there are no jacks on the back of the computer). With a few deft entries into the TCP/IP Control Panel, we were configured for the Internet and off and running.

And performance is surprisingly good. With the limited amount of RAM, we had doubts Netscape *Communicator* would work all that well, and expected occasional pauses and stutters as it swapped things in and out of virtual memory. Instead, we quickly forgot we were using a laptop; it seemed as quick and effortless as any other G3-powered Macintosh. We did notice that, on slow sites, the screen would blank out as the Energy Saver software did its part to extend battery life; a quick tap on a key or the trackpad restored things to normal.

"You're out of time." Out of time!

Since it is supposed to be portable, we unplugged the Ethernet cable and went to a shopping mall. Setting up shop on a (clean) cafe table, we were soon engrossed in trying to figure out *Bugdom* (cute game, but we decided we didn't have time to really look at it), and other things pre-installed on the iBook. Several people, all women, stopped by to talk:

"Is that one of those new iMacs?"

"No, it is an iBook."

"It's adorable! How do you like it?"

"I've only been using it for a couple hours, but I'm quite happy with it."

"Is it hard to use?"

"I took it out of the box and was

on the Internet in, oh, four minutes."

"Four minutes! We've got a [PC] and we haven't been able to get the Internet to work since we got it."

"The iBook comes with a little program that runs automatically when you first turn it on, guiding you through setting it up for the Internet. I didn't use that program, but it does make it easy."

"What's that green light?"

"Uh, I don't know."

The "green light" is dead center at the bottom of the screen, under the Apple logo. You can also see it from the outside, when the top is closed. It pulsates in green every couple of seconds, like a slow heartbeat, when the iBook is asleep.

"It looks like a heartbeat."

"You don't know what it is? Is it in the instructions?"

A quick skimming of the manual, such as it is, gives no clues about the green light. However, the Help Center (part of the built-in Help that comes with Mac OS 8.6) has a section called "Your iBook At A Glance" that reveals this is, in fact, the Sleep Indicator Light.

"That's cute! It tells you when it is sleeping!"

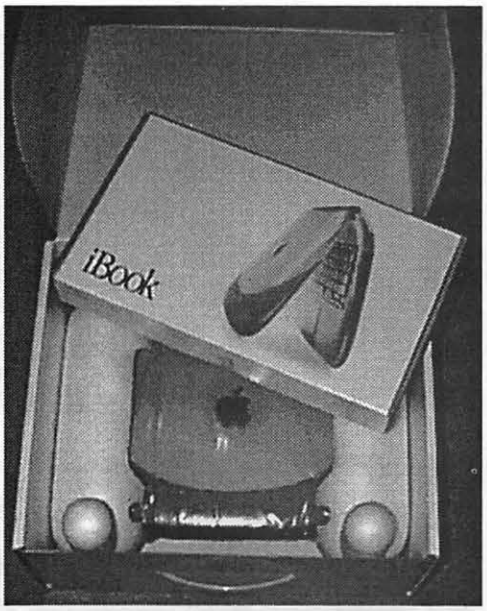
Leaving the cafe table, carrying the iBook by the built-in handle, it became obvious there are some Very Clever People at Apple: half a dozen people stopped to ask if this blue thing with the big Apple logo was, in fact, the new Apple laptop. Nobody asks if your black or gray box is a laptop, especially if it is hidden in a bag. One person had an excellent question: "Why would you get an iBook instead of an iMac?"

An iMac is less expensive, so if price is that critical, you can save some money by getting an iMac. An iMac (at least the current models) is somewhat faster, too, so you get better performance for your money with an iMac. But you can't sit at a cafe table in a shopping mall and attract women with an iMac.

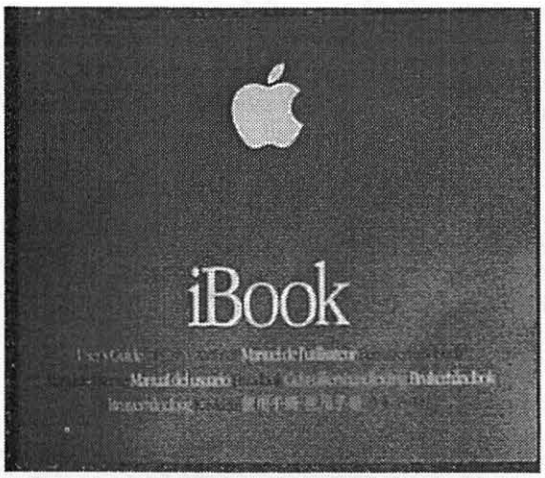
[Actually, you probably could, but you'd need a bigger table, an extension cord, and some place to plug in the extension cord. And don't jump to the conclusion we're being sexist here: women are more inclined to come up and ask you about an iBook than men. Men, you see, are supposed to know it all, so they won't ask.]

A better question might be: why would you get an iBook instead of a PowerBook G3? Money and performance are both factors; the iBook costs less, but the PowerBook is a faster machine. One critical difference, however: a PowerBook G3 has a Video Out port. If you want to use a laptop with a video projector, the PowerBook G3 is the only way to fly; an iBook can't do this at all.

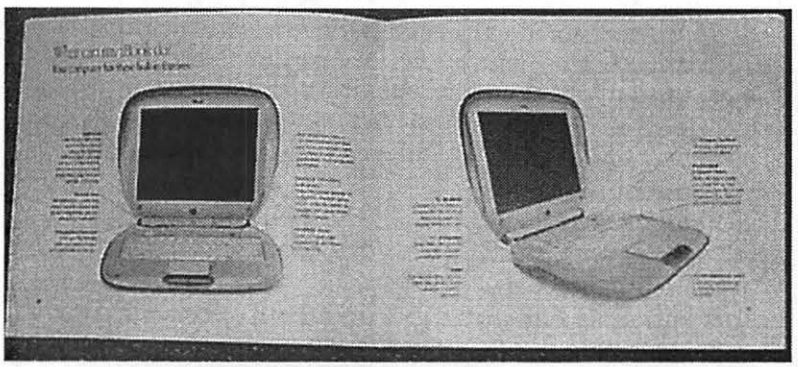
But for those who don't need to do presentations with their computers, an iBook is an outstanding machine: fast, easy to set up, easy to use. The case and



The iBook box is quite small, even compared to a PowerBook G3 box. The iBook, complete with charged battery, is padded in a custom foam cocoon. Everything else is in the cardboard Accessory Kit box.



Like the Getting Started brochure, the User's Guide has a bright red cover printed in thirteen languages. Inside, however, the text and photo captions are all in English.



The User Guide is richly illustrated, with color pictures. Though fairly slim, it is one of the most attractive pieces of documentation from Apple in a long time.

general design should make it more durable than most laptops, though we didn't try to test this. The price makes it more likely that you'd actually carry it around, too, since many people aren't willing to expose a $3500 machine to the same rigors as a $1600 machine.

Two things would make this an even better machine: more memory and an AirPort. Memory is a touchy issue: in the two months prior to the introduction of the iBook, memory prices more than doubled. Adding a 128 megabyte memory module to an iBook (in October 1999, as this was written) would add another $300 or more to the price.

The AirPort wireless networking card, on the other hand, is fairly inexpensive, $99, but (a) isn't available, (b) requires a $299 AirPort base station, also not available, and (c) realistically requires an Ethernet network. But if you have an established Ethernet network, especially one with a full-time connection to the Internet, it opens up new horizons — or at least those within 150 feet of the AirPort base station.

Are people bothering you at your desk, and you need to get away to write a report? Leave — hide outside on the patio, or in the lobby, or in the lunchroom. If you are exceedingly strange, you could even surf the Internet from the restroom. ("Martha, make a phone call to Janitorial. The men's restroom is out of soap.")

Sadly, our test unit didn't have the extra memory or the AirPort for evaluation. Washington Apple Pi Labs deeply regrets this. More deeply than you can imagine.

"Finally! I told you two hours! Can't you tell time?"

Yes. But we didn't want to. An iBook is addictive. Plus: it attracts women, unless your name is John Dvorak. Er, we mean John Qwerty. ■

iBook Benchmarks

© 1999 Washington Apple Pi Labs

Benchmarks

WHEN WE ran benchmarks of the original iMac (*Washington Apple Pi Journal*, January/February 1999), we decided not to use the Ziff-Davis *MacBench* 5.0 suite. For one thing, we prefer our own Washington Apple Pi Mac Bench (see "Introducing: Washington Apple Pi Mac Bench," *Washington Apple Pi Journal*, January/February 1998). But the biggest problem with *MacBench* is that it doesn't make comparisons that make sense for existing users.

MacBench 5.0 is standardized on a Power Macintosh G3/300, which is given a rating of 100. Computers prior to the G3/300 are ignored, so if you have a Mac Plus, or Quadra 800, or Power Mac 6100/60, you have no way of drawing meaningful comparisons between your computer and whatever is currently being measured.

So, once again, we decided to use Symantec's *System Info 4.0*, part of *Norton Utilities for Macintosh 4.0*. *System Info 4.0* includes a large database of older machines, making it easy to compare new technology with old. It does have a few quirks: it suggests the disk cache should be set to 128K, that AppleTalk should be off, and that the video should be set to 256 colors. Such settings make no sense with modern Macs, but we went along with this, and have dubbed these "Norton settings." We then created other sets of settings with what we consider more reasonable values for the world of 1999, and ran several tests. Results marked with an asterisk (*) are supplied with *Norton Utilities 4.0*:

System Rating (an overall rating of performance):

Score	Setup
0.961	Mac Plus *
11.7	PowerBook 170 *
91.2	PowerBook 1400cs/117 *
581	iMac (original 233 MHz)
642	iBook (fresh out of box)
687	iBook (typical use)
731	iBook (Norton settings)

The "fresh out of box" settings had the iBook set with a disk cache of 1024K, the screen set to thousands of colors, AppleTalk turned on, and Virtual Memory set at 64 megabytes. "Typical use" left the screen, AppleTalk and disk cache settings alone, but turned off Virtual Memory.

We decided to take a look at Norton's CPU and disk ratings separately:

CPU Rating (processor and system bus performance):

Score	Setup
1.18	Mac Plus *
10.3	PowerBook 170 *
127	PowerBook 1400cs/117 *
632	iMac (original 233 MHz)
741	iBook (fresh out of box)
811	iBook (Norton settings)
815	iBook (typical use)

Disk Rating (disk drive plus disk caching performance):

Score	Setup
26.3	Mac Plus *
92.4	PowerBook 170 *
111	PowerBook 1400cs/117 *
477	iBook (Norton settings)
484	iMac (original 233 MHz)
645	iBook (fresh out of box)
675	iBook (typical use)

On the whole, these figures show the iBook, no matter how you configure it, is a very fast machine. They also show that turning off virtual memory, adding more RAM, and adjusting the disk cache make it even faster. ■

Computer Show & Sale December 11

Pi Fillings—the CD Version 6

Saga of Mac Fan

By Ray Cook

Part I

IT WAS a dark and stormy night. Oops, can't use that, it is an opening line of a beagle writer who stars in a comic strip.*

It was a dark evening early in October 1999. The weather forecast predicted the first cold evening of autumn, followed by the first frost outside the Washington Beltway the next night. I walked into the bedroom, turned on the light and there they were, unopened, factory shrink-wrapped copies of Symantec™ Norton Utilities™ for Macintosh® v5.0 (NUM) and Norton AntiVirus™ for Macintosh®, v6.0 (NAV). They had been there for two weeks just waiting for me to get the courage to open and install them on my Power Mac 7500.

Said to myself, "tonight's the night, I am going to do it! But first some necessary precautions must be taken." I did a total backup of the hard drive, then ran Alsoft's DiskWarrior® to ensure the disk was healthy. To doubly ensure success I also ran NUM v4.0.x. Not satisfied with this, I fired-up Apple's Disk First Aid. All of these applications pronounced my hard drive as healthy.

I then proceeded to remove the shrink-wrap from NUM v5.0 and read the installation instructions. Having been a prior user of NUM for years, the installation instructions were pretty straightforward and similar to previous instructions. I then inserted the NUM CD into the Mac's CD-ROM drive and cautiously double-clicked the Norton Utilities Install icon. I was provided with a variety of prompts and decided to do a custom install rather than an easy install. I chose to install Norton Disk Doctor, UnErase, FileSaver, Volume Recover, Speed Disk, and Wipe Info. I did not choose LiveUpdate, System Info, Norton Fast Find, or DiskLight.

I then clicked OK and the installation began! With bated breath (kielbasa, mainly) I waited for it to complete, wondering all the time, "will I come through this unscathed?" At last it completed and a message was displayed, saying something like "installation was successful,

you must now restart your Mac;" I cannot remember the exact words. YES, I had succeeded! With great elation I selected Restart from the Special pull down menu and waited for the Mac to complete the restart process. Finally it did and there were no error messages! The Computer Gods (a.k.a. Symantec) had smiled on me.

Part II

Encouraged by this success I removed the shrink-wrap from NAV 6.0, located the installation instructions and, per the instructions, proceeded to restart the Mac using the CD as the startup volume. Having been a prior user of NAV 5.0.x, I knew my hard drive was virus free so there was no need to do a virus scan prior to installation. Double-clicked the Installer icon and again received a series of prompts. Also again, I decided to do a custom install and chose to not install LiveUpdate. Since I use the WAP Explorer Service to download updates to applications and monthly NAV virus definition updates, I figured LiveUpdate was unnecessary.

The installation completed, I restarted the Mac using the hard drive as the startup volume. Again with bated breath, I waited for the Mac to finish restarting and, when it did, promptly received a message that Norton AntiVirus was not launched (or something like that) because the Norton AntiVirus Library file was either damaged or not installed in the Norton AntiVirus Additions Folder. I was further instructed to reinstall NAV and run LiveUpdate to ensure I had all of the correct software installed.

Arghhh, my luck had run out! I figured the fickle Computer Gods were now punishing me for doing custom installs rather than easy ones. Promptly I reinstalled NAV, this time including LiveUpdate, and restarted the Mac. Fired up the modem, got on Explorer, and launched LiveUpdate.

LiveUpdate then proceeded to advise me that all of the existing software was current and quit (would hope so since it was just installed off of a brand new CD.) Frustrated by this experience, I finally solved the problem by manually replacing the contents of the Norton AntiVirus Additions Folder contained on the updated hard drive with the corresponding contents of the Norton AntiVirus Additions Folder contained on the installation CD. Then I updated the virus definition file with the NAV 6.0 Oct 99 virus definitions. Feeling very satisfied with myself that I had beaten the NAV Installer, and had successfully completed the NUM and NAV installations, I went to bed.

The next morning after getting a cup of coffee and finding my face, I started the Mac to do my early morning Web surfing and check for new email. I was promptly presented with an error message about an unimplemented trap and something to do with memory. Initially I thought that NUM FileSaver didn't like the fact that I maintain a RAM Disk on the hard drive, and I had instructed it to not update its directory contents at shutdown since they are done away with at shutdown.

I also received an error messages that the RAM disk was damaged and asked if it should be initialized. Excuse me, how do you initialize a RAM Disk? Turning off the RAM disk eliminated the error message but turning it back on brought it back. Nothing else seemed to work so I said "what the heck" (yea, right), "I'll initialize the RAM Disk," and it solved the problem.... so I thought. Did my Web surfing, read my new email, turned off the Mac and went about the day's business.

That evening, I turned on the Mac to log onto the WAP TCS and again received the error message about an unimplemented trap. By now I was totally regretting I ever decided to install NUM 5.0 and NAV 6.0. I use the RAM disk to hold the Netscape cache so that it doesn't further bloat the System Folder. You also get the benefits of the RAM disk contents being trashed at shutdown, and getting the opportunity to cancel a shutdown when presented with the question about losing the RAM disk contents. This is good if you selected Shutdown and then decided to not do it.

By this time I was willing to do anything to get this behind me but didn't want to have Netscape use my System Folder as the place to cache information. I reluctantly decided to turn off the RAM disk and, in its place, create a new folder on the desktop and call it Netscape Cache. Then I went into the Netscape preferences and pointed the cache to this folder. This allows me to manually empty the folder prior to shutdown and satisfies either NUM or NAV (at this point not sure which one is the culprit), and the Mac no longer displays the unimplemented trap error message at startup. I would imagine that an AppleScript could be written to trash the cache file contents at shutdown; however, it must be very accurate to ensure it is the only file it trashes.

As a long-time user of NUM, Symantec AntiVirus for Macintosh (SAM), and NAV, I'm very disappointed that this conflict with a RAM disk was not identified during development of the application(s) or during the beta-testing period. It's been a long time since I've had an extension conflict and really don't want this one but I'm not going to pursue it any further. If versions 5.1 of NUM or 6.1 of NAV are ever issued hopefully they will correct the problem. In the meantime I'll use the folder on the desktop of the Mac as a place to store the Netscape cache.

Required Journal Material:
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Suggested title: Saga of Mac Fan

About the author: Ray Cook is a Mac enthusiast and became a WAP member around 1995. He's an active user of the WAP TCS and Explorer Service, and try's to not take himself too seriously. Has served as a WAP betatester for the TCS Explorer Service Sys Config and Applications Installers.

*Actually, Snoopy plagiarizes the opening line of *Paul Clifford*, a really bad novel by the 19th century English writer Edward George Bulwer-Lytton, best known for *The Last Days of Pompeii*. Bulwer-Lytton's mangled prose is immortalized in the yearly contest, sponsored by San Jose State University's English Department, for the best deliberately bad piece of English writing. For more details, see http://www.bulwer-lytton.com. - *Editor*

FileMaker Pro Demystified

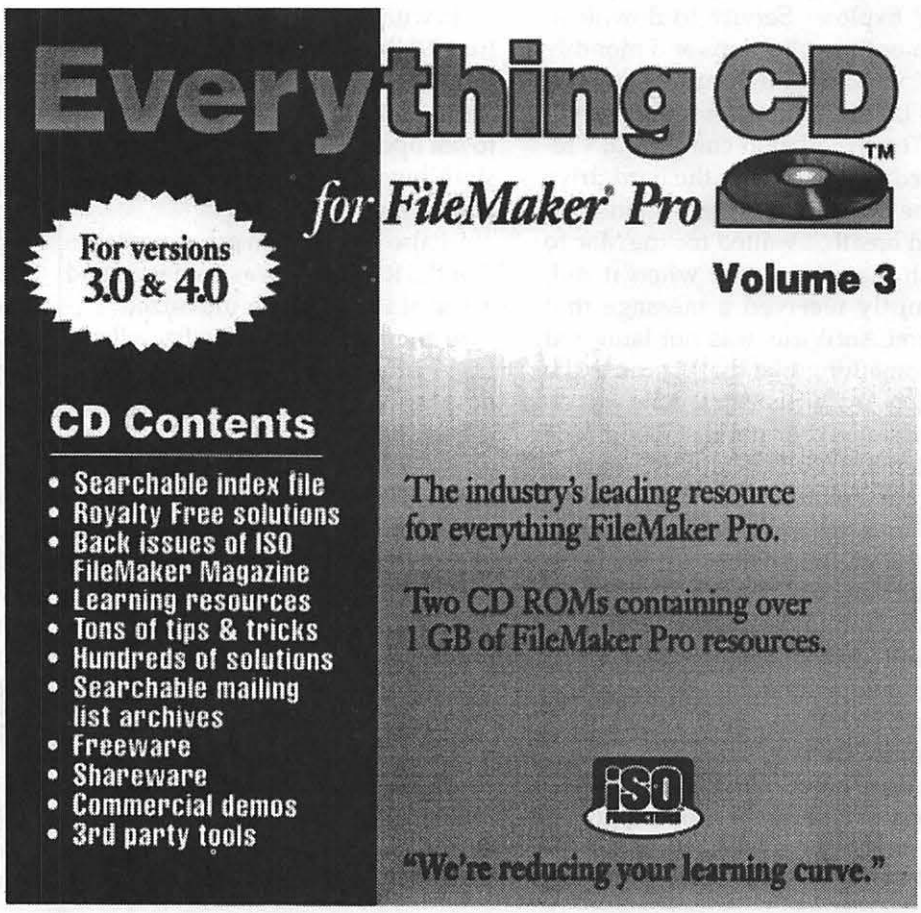
A Review of ISO Publishing's Scriptology Book/CD combination and the companion "Everything CD"

By Dave Ottalini

FILEMAKER Pro is one of the most powerful, and popular, cross-platform data base programs around. Not just easy to use, FM Pro is able to do things no self-respecting data base might ever dream of doing.

But I always felt like I needed something more to help me use the program better. I've developed databases ever since I cut my teeth on computers—QuickFile on the Apple ///, AppleWorks on the Apple II GS. But most of what I learned was mostly self-taught through use, reading manuals or going though magazines. The learning curve was a little higher with Apple Computer's FileMaker, and later FileMaker Pro data base program. Now published by spin-off FileMaker Inc., FM Pro offers so much I decided it was time to look for something that would help me get the most out of the program.

Enter ISO Productions and their fabulous



Scriptology series. Along with a 471 page book and "Techniques Files CD" combo, there's a second "Everything CD" that literally contains just about everything the FM Pro Industry has to offer. Both are for intermediate and advanced users, but I believe even someone who is beyond the "newbie" stage can get something out of these products.

The authors, Matt Petrowsky and John Mark Osborne have worked very hard to "Demystify" FM Pro - and in fact, offer tips and suggestions covering both the 3.0 and 4.0 versions of the data base, for Windows and Mac users. Petrowsky is also the President of ISO Productions, which publishes a FileMaker Pro Magazine and offers additional training and resource information for users.

Scripting Basics

One of FileMaker Pro's most powerful features is ScriptMaker, a macro language generator that allows you to automate just about anything and everything within the program. In fact, it's so powerful you can call any number of scripts from within a script. As the authors write, "Developing a FileMaker Pro solution requires only a fraction of the time, yet the results are similar to developing with a programming language."

Scriptology starts with the basics: what are scripts, the best way to develop them using the proper conventions, modular script design, etc. Along the way, the "Techniques CD" is there to help and reinforce. In the left side of the column, you're told what the file is, and when to open it. The authors, for example, emphasize the need to break large scripts down into smaller, more manageable modules and then link them together. They show you how to do this in an easy step-by-step manner. At the end of each chapter, you get an overview and quiz to see if you really have learned what you should have.

If you run into trouble, there's a whole chapter on ScriptMaker Debugging. Additional chapters look at calculation fundamentals, how to make sure FileMaker Pro uses the right information, value lists, understanding relationships and debugging when problems arise. There's even a chapter on cross-platform issues and how to make your FM Pro Data Base look its best. Again, the CD is always there to help with technique files, button tips, and more. It is impossible not to find something there to help you become a better FileMaker Pro user.

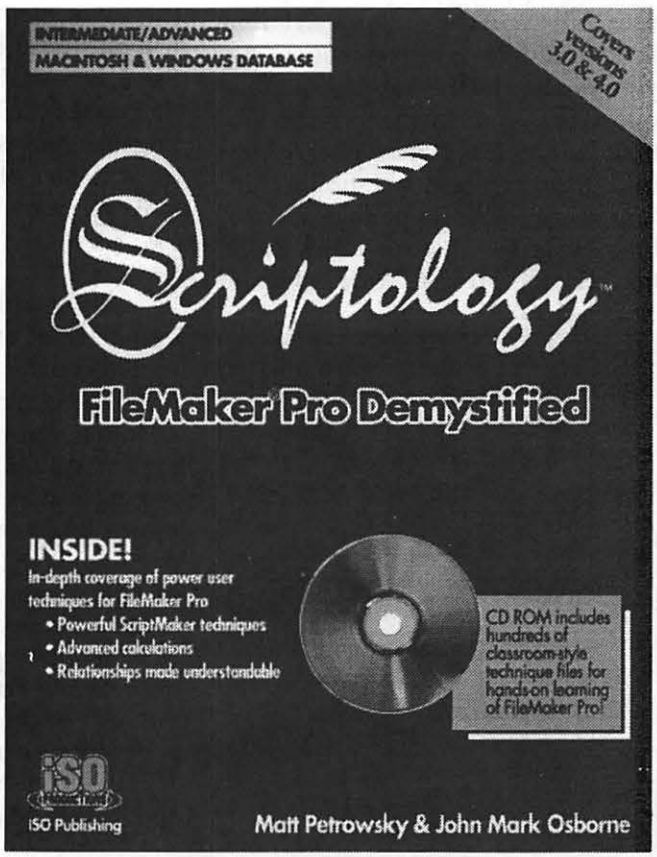
Finally, you'll find a chapter full of advice: lists of where to go for even more help, the most common fields to add, even using a developer layout. The Appendix gives you a host of documented and undocumented Power Keys for both the Mac and Windows versions of the program, a functions list, glossary and FM Pro technical specifications.

Everything CD

As if the Scriptology book and Techniques CD weren't enough, the companion "Everything CD" makes your life as an FM Pro data base developer even more complete. It's described as "a huge collection of the best that the FileMaker Pro industry has to offer." Version 3.0 is actually a 2 CD set and includes more than 1 gigabyte of freeware, shareware, commercial demos, tips and tricks, an online mailing list archive and much, much more. All the files are indexed using FM Pro and there are versions for both Mac and Windows users.

Let me give you an example of its usefulness. One of my big frustrations with FM Pro is the fact that it will not highlight words in a database, at least not the way I need them to be highlighted. At work, I maintain a large videotape library. One of the fields contains a "shot chart" of what is on that particular tape. The "shot chart" includes a time code and description for each item. But when I search that field for a particular word, the program will not highlight it. The data base gives me the relevant records, but forces me to scroll through each to find where that unhighlighted word is—a time consuming job if ever there was one (especially where each record covers a one hour tape).

On disk 2 of the Everything CD is an archive of 5 different discussion group lists, two aimed at more general questions about FM Pro. Of course the information itself is an FM



Pro data base and searchable. I did that and found one possible answer almost immediately. Not the best answer, but one that will do until I can convince FileMaker to give users a "true" highlighting function (and yes, I did talk to them about it at MacWorld in July). By the way, the Scriptology book also discussed other possible ways to deal with this problem.

Given the cross-platform setup of this CD, you'll find FM Pro Database files compressed with .zip (Windows) and .sit (Mac) formats. There are utility programs that will open these files - and the CD includes them for both platforms if you don't already have them. All the database files can be used on either version of computer.

The Bottom Line

For me, "Scriptology - FileMaker Pro Demystified" and the companion "Everything CD" have become indispensable tools that I will be using over and over again. I think they are must additions to any serious FM Pro user's library. The authors write in their Scriptology Introduction: "As you read this book, keep in mind this question, "Can FileMaker Pro do that?" More often than not the answer is, "If I don't know now, I'm sure I can find a way!" With Scriptology and the Everything CD, I know I now have the help to find that "way" quickly and easily.

Book: Scriptology—Filemaker Pro Demystified (with CD) (Win/Mac)
Published by: ISO Productions
Authors: Matt Petrowsky and John Mark Osborne
Cost: $79.99

CD: Everything CD for Filemaker Pro, V. 3.0 (Win/Mac)
Published by: ISO Productions
Covers: FM Pro 3.0 and 4.0
Cost: $49.99

More Info: www.scriptology.com
Telephone: 1-800-958-8999

DoubleClick— Sept. 20th

I OWN A Powerbook 1400cs/117 that has given me headaches (like lots of freezing, crashing, etc) since I purchased it -unfortunately, since I 'm a big Mac fan. I would like to reinstall the system without having to back up all of my data files, since the only writeable medium on this machine is a 3 1/2" disk drive. I have already gone through the process of deleting a number of no longer necessary program files (by which I probably created even more problems). I've run Norton without any success. My thought is that if I partition the drive and install a new system, move my data files over, and then wipe the now troublesome system off the other portion of the hard drive, I should be better off. But how do I do this? Can you tell me where to get step-by-step instructions? Or do you have other suggestions how to fix this mess?

Dave: STOP!

Do not under any circumstances even THINK about partioning your hard drive the way you are describing. Whew! Now that I've got your attention, the reason is simple. You can't partition a Mac drive without wiping out everything on it. That means bye bye to all that data you need to save. You don't say how MUCH data you have but I would suggest a couple of things. Get a ZIP SCSI or other external hard drive and appropriate Powerbook cable, then do your backup. Or you can hook your Mac up to another Mac using the Appletalk network built into just about every Mac (you'll need the appropriate connectors), turn on file sharing on your Powerbook, mount it from the Chooser of your other Mac and copy the files across. You could also sign up for one of the "virtual hard drives" on the Internet (originally done for the iMac but anyone can use them) and copy your files there for safekeeping until you're ready to grab them later.

Although you said Norton had not successfully repaired your Powerbook, there is still not enough information to really know why you are having so much trouble. You may find that once you've saved your data and formatted the drive (making sure to update the hard disk drivers) your problems may go away. But partitioning it (which you can do using Apple's Drive Setup Utility) will not help solve the problems you describe. I know from experience that if you have a bad hard drive, no amount of repair runs with Norton or TechTool, or formatting, will fix the problem (I have one now where the drive won't boot despite repairs and new OS installations but it can be seen by other programs booted off the disk drive or CD.)

One other thought, tho: You don't have TWO copies of the System Folder on that drive, do you? THAT's a BIG no-no and can cause some of the troubles you're describing.

I would suggest you run the 1400 over to the Washington Apple Pi Tuesday Evening Repair Session and let them take a look. You'll at least get a good assessment of what might be wrong and some indication of what you may have to do. It could be you

need a new hard drive, you need a new battery or something else (though there's not a whole lot left to go wrong). Call the WAP office at 301-984-0300 to make sure the Tuesday Night session is still on. You will be asked to make a donation, by the way -or at least join! A wonderful investment, if I do say so myself.

Derek -usually partioning a drive with data on it destroys everything - but are there utilities on the PC that can get around this problem? I don't believe there's something like that on the Macintosh.

DEREK: The PC tool for partitioning your drive and maintaining the data on it that I like is called Partition Magic. It allows repartitioning and multi boot capability without losing any data. It is very cool. You can find information on it at: http://www.powerquest.com/partitionmagic/index.html.

I was unable to find any information on any similar tools for the Macintosh. As far your exact probem is concerned, repartitioning may not solve your problem anyway.

While I'm not sure exactly what is the root cause of your trouble, reinstalling everything often fixes, but it is a very drastic step. Certainly you can purchase an external drive such as a ZIP drive to store information and then reinstall. They are inexpensive, and are nice to have anyway.

Good luck! ■

DoubleClick is reprinted by permission of the Journal Newspapers. *Dave Ottalini is on the Board of Directors of Washington Apple Pi, the Apple/Mac user group based in Rockville, MD.*

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Dave and Derek can be reached by email at doubleclick@jrnl.com; by snail mail in care of The Journal, 6408 Edsall Road, Alexandria, VA 22312; or by fax at 703-846-8366. While all questions and comments are welcome, we cannot promise individual responses.

DoubleClick— Sept. 27th

I HAVE A Gateway G5 200MMX, with 64Ram, 3.2gb, running Win95 with latest service pack.

Problem is with Word97 and Excel. When I try to use the programs, I get illegal error, stack dump, and program shuts down. Using Bomb shelter recover) I am able to get back into programs. but unable to type anything. I must confess that I clean my system once a week (Reg clean, duplicate files, etc.) and I believe I deleted a sys file, although I am not sure. All other programs work fine, did a virus scan with 3 different programs to include a cold boot) and nothing found. I have installed and re-installed Word97 along with mouse drivers, 4 times. Nothing helps, still get illegal operation, stack dump. When I go into Word97, everything is fine until I move my mouse, then the illegal operation, and then I recover using bomb shelter. I have also re-installed the mouse drivers (Microsoft intelligence) 3 times, to no avail. I cant use Word97,,,,,Help???- Zack

Derek: Zack, I don't know. Without knowing the module that is crashing (there should be a module name listed in the Illegal Operations box) I can'-t do an adequate search. I scanned through the support documents at Microsoft (support.microsoft.com) but couldn't find anything specific either in Word or in the Intellimouse section.

One suggestion though is to stop using the mouse. (I know what you are saying - sounds like the guy that goes to the doctor and says "hey doc, I'm having a hard time bending my elbow." The doctor says "no problem - I can cure that. Stop bending your elbow." No really what I mean is stop using that mouse driver. It may be the problem. I would change the mouse driver to the generic one.

Remember in troubleshooting you want to minimize the effects of all those software programs and drivers. Remember how we often say if you have a weird problem, also change the video driver to the generic standard VGA.

First, I would change the mouse driver from the Intellimouse to the regular mouse driver. If that doesn't work, change your video adapter to VGA. If that doesn't work, get rid of all the programs running and maybe even boot into safe mode.

If none of those works out, then you definitely have a problem with something. Of course, the most common culprit would seem to be the mouse driver, but if that doesn't work I'm not sure where to go next. You could reinstall Windows 95. That would be my next step. There may be a critical file that isn't there anymore. Remember, reinstalling Windows 95 won't erase your data but always do this as a last resort.

Let us know how it works out.

Dave: Zack - We on the Mac side

of the Force salute your perseverance. My solution is bit more drastic than Dereks. Back up your personal files, reformat your drive and do clean installations rather than reinstalling everything over and over and trying to figure out why one piece of the puzzle doesn't work. Do the installation in stages and test to make sure each program works the way it should then move on. Hopefully this will give your PC a new life and get you back on track doing what you need to do on your computer. And maybe you should "clean" your PC ever OTHER week. I'd also like to hear how things worked out, so please do give us an e-holler.

Question: Acquired a HP 7585 (this is an older plotter) for my high school son to use with his AuotCAD software. PC is running 95. Cannot get the plotter to print queued jobs from the PC via serial port. Even a simple text document in MS Word and Notepad. Attempted to use different COM ports (1-4), but unsuccessful. Did change the CMOS to detect serial port on AUTO mode. Plotter is able to print test page demos with no problem. Any suggestions. Many thanks. Annie

Dave & Derek: Annie read our article a couple of weeks ago on serial printer cables. That may be the problem. Check out: http://www.jrnl.com/news/99/Sep/jrn33130999.html Let us know if that solves the problem. ■

DoubleClick— Oct. 4th

DEREK AND DAVE,

I love my iMac, and don't regret buying it, but I am now having a compatibility problem. I have the Virtual P.C. program (Windows 98 version), which I bought last April, and it has worked fine with all the software I've tried to run {until now}-With Virtual P.C., its just as fast as a P.C., as far as I can tell, too -I turn off all extensions not necessary for Virtual P.C., when I'm using the P.C. side of my computer (I have 96mb of RAM, also) I'm running Microsoft Office 2000, now and it works fine - plenty of speed.

Now for the question: I'm taking an accounting class, and the program I need to use for a homework assignment comes on a floppy disk that says "requires IBM PC or 100% compatible and DOS 2.1 or higher". I both tried to run the program and to load it from my SuperDisk (which can read and write both Mac and PC formatted floppy disks), but I can't do it. I get no error messages, but the Superdisk just makes noises, but doesn't load anything -I checked the directory that I was tryng to copy to and after 30 minutes of attempted copying, it had a total of 0 Kilobytes of data. Maybe the problem is the "Hot Keys"-the F1 and F10 key that the program needs to use? Anyhow, I sent to Macgraw Hill for the CD version of the program, which is a windows version. I'm hoping that will work. Alternately, I guess I'll have to use the computers on campus. At least I can use my Mac for about 90% of the homework that I have to do with accounting. I'm still hoping I can get the windows version of the program to work. Lee in Springfield

DAVE:

Lee: You don't say what version of Virtual PC you're using, but you should upgrade to at least 2.1.3 (which came out last April) from www.connectix.com as a free download at :
http://www.connectix.com/downloadcenter/updater_vpc_213.html
or get the newest version -3.0 (a $50.00 upgrade). Part of your problem with the Superdrive may be that Virtual PC didn't really recognize the Imation USB drive until version 2.1.2 came out last January. 2.1.3 is a must if you're running Mac OS 8.6, by the way. Connectix discusses the inability of a Mac to see the Superdrive in article #4095 and discusses some workarounds if you don't have the 2.1.2 or later upgrade. To get to this article, goto http://207.82.227.85/kdb/KDB.htm, select Virtual PC and then type in Imation.

Beyond that, Virtual PC can run all versions of Windows and it can run the older, original DOS operating system so that in and of itself should not be a problem. You could try dragging the contents of the disk while in native Mac mode into a folder (same name as the disk) on the Virtual PC partition and then reboot into Windows. Now try to run the program and see if that doesn't help. But I suspect you'll have few problems getting the Windows version (on CD) of the software to run.

Derek, Zak's problems point out some of the troubles folks can have trying to do things in a software emulation rather than using real hardware. But then, folks have enough problems getting their hardware to work right on the PC -and the Mac - sometimes as well!

DEREK:

Zak, are you sure the disk isn't defective? While you are waiting for the Windows CD to arrive, why not swap out the disk with someone else. Or try that disk on a real PC to see if there is something wrong with it. Floppies are easily damaged. This is one rea-

son, I don't recommend ever storing anything real important on floppies unless you have other backups of it and in different locations. Of course, one of my favorite media types are the ZIP drives. The new 250MB ZIP drives are sure to be the ticket for removeable media along with read/writeable CDs and DVDs. Check out the 250MB ZIP at www.iomega.com

Back to the emulation program. Emulation systems are one of those things that I have never recommended. In my opinion the only real advantage of them is physical space. Buying a second computer (especially a used one) generally results in as fast performance, better compatibility and the benefit of a second machine. But of course, not everyone will subscribe to that philosophy. And, having two machines around does take up a lot of space.

ANNE: ADDING THIS NICE READER'S COMMENT:

Hi Dave and Derek, Great article in the Journal Online on Macs and Y2K at

<URL:http://www.jrnl.com/news/99/Sep/jrn41070999.html>. Another site you might add to your list, whether in an update to this article or otherwise: http://y2k.berkeley.edu/computers/fixpcs/checklists/mac/macos/ Thanks! Aron Roberts Workstation Software Support Group . 221 Evans Hall University of California, Berkeley, CA 94720-3808 USA aron@socrates.berkeley.edu . (510) 642-5974 . fax (510) 643-5385

DEREK AND DAVE: Here's an updated link for our PC and Mac users who want to check out their Y2K readiness thanks to reader Jim Little (who claims to be a "WAP member almost forever") (Dave - and I believe him since I've been one almost as long!): http://y2k.berkeley.edu:7040/computers/fixpcs/checklists/

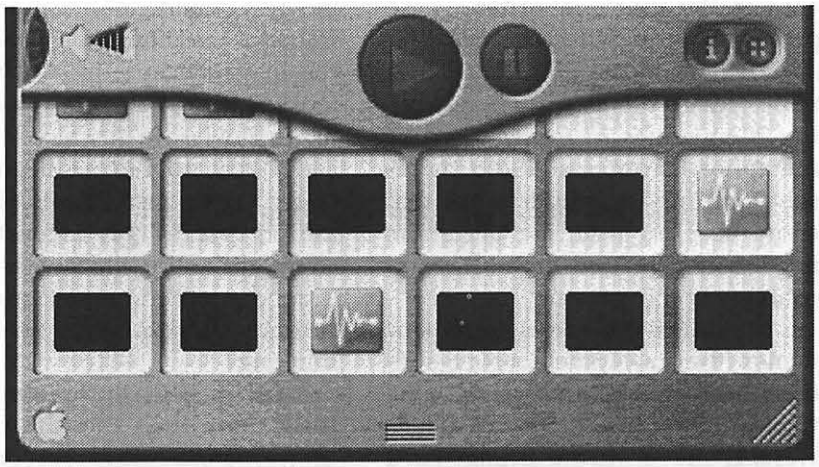
This is an amazing site that discusses how to deal with virtually every Mac and PC running all the OS versions. It also offers suggestions and links for other systems as well.

Macintoshes PCs running DOS PCs running Linux PCs running Novell NetWare Server Products PCs running Windows 3.1x PCs running Windows 95 PCs running Windows 98 PCs running Windows NT 3.5.1 PCs running Windows NT 4.0 Workstations running Unix operating systems

Hall of Shame QuickTime 4.0

(continued from page 39)

might want to emulate the buttons used on the QuickTime Player would be well advised to consider this fact of human vision: the amount of light that passes through the eye of a sixty year-old is only one-third of that passing through the eye of a twenty year-old. The lack of contrast in the player controls will necessarily mean that many older users will be unable to discern the symbols.



As part of their effort to mimic the appearance of the hand-held consumer device, the designers of the QuickTime 4.0 Player employed "drawer-like" interface elements. The most notable of these, and unquestionably the single biggest blunder in the design of the application (other than attempting to mimic a physical device) is the Favorites Drawer. The **Favorites Drawer** is intended to provide the user rapid access to his or her favorite multimedia files. By that concept alone, it should be a useful interface feature. Unfortunately, by virtue of attempting to mimic real-world devices, and due to a complete lack of familiarity with basic design principles, the Favorites Drawer in QuickTime is a dismal failure.

The designers provided a smooth animation to give the appearance of the drawer opening at the bottom of the device, much like, one supposes, a panel might open on a hand-held device, and very much like the phone number "drawer" used in IBM's RealPhone. The drawer demonstrates one distinct problem of translating real-world phenomena to the computer desktop: **real-world phenomena are not subject to the constraints of screen size**. The extent to which the drawer can "open", and therefore the number of items visible in the drawer, is a function of where the player is located in relation to the bottom of the screen. If you want to hold more than a few items in the drawer, you'll have to first position the player near the top of the screen. If you want

to hold a lot of items in the drawer, you'll have to increase the resolution of your monitor. If the player is positioned too close to the bottom of the screen, the drawer will simply not open. Similarly, the current size of the player can interfere with the user's ability to access items in the Favorites Drawer; if the size of the player is increased, there is less screen real estate into which the drawer can open and therefore, fewer items in the drawer are accessible. These problems would not exist if the designers had employed a standard pop-up window to contain the user's favorites. These problems are the direct, expected results of dogmatic adherence to a faulty design philosophy. By restricting themselves to the real-world metaphor, and not availing themselves of the dynamic features that computers provide, the designers needlessly restricted the utility and usability of the software.

Alook at the arrangement of items in the drawers demonstrates another fundamental problem with the translation of physical devices to software. The favorites are arranged in a matrix, the number of elements of which is limited by the size of the screen. A physical item is limited by its physical size. A virtual item, such as a list of phone-numbers or favorites, is limited only by the amount of computer memory. If the designers had provided a standard list box there would be virtually no limit to the number of favorites that a user could maintain. Furthermore, by availing themselves of other standard GUI elements, the designers could have provided a great deal of additional functionality such as organizing favorites by whatever constructs the user wishes to employ, or creating a PlayList of items to be played successively. Computer software is the ideal platform on which to offer such functionality, but because of their adherence to the physical device, the designers of the QuickTime 4.0 Player, like other RealThings apologists, have made their software woefully inept in an area in which it should greatly excel.

The images in the Favorites Drawer, despite their appearance, are not entirely meaningless. The QuickTime 4.0 Player assigns an image to those items that represent sound files. All sound files however, will be assigned the same image, and the program provides no means by which the user can substitute a meaningful image. On the other hand, the image used to represent a given movie is a thumbnail image of the first frame of the movie. On the surface, this may seem appropriate, until one looks at a collection of movies: most of the movies we downloaded, especially those from Apple, begin with a blank, black screen. The first frame of the remainining movies constituted a copyright notice which is especially unrecognizeable when reduced to thumbnail size. What were they thinking?

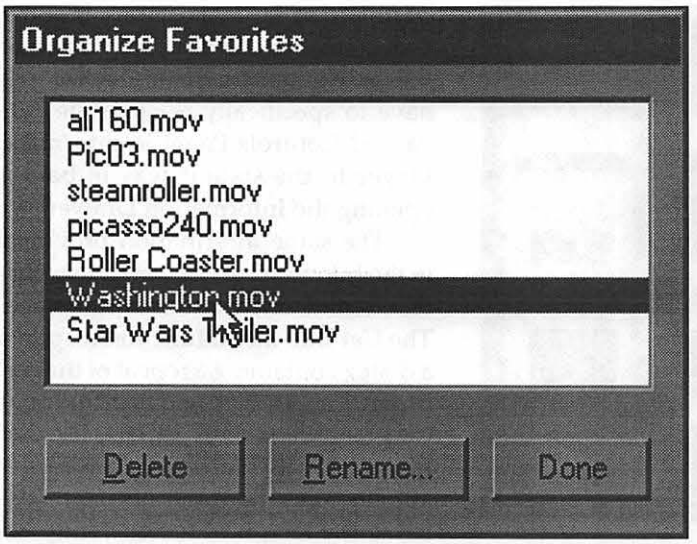
The images in the drawer indicate little more than the fact that the drawer contains items. For some completely inexplicable reason, the designers did not feel that it was important to display a title or other description of the item itself, nor did the designers provide any secondary means in the drawer itself, such as tooltips, balloon help, or a message in a status bar to distinguish various titles. This is not a result of the inappropriate application of a real-world metaphor; this is simply pitiful design. Balloon Help would certainly help the user, but it would still require the user to pass the cursor over each image until the desired target could be located. Since Balloon Help requires intervention of the user to be effective, it should be regarded as little more than a quick fix and not a substitute for an appropriate design of the Favorites function.

The lack of meaningful descriptions for the items forces the user to rely on the physical position of the item in the matrix. Unfortunately, if the user resizes the player window, the number of images in each row of the drawer may or may not change. The end result is that the user can no longer rely on image position as an aid to identification. An item that was the third row from the bottom, might, after resizing, appear in the second row. Because of the lack of labels and reliable positioning information, selecting a particular movie or sound file from the favorites drawer is not unlike trying to find a caramel-filled chocolate from a sampler box of chocolates. As expressed by Forest Gump in the movie bearing his name:

Mama always said life is like a box of chocolates,
you never know what you are going to get.

The only reliable means of finding a particular type of chocolate is to either bite into each, or at least press your thumb into the bottom of each and hope that nobody notices later. Similarly, the only reliable means with which the user can identify a file of choice in the favorites drawer is to open several until he or she happens upon the file of interest. If the designers had been concerned with the users' objectives at this point of the interaction with the QuickTime 4.0 Player, specifically, the ability to rapidly locate and open a particular file of interest, the favorites drawer would never have seen the light of day. Unfortunately, the designers were far more interested in form over function, where "looking good" is considered more important than working well.

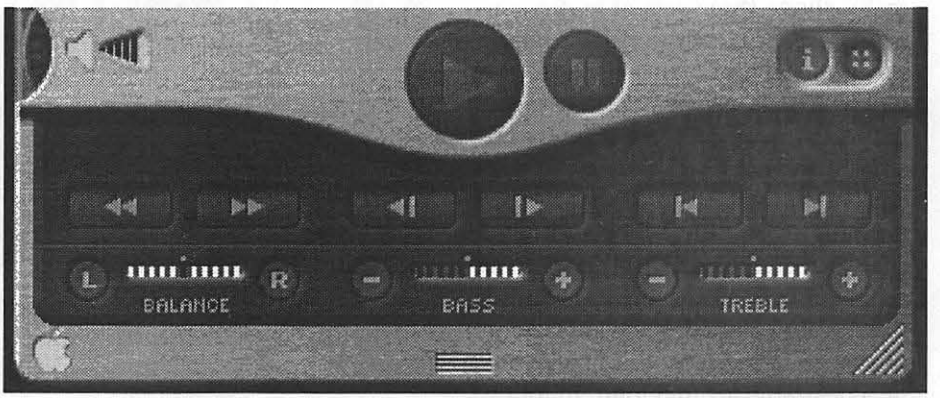
The application does provide additional means to determine the names of one's favorite media files, but the user must go somewhere else. The application's menu bar offers a function labelled "Organize Favor-



ability to organize the favorites into categories, export groups of favorites to share with others, add the ability to create a playlist, and open a favorite in a new window. When you are dealing with a computer and not a real-world physical device just about anything is possible.

ites", which when selected provides a standard listbox containing the names of the favorites. The listbox allows the user to rename favorites, delete favorites from the list, and reorder items in the list; these functions are notably unavailable from the Favorites Drawer itself. The Organize Favorites dialog is not without its own design problems. Surprisingly, the Organize Favorites dialog does not allow the user to Add favorites to the list, for that, the user has to ...go somewhere else. Items in the list can be reordered, but no indication is provided that this is possible. Further, as an example of a failure to pay attention in GUI 101, the designers do not allow the user to make multiple selections in the listbox; you cannot delete more than one item at a time, nor move more than one item at a time. (Additional design inadequacies of the dialog are discussed below).

Those limitations aside, all the designers need to do is add the ability to launch a favorite from the Organize Favorites dialog, change the title of the dialog to "Favorites", and burn the source code for the drawer. In so doing, they will exponentially improve the utility and usability of the Favorites function. Then, after the designers complete GUI 201, they might want to provide the user the ability to organize the favorites into categories, export groups of favorites to share with others, add the ability to create a playlist, and open a favorite in a new window. When you are dealing with a computer and not a real-world physical device just about anything is possible.

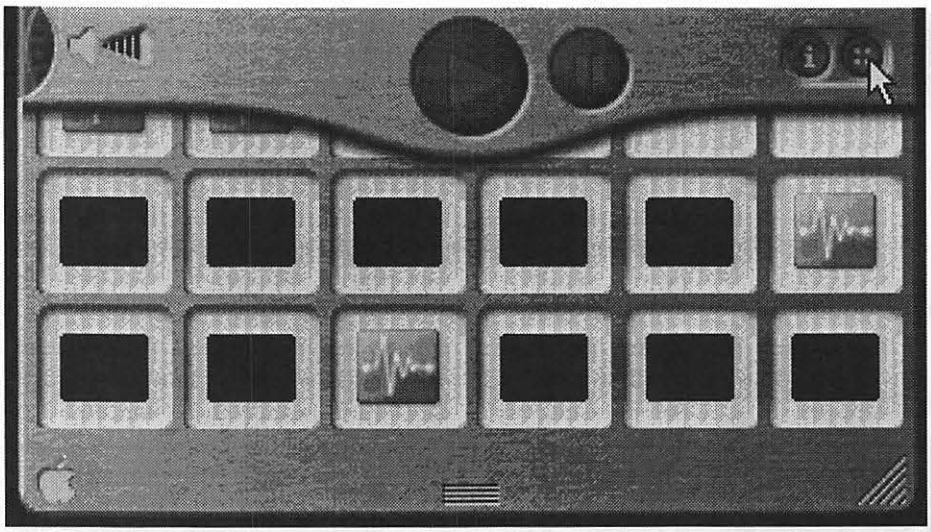


A second interface drawer is used to hold (and hide) the "Advanced" controls. These include the balance, bass and treble audio controls, and the video navigation controls. A similar animation, smoother than that of the Favorites Drawer is used to give the appearance of the panel opening at the bottom of the device. Unlike the Favorites Drawer, which will not open if the player is positioned too close to the bottom of the screen, the Advanced Controls Panel will open beneath the visible portion of the screen, thereby requiring the user to perform some window manipulations to view and access the functions.

The position of the Advanced Controls Panel (see figure top of page 82) directly interferes with the Favorites drawer, often making it impossible to select favorites when the Advanced Control Panel is open. By selecting a design in which both panels "open" below the player, the two panels must compete for the same screen real estate. Further, attempts to view more of the Favorites Drawer when the Advanced Controls Panel is open can cause both panels to be closed. If the designers had employed a standard pop-up window for one or both of the panels, neither would of necessity interfere with the other.

The design of the Advanced Controls Panel suffers from a number of basic design problems, the most notable of which is how the user accesses it. Whereas the Favorites Drawer is accessed by dragging or double-clicking the "thumb indentation" on the player, the Advanced Controls Panel is opened by single-clicking the button-that-looks-like-a-shirt-button (there's a real-world metaphor for you). The image on the button has no resemblence to its function, nor to the functions contained on the panel. Furthermore, since QuickTime, like IBM's RealCD, does not provide tooltips (or balloon help) for any of its controls, the interface provides no indication that the functions exist.

While the Advanced Controls Panel is aesthetically clean and appealing, the arrangement of controls is likely to lead to mistakes in their operation. Because the designers balanced three sets of video controls di-

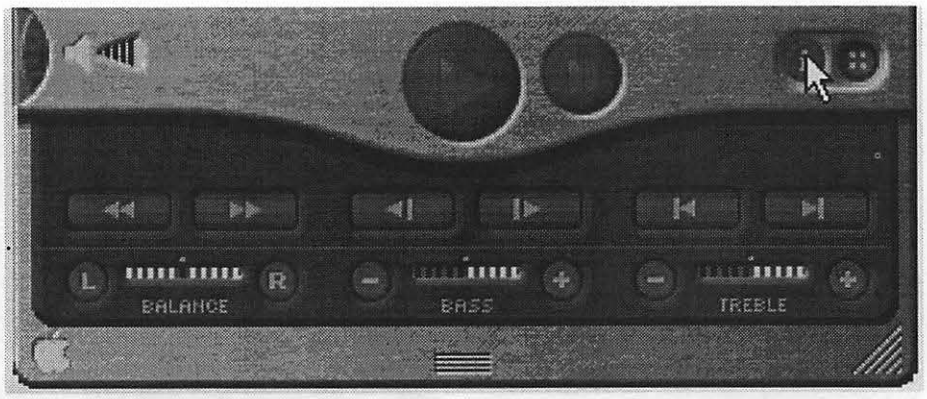


competition for real estate is that the user cannot have both panels open at the same time. Moreover, the user will have to specifically re-open the Advanced Controls Panel to return the Player to the state it was in before opening the Information Drawer.

The same information provided in the Information Drawer is also provided somewhere else in the interface. The Get Info menu function displays a dialog containing a repeat of that information, and provides additional information as well. In fact, the Get Info dialog is the only place in the application where the user can discover the length of the currently selected movie (without of course, having to watch the movie or move to the end of the movie). Not only does the Get Info dialog provide more information, it does so without interfering in any way with the rest of the interface.

rectly above three sets of audio controls, because all of the video controls resemble arrows, and because the video buttons are several times larger than the audio buttons, it is reasonable to expect that some users will click on a video control in an attempt to change the setting of the audio display directly beneath it. While the consequences of such errors are minimal for a multimedia player, in terms of design principles, this would not be a desirable arrangement to follow for software in which such errors could lead to more serious consequences.

While hiding these controls on a panel does result in a leaner, cleaner interface for the main player, it is likely that some users would prefer that the controls always be present and available. The video controls in particular are, after all, standard multimedia controls, and hiding such basic controls as fast forward and reverse for the sake of a "clean" player interface strikes us as a mistaken design priority. One solution would have been to allow the user to indicate that the Advanced Controls Panel be kept open; unfortunately, the program offers no such option, nor does it remember the state of the panel between sessions.

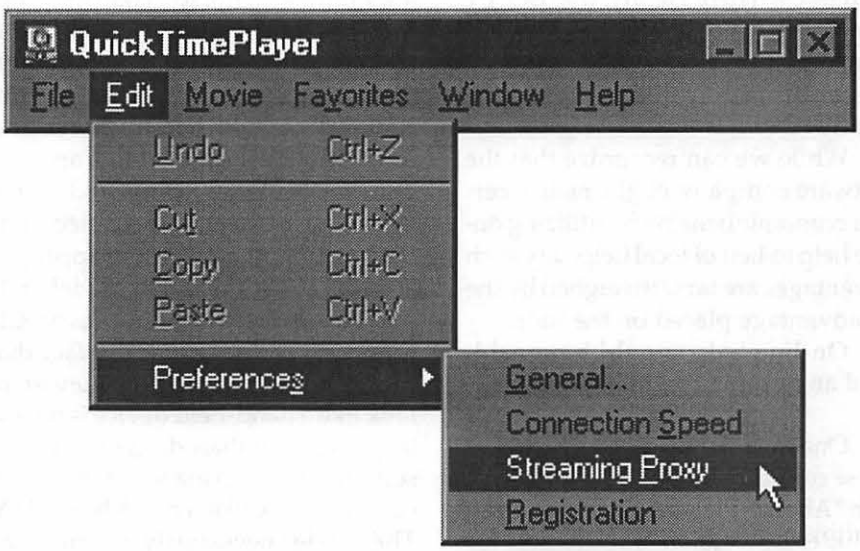


The interface offers a third drawer, opening into the same location as the others. The Information Drawer contains some information for the currently loaded movie. Like the Advanced Controls Panel, the user's access to the Information Drawer is restricted by the location and size of the player. If the player is positioned too low on the screen, if the user is currently viewing a large movie, or if the user has resized the player to a large size, the Information Drawer cannot be accessed. In a true example of the nature of competing screen real estate, if the user accesses the Information Drawer while the Advanced Controls Panel is open, the player will close the Advanced Controls Panel before opening the Information Drawer. The net result of this

Unfortunately, the Get Info dialog is a complete UI aberration (see first figure on page 83). Locating the same information as that contained on the Information Drawer will require scrolling through a three-item listbox (which only displays two lines at a time) and selecting the various options. At a minimum, this will require three additional mouseclicks. Locating additional information, such as the original size of the movie or its duration, will require an additional two mouseclicks each. Locating the

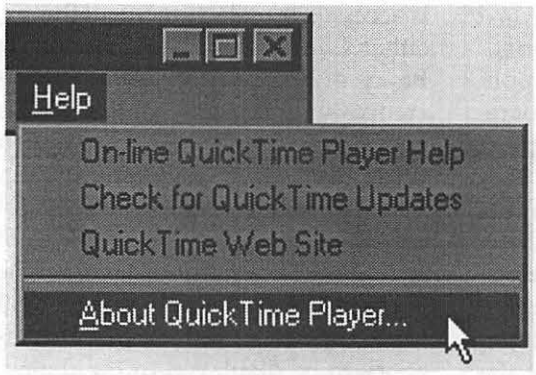
format of the video track will require an additional four mouseclicks among two controls, and locating the sampling rate of the sound track will require additional manipulation of two controls for an additional four mouseclicks. The person responsible for creating this Rube Goldberg design could not have made the information more difficult to locate and access.

There are many additional interface problems that indicate a general lack of familiarity with the basic principles of user interface design. These problems, we believe, cannot be excused by the "beta" status assigned to the product. Apple, regarded by many as the definitive advocate of attention to the user interface, should be setting an example for other developers to follow, not relying on its users to identify user interface problems in its products. One characteristic of the QuickTime 4.0 Player that we found particularly striking was that the program is often stupid. It "forgets", for example, the user's specified volume, bass, treble, and balance settings. It cannot remember the state of the Advanced Controls Panel, and it cannot remember where a particular dialog had last been positioned. Providing an application a means of recall is standard practice in the software industry; the failure to provide such recall is more a reflection on the designers' backgrounds than on the beta status of the product. Additional such examples include the failure to allow multiple selections in lists, the failure to indicate the default command button when an item in a list is selected, the failure to allow the user to cancel changes in certain dialogs, the lack of keyboard navigation among controls on a dialog, the inconsistent application of standard controls rules, and the use of convoluted and inconsistent navigation paths through the application.



The user quickly discovers such problems when attempting to specify options within the player. The "QuickTime Settings" dialog, which is accessed by selecting (of all things) either Connection Speed, Streaming Proxy, or Registration from the Preferences submenu of the Edit menu, is particularly problematic. Each option takes the user to the same dialog, which offers a drop-down control containing many other categories of settings. While selection of most of the items in the drop-down control will cause the options related to that category to be displayed in the dialog, selecting one in particular causes an additional dialog to be opened. A separate preferences dialog, General Preferences, offers additional options and suffers fewer UI problems. The General Preferences dialog is accessed through the more straightforward means of selecting General from the Preferences submenu of the Edit menu. The fact that the program offers two separate options dialogs can possibly be attributed to the product's beta status. Hopefully, the QuickTime design team will place a call to someone in Apple's interface design group for a consultation on how the two dialogs can be combined into a single, properly designed and easily accessed dialog.

Perhaps one of the most shameful aspects of the program is that it



does not come with its own help facility. Users in search of elementary help on the program, such as learning which combinations of keys must be selected to perform basic functions, or to learn which file types are supported, will first have to log onto the internet and access Apple's website. Once there, the user will have to learn how to navigate the web pages of the site, based on whatever navigation methodology might be in place on that particular day. Depending upon the user's internet connection, it might take several minutes simply to access the web page. In contrast, if the program had been properly supplied with its own help facility, the user, by leveraging his or her existing knowledge of how to use help, could locate the information much more efficiently.

While we can recognize that the software company might realize certain economic benefits by utilizing online help in lieu of local help, any such advantages are far outweighed by the disadvantage placed on the user.

On-line help should be considered an adjunct to a local help facility.

One area that can be expected to cause confusion is the use of two separate "About" dialogs. These typically include the version information for the program, copyright notices, and other such information. Selecting "About QuickTime Player..." from the Help menu causes one "About" dialog to be displayed; the other About Box is accessed by selecting "About QuickTime" from the drop-down box of categories on the QuickTime Settings dialog which is itself accessed by selecting either Connection Speed, Streaming Proxy, or Registration from the Preferences submenu of the Edit menu. While there is a logic behind the two About Boxes, the logic will not be apparent to those many users who will not notice the distinction between the titles "About QuickTime Player" and "About QuickTime". The typical user will not notice that there is a distinction between the player and the underlying system files that allow it to work. If it is necessary to provide both types of information, they should be provided within a single dialog, accessed from a single location in the application.

Concluding thoughts

The design of the user interface in the QuickTime 4.0 Player could hardly be described as innovative. It merely represents the latest failure in a sporadic attempt to make computer software look more like real-world analogues. We have attempted to explain in this review, and in our earlier reviews of IBM's RealPhone and RealCD, why such attempts are misguided. While we acknowledge that Apple's use of a hand-held electronic device as a model is more appropriate than IBMs attempt to model a CD player application on a plastic CD case, we cannot ignore the fact that designing a multimedia viewer to look like a hand-held device is no less inappropriate than designing a personal information management application to look like a hand-held PDA. The model necessarily restricts the utility of the software. Additionally, we hope to have explained why the effort is particularly doomed to failure when the designer is either unfamiliar with the basic concepts relating to human-computer interaction, or chooses to ignore those concepts.

We find this trend toward "consumer" interfaces to be particularly disturbing. The design places a premium on aesthetics over usability. The emphasis is on creating a flashy product, and not on creating a useful and usable product. Rather than asking, "How can we make this look more like a real thing?", the designers would do their users a far more important service by asking, "How can we make this operate better than the real thing". To use the QuickTime 4.0 Player as an example, the designers spent far too much time making the software look like a hand-held player, and far too little time examining how they might add utility to such a player. A hand-held player is just that: a player. A software-based multimedia viewer can become an information device. It would appear that this latter approach was never considered in the design of QuickTime.

We should all be disturbed by this trend. Apple devotees should be enraged. Apple has amassed a dedicated following of users due, without question, to Apple's attention to the user interface. If the user interface of the QuickTime 4.0 Player is an indication of the future of GUI design at Apple, Apple's leadership should certainly be worried. Without that attention to the user interface, there is no real reason for a dedicated following among its users.

Our hope is that apologists for the real-world design philosophy will take a serious look at the limitations of their approach. It would seem that this approach has arisen from a belief that the current state of GUI design has stagnated, and that a radical design approach is necessary. The constancy of the desktop model might be explained in terms of the constancy of steering wheels and pedals in automobiles: they work very well.

We do not dispute that there is room for improvement and we do not

wish to detract from any sincere effort to explore alternatives. Unfortunately, instead of investigating how current GUI design strategies might be improved, followers of the real-world approach have decided to completely abandon those strategies, and with them, the basic principles of design such as perceived affordance, feedback, guidance, and consistency. The attempts to follow this approach have demonstrated that they have indeed, thrown out the baby with the bathwater. We are struck by the consistency of failure exhibited in these attempts, and see several possible explanations for the failure rate: (a) it is being attempted by the wrong persons, (b) it is being attempted for the wrong reasons, or (c) a combination of both. We believe there is data to support each of these candidate explanations and another as well: designing virtual software in accordance to the requirements and characteristics of physical devices does not work. ■

We would like to thank Isys Information Architects Inc. for granting us permission to reprint this article. For more articles concerning design esthetics visit the Isys Infomration Artictects website at <http://www.iarchitect.com>.

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Isys Information Architects Inc. is constantly searching for examples of design practices that are worthy of extinction, and those worthy of emulation (see the Interface Hall of Fame at our site). Submit your own nominations for potential entries into either hall to feedback@iarchitect.com, and they'll try to add it to the collection.

Protecting Your Copyrighted Graphics

by Paul Gerstenbluth (ArieFound@aol.com)

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Paul Gerstenbluth is President of the ARIE Foundation. The ARIE Foundation's mission is to provide VA hospitalized patients with hobby materials and computers which helps in their stay and recovery.

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1997 Index of Journal Articles

compiled by Bonnie Ashbaugh

Great thanks go to Bonnie Ashbaugh for her patience and meticulousness in putting together this, and other journal indices. To understand the index note that it is organized by volume, issue number and by page. The articles are then divided into categories. These categories include: G=General interest; F=Feature; BR= Book review; SR=Software review; HR=Hardware review; CDR=CD-ROM review. Author, (with NA=no attribution) and title of article are also included.

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A Resource for AppleWorks Users

by Brian G. Mason

FOR THOSE of us who are very happy with our Apple II computers and love the speed and functionality built into these rugged machines, there is a world-wide support community out there ready to lend a helping hand. And when it comes to users of AppleWorks, the first powerful integrated software application, there is an excellent place to go for support.

Let me introduce you to TEXAS II. This is a full-time business concern supporting *AppleWorks* users with a newsletter, *TEXAS II*, TEXAS II on Disk, and other products. The power behind TEXASII is Beverly Cadieux of McKinney, Texas.

Now, this is not the product that runs on the Mac formerly known as *ClarisWorks*, which Apple recently took over and renamed *AppleWorks* . This is the original *AppleWorks*, written for the AppleII computers about1983 and updated many times since then.

TEXASII offers various products for sale related to *AppleWorks* . These include the *TEXAS II* Newsletters and Disks, printed material and books, *TimeOut* Updates, *AppleWorks* updates, Y2K updates to various programs, and pre-owned *AppleWorks* and *TimeOut* software. They also do *AppleWorks* to *MicroSoft Works* data transfers.

TEXAS II is a printed newsletter of interest to those folks who use *AppleWorks* v5.1 on the Apple IIe, IIc, IIGS, and Macintosh computers. Subscription price for the next six issues of the *TEXAS II* newsletters v8.1 - 8.6, is $24, or $27 overseas. To get the previous six issues of the *TEXASII* newsletters v7.4 to 8.0 will cost you $18, or $24 overseas. Articles in these recent issues have included such topics as "All About AppleWorks and HP DeskJet printers," "Connecting the Apple II and the PC to transfer data," "So, why all the Year 2000 problems in my rock-solid Apple II?"

TEXAS II on Disk is available on 3.5" or 5.25" disks. The disks cost $10 if you subscribe to the Newsletter, $15 if you don't or if you live overseas. Non-subscriber disks do not include the *AppleWorks* text of the printed *TEXASII* newsletter. Back issues cost $24 for the 3 most recently released disks or $66 for ALL past disks (25 disks). Disk number 29 includes Bev's Free Patcher v6.9, with complete documentation on disk. Year 2000 updates/patches on Disk 29 include *AppleWorks* 2.0, 2.1, 3.0, 5.0, and 5.1, and *Sneeze*.

Year 2000 updates/patches on Disk 30 include *ProSel-16 START* v8.90, *ProSel-8 Mr. Fixit* v4.6, TimeOut *File Librarian* v5.2, and Harold Portnoy's *Change-A-File* v4.30 (complete). The 5.25" disk version of Disk 30 does not contain *ProSel-16*.

Disk number 31 includes a new version of the *AppleWorks* 5.1 patcher, v7.0, TimeOut updates for *AppleWorks* 5.1 including TimeOut *TOC Generator* v5.1 and *QuickStyles* v5.1 from TimeOut TextTools, TimeOut *CelLink* v5.1 from SpreadTools, and TimeOut *File Status* from MacroEase. Disk 31 contains a complete list of version numbers of TimeOut accessories for *AppleWorks* 3.0 and 5.1, plus many other interesting activities for *AppleWorks* 5 users.

Among the TimeOut updates offered by TEXASII is the special TEXAS II edition of Randy Brandt's Freeware TimeOut PowerPack. It is Y2K-compliant and includes both *AppleWorks* 3.0 and 5.1 versions of Randy Brandt's programs, and full documentation on disk. The PowerPack includes TimeOut *ASCII Values, AWP to TXT, Category Search, Desktop Sorter, File Librarian, Help Screens, Line Sorter, Program Selector, Triple Clipboard, Triple Desktop, Disk Tester, Utilities*. This disk is only $10. Also available are pre-owned, but original versions of many of the Beagle Bros. TimeOut disks and manuals including *UltraMacros, Grammar, FileMaster, TeleComm, Thesaurus, Graph, SideSpread*, and *ReportWriter*, just to name a few. These are available with the manuals for $5 each.

Finally, TEXAS II has available a considerable number of Y2K fixes available for Apple II software. Provided a fix is available, TEXASII will update any AppleII software, any version, for Y2K compliance. They charge $10.00 for this service, to cover time spent and return postage. Except for *ProSel 8* and *16*, simply mail a backup copy of your startup and program disks (no originals) and $10 ($15 overseas) to Beverly Cadieux, 2503 Sherbrooke Ln., McKinney, TX 75070. Y2K updates available now include:

- *AppleWorks* v1.0, v1.1, v1.2, v1.3, v1.4, v2.0, v2.1, v3.0, v5.0, and v5.1
- French & Spanish versions of *AppleWorks*
- *AppleWorks* with PinPoint, Applied Engineering, TimeOut, or other patches installed
- TimeOut *File Librarian* v5.2 by Randy Brandt
- *Sneeze* by Karl Bunker
- *Change-A-File* v4.30 by Harold Portnoy
- *ProSel-16* by Glen Bredon (v8.90) - not necessary to mail a disk. Not just an update, you will receive a complete *ProSel* v8.90 disk in return.

- *ProSel-8* by Glen Bredon (v4.0 with *Mr.Fixit* v4.6) - do not mail a disk. Not just an update, you will receive a complete *ProSel 8* v4.0 disk in return.

If you have access to the Internet, you can visit the TEXASII site at http://members.aol.com/a2mg. The mailing address, as noted above, is 2503 Sherbrooke Ln., McKinney, Texas 75070-4766.

One advantage of using an orphaned computer is that you can get a lot of powerful software CHEAP! Anybody using *AppleWorks* should take advantage of the resources made available by TEXASII.

Updating *ProSel*, "Norton Utilities" for the Apple II

by Brian G. Mason

ONE OF THE most important programs an owner of an Apple II computer can have is *ProSel*, written by Glen Bredon. Before there was *Norton Utilities*, there was *ProSel*. This program, let me tell you, has pulled my bacon out of the fire many a time. It wasn't so important in the days of 5 1/4" disks to have a program that would repair your disk and salvage your data. With only 143K on a disk, if you lost your data, not much was lost. Your best and almost only solution was to keep backups. If your disk went bad, you threw it away.

But with the advent of 3.5" disks and hard drives, if a disk went bad, a better solution was required. The storage of data on disk became a lot more complicated. Keeping track of everything was a problem. Corruption of data on a disk could cause a business that depended on it untold problems.

There are two versions of *ProSel*. The first one written is now called *ProSel8*. It is written to work with Apple II+, IIc, and IIe machines that use the original *ProSel* operating system. The second was written after the Apple IIgs came out and only works with this machine. It is known as *ProSel16*.

These programs that Glen Brendon worked so hard to create were just recently released into the public domain. This is certainly of important news to anyone still using Apple II computers. These are programs that no Apple II user that uses a hard drive should be without. The only competitor I am aware of that offers anywhere near the utility that *ProSel* does is *UtilityWorks* for the IIgs.

There is just one problem. The *ProSel* programs are not Y2K compliant. After January 1, 2000, *ProSel8*'s Mr. Fixit utility and *ProSel16*'s Volume Repair will think that any file saved has an incorrect date-stamp. When they try to repair the "problem", the "fixed" files will display a date of 00/00/00. That is the bad news.

The good news is someone has addressed the problem. Beverly Cadieux, the publisher of the *AppleWorks* v5.1 newsletter, *TEXASII*, has made available revisions to the two programs that make them Y2K compliant. These repaired programs are NOT in the public domain. However, they are freeware and they can be downloaded from the *TEXAS II* site at http://members.aol.com/a2mg or from the WAP File Download Area.

If you currently do not have either *ProSel8* or *ProSel16*, you will need to download the entire program, depending on which Apple II you have. If you already have *ProSel8* version 4.0 or *ProSel16* version 8.84, you will only need to download Mr. Fixit or the Start** file respectively. If you need the manuals, (and you do need the manuals), *ProSel 8*'s 70 pages of documentation is available from *Shareware Solutions II* on either 5 1/4 or 3.5" disk for $4.00. Write Joe Kohn, *Shareware Solutions II*, 166 Alpine Street, San Rafael, CA 94901-1008. The documentation for *ProSel16* is naturally twice as long as the documentation for *ProSel8*. It is available from Chuck Newby for $14.00. Write Chuck Newby, 9081 Hadley Place, San Diego, CA 92126-1523.

If you don't have downloading capability, you can purchase the programs from Beverly Cadieux for $10.00 each. Write Beverly Cadieux, 2503 Sherbrooke Lane, McKinney, TX 75070-4766.

**Please note: the file is named, Start, because it is intended to replace the Start file that come with the ProDos operating system, thus replacing the Apple IIgs Finder and making *ProSel* your program launcher. To go along with this scheme, it is best to rename the ProDos Start file, which is found in the System folder on your boot disk to Start.gs or something similar, before moving the *ProSel* Start file into the System folder on your boot disk. That way, if you ever change your mind, you will still have your old Start file available to use. If you do not want to go along with this scheme, rename the *ProSel* Start file to Start.ProSel or something similar. Then you can launch *ProSel* just like any application by double clicking on the Start.ProSel icon.

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Classified advertisements can be placed by mailing copy to the business office of Washington Apple Pi, Ltd., 12022 Parklawn Drive, Rockville, MD 20852. Be sure to include your WAP membership number and indicate area codes with your phone numbers. Ads must be received by the ad copy due date listed in the calendar page for that month in order to be included in the appropriate issue. Any ads postmarked after that time will be included at the discretion of the editor. Cost is $2.00/line (40 characters per line), maximum 12 lines. Members of Washington Apple Pi, Ltd., may place ads up to three lines at no charge. The editor reserves the right to refuse any ads deemed inappropriate.

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—Apple IIGS w/drives & monitor. Various software and amnuals included. Please call Drew at 703-706-0351

Other/Personals

ISOOutgoing M/F interested in people, with access to tape recorder and a few free hours to conduct informal interviews with WAP members for publication in the multi-award-winningWashington Apple Pi Journal (six issues per year).

Defiantly withstanding pleas, cajoling, bribes, threats, prostration at her feet, and crafty incantations, several months ago Nancy Seferian retired from her post as Interviewer-at-Large. Her articles are sorely missed, for they made connections—sometimes unusual, always interesting—between the technical matter that forms the backbone of the Journal and the daily lives of WAP members.

Among her subjects were Stuart Bonwit, Lou Dunham, Paul Chernoff, Dennis Dimick, Carol O'Connor, David Morganstein, Dave Ottalini, Tom Warrick, Jeff Gates, Michael Briggs, and Brian Mason. If you've attended a General Meeting or spent time on the TCS, you know that WAP is populated with many other personalities well worth putting a tape recorder in front of. If you have an interest in learning how fellow WAP members use their computers at work and at home, please consider filling the void left by Nancy's retirement.

Nancy <nancys@tcs.wap.org> has kindly agreed to share with potential volunteers her approach to conducting the interviews and writing the articles. Interest can also be conveyed to any of the Journal editors: Kathryn Murray <KAM129@aol.com>, Lawrence Charters <lcharters@tcs.wap.org>, or Bonnie Ashbaugh <bonniea@tcs.wap.org>. Journal staff are always available to help with preparing the interviews for publication.

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Send or bring them to the office to help with the computers for students program.

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- ☐ Mac SE30, Mac IIx
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- ☐ Mac II
- ☐ Performa (all)
- ☐ Other _____
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- ☐ G3
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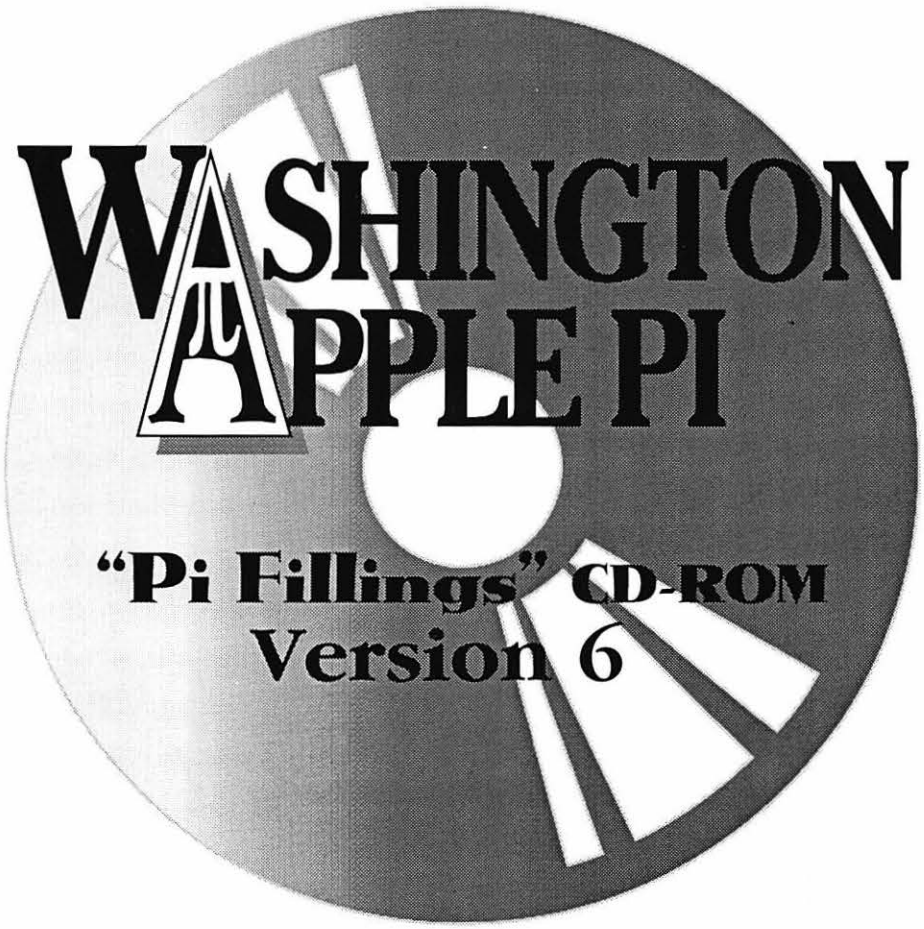
Version 6 is your companion CD if you are using Mac OS 8.x through 9.0. This *one-stop updater will save you hours* of downloading time. Here is where you will find the updates and drivers to all your Macintosh peripherals whether the device is USB, Firewire, or Old Faithful. We include updates to Java, Open Transport, ColorSync, and PowerMac G3/4 ROMs. In addition, we freshened the essential Internet tools and utilities; added more large updates for the more popular applications; and of course, put in some interesting diversions. In all, *more than a billion bytes worth of stuff fills our latest offering* in the Pi Fillings—The CD series.



How to get it: Pi Fillings—the CD, version 6 is available for $10 at Pi General Meetings, or for $12 via snail mail. Call the Pi office at (301) 984-0300 and place an order, or send a check to the Pi office. You can also place an order over the Internet by visiting the Pi store at: http://store.wap.org

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