September / October 2000

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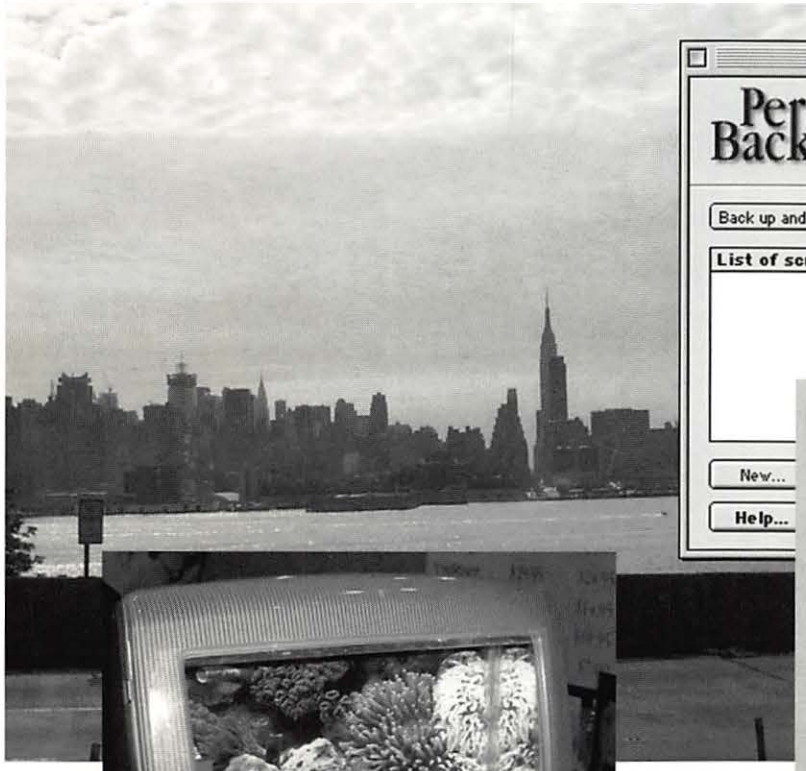
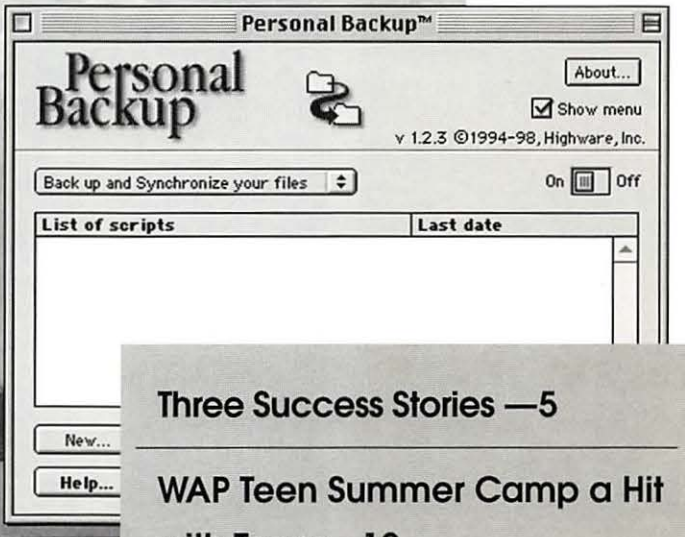
The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 22, Number 5





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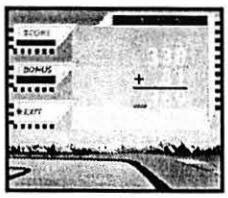

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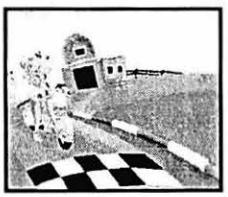

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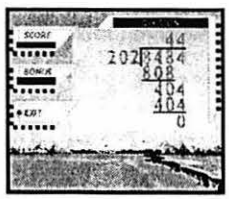

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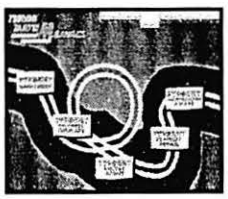

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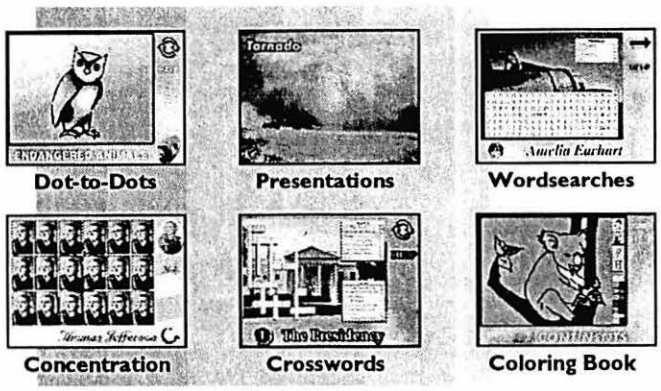

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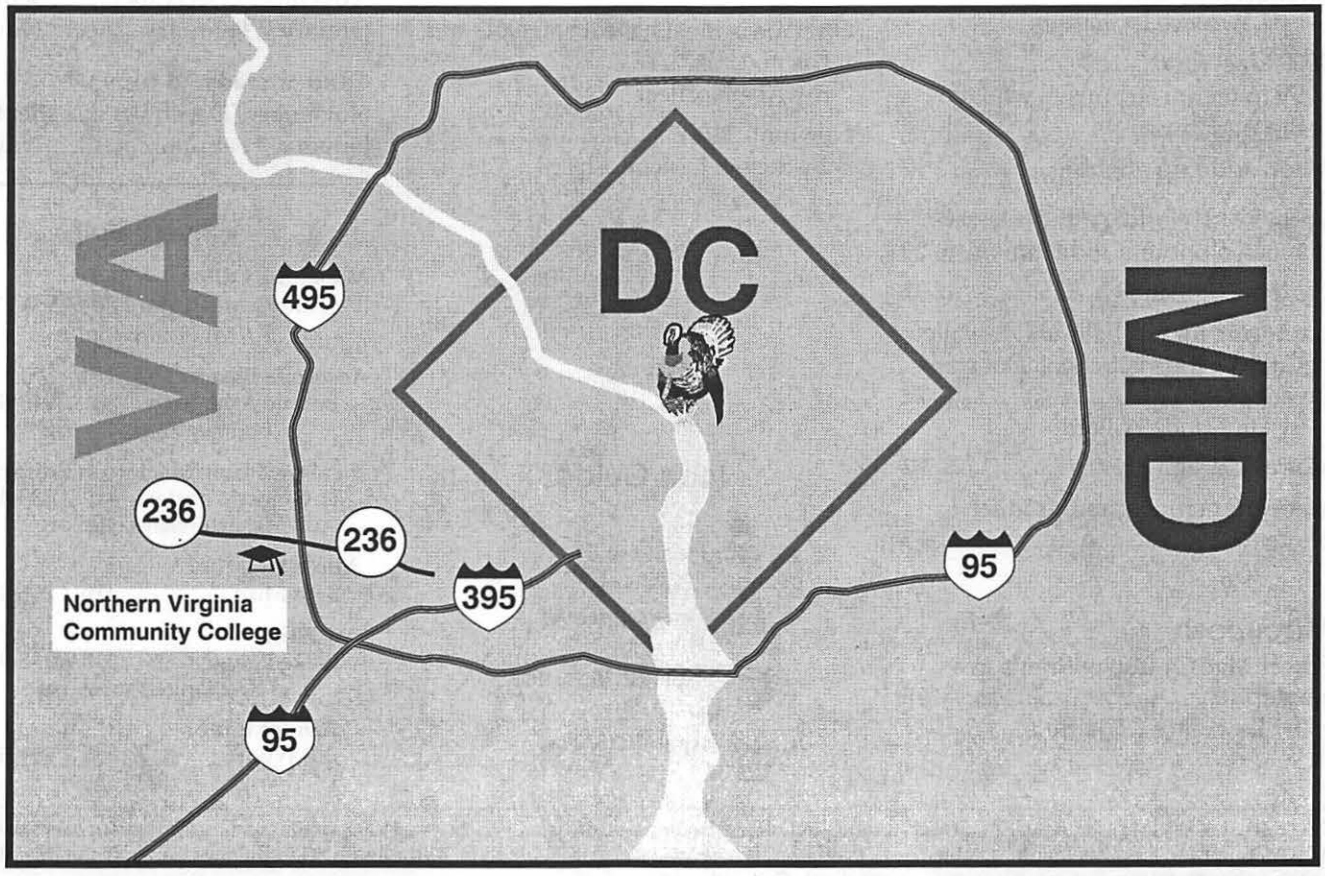

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Postal Information

Washington Apple Pi (ISSN 1056-7682) is published bi-monthly by Washington Apple Pi, Ltd., 12022 Parklawn Drive, Rockville, MD 20852. Periodical postage paid at Rockville, MD.

Annual membership dues for Washington Apple Pi, Ltd. are $49; of this amount $24 is for a subscription to the Washington Apple Pi Journal. Subscriptions are not available without membership.

POSTMASTER: Send address changes to Washington Apple Pi, 12022 Parklawn Drive, Rockville, MD 20852.

Change of Address should reach us 60 days in advance of the move to ensure that your Journals continue uninterrupted.

Deadlines

Writers' submissions
November/December ..... Sept. 20
January / February ..... Nov. 20

Ad space reservations
November/December ..... Sept. 20
January / February ..... Nov. 20

Camera-ready ad copy
November/December ..... Sept. 25
January / February ..... Nov. 25

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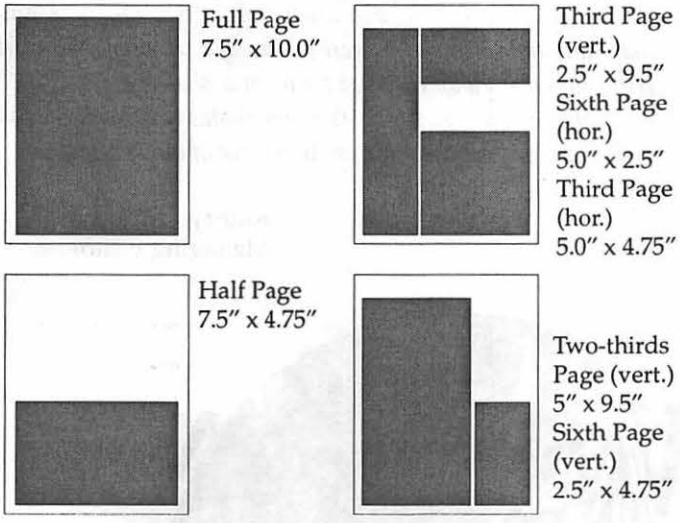
Washington Apple Pi

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.

Advertising in the Journal
(available sizes)



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Sixth Page	$125	$106	$93	$75

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The Washington Apple Pi Journal is published bi-monthly. The ad copy deadlines and ad space reservations are listed below for your convenience.

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Journals, past and present

About a dozen years ago I worked in an office that was producing the WAP journal. A lot has changed over that span of years—desktop publishing has come of age.

State-of-the-art at that time was an SE30 and a LaserWriter IINT. And the journal was almost entirely type, densely type-filled, with very few graphics and photos....well that's another story.

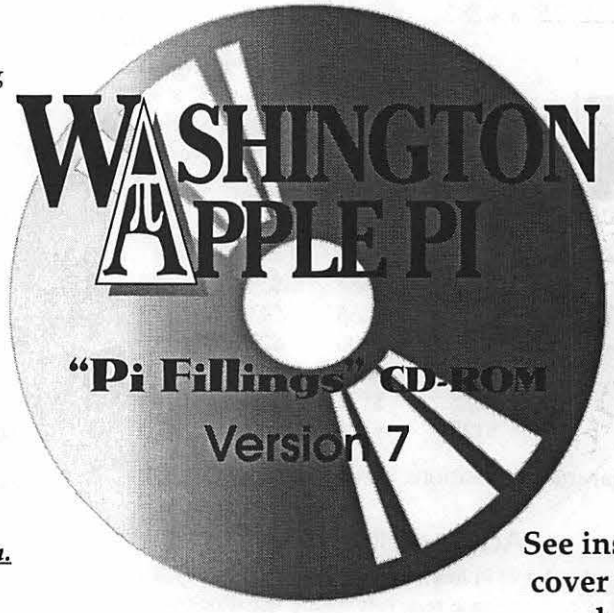
When photos were provided, which was rare, they were given to the printer (meaning McArdle Printing--they were our printers then as they are now) and the photos were shot by the printer and stripped into place.

These days I get photos and screen shots and diagrams of all sorts. They come to me over the Internet, to my little office in the woods. They are technical, they are beautiful, but take a look at this current journal and you will have to admit that we have a journal filled with illustrations, filled with information which isn't pure type. Our journal is more accessible because of these additions and we almost take it for granted because technology has made it so easy.

It wasn't very long ago when a photo was rare here, and diagrams and screen shots were few and far between. Not to be trite, but hasn't a lot changed for us in a short time?

Enjoy the journal with its many photos of MacWorld and broad range of articles. It's another piece of our history.

Kathryn Murray
Managing Editor



See inside back cover for more details

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Three Success Stories

I'VE GOT three goodies. How about two success stories concerning Pi members who have risen to the occasion and performed stellar work for you? How about another that explains how a small federal commission made my MacWorld really informative and, if you play the stock market, is giving you access to new information so that you can become a much more informed investor?

The two success stories involve Mary Keene our intrepid MacWorld tour director and Pat Fauquet who designed and built from scratch our summer camp program.

Two VanHools

Elsewhere in this magazine you will read some firsthand accounts of the Pi bus trip to MacWorld. I want you to know about the person who sweats the details to make the mechanicals of that adventure uneventful—as you see it. That person is Mary Keene. Tickets, name tags, breakfast, helping the driver find the Jacob Javitz Center, getting you back on the bus, fed, and home encompasses some of the essential details that consume her.

Last year, the Pi assembled one bus load for New York. This year, we filled two. If you have not tried the Mary way to see MacWorld, plan to take off for one day next July. Given our growth curve, the Pi may be able to charter three buses for the July 2001 MacWorld. We want each to pick up from a different area around metro Washington. For example, one or more could leave from Northern Virginia near the intersection of I-66 and I-495 (MicroCenter). Another one or two would depart from the Rockville, Maryland area.

In case you don't know it, the real reason the Pi sends yours truly and Mary to New York is to see who can bring back the most show loot. We use that stuff to provide you with information on Mac products, give aways at our monthly meetings, and provide a pool of trinkets to use when we are asked to provide a guest speaker. For the lucky hundreds who take advantage of our MacWorld bus excursions, you are also aware as to how unfair it is that Mary gets to use a bus to carry her stuff back; all I get is a van. This year, she got two buses. I have got to figure out something for next year.

"Given our growth curve, the Pi may be able to charter three buses for the July 2001 MacWorld. We want each to pickup from a different area around metro Washington."

Summer Camp

Ever think of running an existing summer camp. It sounds like fun, but it is a ten week window in which you scramble. Ever think of starting a

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camp from scratch? I've done two in another life. Once the train leaves the station, there is no going back. You start with what it is you dream of doing and ten weeks later look back on what was doabale. Give it a year or two and, depending on how agile you are, you are either a success or in another line of work.

The Pi decided to do a two week computer camp this summer. We tried to do one last year, but started too late and did not obtain the minimum commitments from parents to open. This year was a different story. We had more then enough campers, lots of iMacs, cameras, bandwidth and most importantly, a driven lead counselor, Pat Fauquet. If you have ever taken a course with Pat or one of her instructors, you know what these kids experienced. If the truth is out there somewhere, they found it; if it could be captured electronically, they did it; and, if it was consumable, they ate it. In a couple of weeks, the results of that work will be on our website. After that, Pat and I will take some time to try and figure out where we go next. Up is a facile answer. But, like Mary's growing bus fleet, I suspect we are looking at a much larger applicant pool next spring. Nice going Pat.

Leveling The Information Playing Field

My third story is about the Securities and Exchange Commission (SEC). They are the nice folks who try to keep the securities industry honest and a somewhat level playing field available to all. The SEC just issued a ruling which made this MacWorld a particularly informative one for me—and now you.

You may not know much about this, but publicly traded companies routinely provide information to analysts who follow that particular industry. It is called selective disclosure. You know, stuff about a company's finances, business model, sales goals, and corporate priorities. Like it or not, companies give preferential treatment to select individuals. Executives are far more likely to make themselves available to security analysts and institutional investors than to the average shareholder. It is unfair that these specialists should have access to information before everyone else. Like it or not, this has been accepted as standard practice for years. One analyst opined that this cultivation has one group of investors having the benefit of knowledge concerning the health of a company long before that same information, or some slice of it, gets to you. Institutional and corporate analysts should not be the means for the dissemination of financial information to us. At best this means that we end up making our investment decisions based on old or second-hand information. At worst, it makes possible selective disclosure depending on the predilections of the person releasing the information. So, along comes the SEC with a neat update to an existing rule that will prohibit those companies from intentionally disclosing important information to analysts and corporate investors before disclosing that material to the general public. This rule is known in the trade as Regulation FD. <http://www.sec.gov/news/endseldi.htm>

"The Pi decided to do a two week computer camp this summer....This year was a different story. We had more then enough campers, lots of iMacs, cameras, bandwidth and most importantly, a driven lead counselor, Pat Fauquet."

Regulation FD, as amended, addresses the selective disclosure of nonpublic information. In essence, it now requires that information that could move the price of a share, be made available to everyone via an SEC filing, or a news release. Now, before you start dancing in the isles, keep in mind that the regulation will apply only to conversations with market professionals, and holders of the issuer's securities under circumstances in which it is reasonably foreseeable that the security holders will trade on the basis of the information. It only applies to senior management, its investor relations professionals, and others who regularly communicate with market professionals and security holders. It will not apply to chatting with the press, rating agencies, and ordinary-course business communications with customers and suppliers.

The securities industry must have had a hissy. Some amount of credit for this change is due to the way the Internet has altered the buying practices of stock owners and their awareness of the unequal sharing of information needed to make an informed purchase decision. That same Internet made it possible for supporters of a change to a more open rule to gather support and lobby the SEC directly.

So What?

Here is what. Apple knew this ruling was coming. And, they did the right thing. They got out in front of the story and made it possible for you, via the web, and me in New York to learn what the big boys and girls used to learn first. If you follow the corporate fortunes of Apple, you know Eric Yang. He runs Apple Investors <http://www.appleinvestors.com/>. He put it succinctly: "Apple's webcast of its financial analyst meeting is a milestone, so to speak. By providing a greater degree of transpar-

"My third story is about the Securities and Exchange Commission (SEC).....The SEC just issued a ruling which made this MacWorld a particularly informative one for me—and now you."

ency, it helps to level the playing field for individual investors. We are now able to access privileged financial information without delays. It's a step in the right direction and hopefully other companies will follow suit."

Gee, if I could only get Apple to use that same enlightened reasoning to get out in front of a couple of other issues heading their way like this one . . . wow.

You can still hear what was said that Wednesday in New York. Point your browser to: <http://www.apple.com/quicktime/qtv/analyst_meeting/>. If that is a bit too much, flip over to page 29 in this Journal and read what I learned. It is the story of my MacWorld.

Oh, for those of you in need of more Redmond on the Potomac, the ongoing saga of DOJ vs Microsoft, I have little to offer. The only movement in the story is that Microsoft has asked the Supreme Court not to hear their appeal directly. Redmond want the US Court of Appeals in Washington, DC to review the case first. <http://www.microsoft.com/presspass/trial/default.asp> has the full text of their filing. Microsoft now calls their website for this story, the Freedom to Innovate Network <http://www.microsoft.com/freedomtoinnovate/default.htm>. Philip Morris, here we come. The Justice Department has until mid-August to comment. To date, no word from the Supreme Court as to how they will rule. But fear not; October is not far away.

—Lorin

Washington Apple Pi

Board of Directors Notes
June 14, 2000 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: Kenneth Clare, Kristen Dunn-Thomason, Lorin Evans, Pat Fauquet, David Harris, Brian Mason, David Ottalini, Dale Smith, Richard Sternberg, and David Weikert

Outgoing Directors Present: Lawrence Charters, Lou Dunham, Mary Keene

Directors Absent: Don Essick, Jim Kelly, Steve Kiepe, and Needham Langston

Members Present: Steve Fink

1999-2000 Board

THE BOARD was convened at 7:40 PM. The minutes of the previous meeting were assumed to have been previously read by those present. It was moved by David Harris and seconded by Dale Smith that the minutes be approved as written. The motion passed.

Steve Fink was present representing the Election Committee. There were no election challenges, and the results conformed to the Pi's Bylaws. The winning candidates for 2000-2001:

President: Lorin Evans
VP Programs: Steve Kiepe [resigned due to work conflicts]
VP Volunteer Services: James Kelly [resigned due to work conflicts]
VP Publicity: Dave Ottalini
Secretary: Brian Mason
Treasurer: Dave Weikert
Directors:
Don Essick
Pat Fauquet
Dale Smith
Kristen Dunn-Thomason
David Harris
Richard Sternberg
Kenneth Clare
Needham Langston

A discussion followed the report of the Election Committee assessing the previous year. Lawrence Charters felt that it had been a productive year, that the Board had accomplished a lot. Steve felt that attendance at the Board meetings had generally been very good. Lorin was pleased to report the Washington Apple Pi User Group was in at least as good shape at the end of the fiscal year as we had been at the beginning, unlike many other Apple and Macintosh user's groups around the country.

The Board accepted the report of the Election Committee and adjourned at 7:54. At 7:55 the newly elected Board convened.

2000-2001 Board

Lorin Evans was elected Chair and Pat Fauquet was elected Vice Chair.

Although James Kelly was elected Vice President for Volunteer Services, he sent word that he would not be able to serve because he feared his current employment would create

a conflict of interest. He submitted his resignation via email that evening. And Steve Kiepe, who was elected Vice President for Programs, sent word that he would not be able to fully participate since he will be doing a lot of travelling this year. Lawrence Charters nominated Steve Fink to assist Steve Kiepe.

Also appointed were Lawrence Charters, Webmaster, Lou Dunham, Tele-Communications System Operator (TCSO), Jon Thomason, TCS Software Engineer, Mary Keene, MacWorld Bus coordinator, and Tom Wittie, VP Office Administration.

The next topic of discussion was the June garage sale. The vendors that came seemed to be pleased with their sales. However, there were fewer vendors than usual this time; i.e., there were fewer tables rented. The income to the Pi from the garage sale was comparable to previous garage sales. But this was the result of the sales of the Pi Fillings CD-ROM, the income from the table where equipment was diagnosed and repaired, and donations received.

Lorin suggested that the Board start thinking about changing the focus of the garage sale towards things that would attract a higher attendance. He suggested trying to get commercial brand-name vendors to set up booths or having the Pi set up mini-seminars adjacent to the sales floor as two possible ideas. Another suggestion raised was that placement of ads for the garage sale was not targeted at the people most likely to attend. It was pointed out that decisions need to be made before August since ads for the December garage sale must be created by then to make it into the September-October WAP Journal.

Mary Keene told the Board that the one bus chartered to go to the MacWorld in New York was filled and there was a waiting list of 12 additional people who wanted to go as well. The question was whether it made sense to charter a second bus. Some quick calculations by our Treasurer, David Weikert, showed that we needed 24 people to make the second bus economically viable. The task of the Board was to round up another 12 people by July 1 in order for Mary to go ahead and charter the second bus.

Lorin next launched into his annual pep talk for the new Board. He noted that the Washington Apple Pi is the largest and most successful of the Apple computer user groups. He said we have survived economically as the result of four things, our membership, the classes we hold, the CD's we sell, and the donations we bring in during our Tuesday night clinic. In order to continue to survive and pay the bills, these four areas must be built upon. In order to be successful at doing that, the Pi has to stay ahead of shifting times. Our members can be classified in three groups: those who walk on water and can program their way out of any mess they get themselves into, those who are afraid to click on a box with their mouse if they don't know ahead of time what the end result is going to be for them next year, and the vast majority in the middle who are mostly comfortable using their computer but get in a bind once in awhile and need help from a fellow traveler. One group that is largely missing are the youngsters, though the summer camp for preteens will take place this year.

The message, therefore, is (1) we need to continue to build our membership base by recruiting and then retaining members. Our biggest problem is that Macs don't break, so we are often offering a helping hand to those who don't need it. Members need to bring their friends and colleagues into the club. Lorin suggested (2) that we change the pricing structure for our classes. We have professional-level instructors teaching professional-level classes, yet we are charging volunteer prices. Any members who would want to volunteer to teach a subject need only contact the office. Also (3), we might think of adding another time to do our Tuesday night clinic. The WAP offices have been crowded with people almost unable to move around on Tuesday night.

"Our biggest problem is that Macs don't break, so we are often offering a helping hand to those who don't need it."

Finally, (4) with regards to the CD's, we are in the process of making Pi Fillings Goes to School, Vol. 2. Lorin suggested that the Board think of ideas for other specialized CD's such as a CD devoted to those who want to make their own home movies.

Lorin pointed out that all of this income supports the infrastructure of the club, the office and the TCS, our communications link to the outside world.

Next month, Lorin indicated, we needed to talk about the Saturday meetings. What brings a member out on an early Saturday morning? Would changing the day or time of the meeting make a difference?

With that, one of the longest Board meetings in at least a year adjourned at 9:55 PM. ■

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Washington Apple Pi

Board of Directors Notes

July 12, 2000 Meeting

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

Directors Present: Needham Langston, Don Essick, Dave Weikert, Richard Sternberg, Dale Smith, Lou Dunham, Dave Ottalini, Steve Fink*, Pat Fauquet, Kristen Dunn-Thomason, David Harris, Lorin Evans, Ken Clare
Directors Absent: Brian Mason
Members Present: Steve Fink*, Lawrence Charters

* Status change during meeting

THE MEETING was sorta called to order at 7:35 after the usual multi-variant analysis of several imponderable questions: do we have a quorum? What is a quorum? Is a quorum better than a new golden dollar coin? How many members of the Board are there, anyway? Can we count you for the quorum if you used to be on the Board? The minutes of the previous meeting were approved as corrected.

Old Business

The opening topic was the ever-popular "rejuvenation of the General Meeting." For various reasons, some real and some imagined (bad traffic, wrong state, bad location, nobody awake on Saturday morning, computers so easy to use that nobody needs help, bad vendor presentations, good vendor presentations, Steve Jobs still hasn't released the "right color" of computer, etc.), attendance at General Meetings has declined in recent years. Given the expense of the General Meetings, this is not a good thing.

Many people seem to be more interested in learning things at the Question and Answer session than in viewing vendor offerings. Tutorials were discussed as a way of bringing more members, and new members, to the General Meeting. The suggested format: a 9-9:30 mini-tutorial, 9:30-10 Question and Answer, 10-11 vendor presentation, 11-11:30 Question and Answer/Wrapup (covering tutorial and vendor presentation), 11:30, drawing. This was discussed at considerable length, and the Board consensus was: do it. The tutorials would have to be planned and publicized well in advance or otherwise they will be ineffective (since no one will know they are being held). Kristen Dunn-Thomason moved, with a second by Richard Sternberg, that this be tried for a minimum of a year. The motion passed. Pat Fauquet will assume initial responsibility for coordinating the mini-tutorials.

There was a brief review of the planned Pi bus trip to MacWorld New York. Enough reservations have been received to make a second bus economically viable, so two buses will head north to the Big Apple.

Next was the burning question: when do we hold Board meetings? After reviewing past history (the Board meeting has been on the second Wednesday, with few exceptions,

A good-sized crowd turned out for the July 22 General Meeting. Note the gentleman in the foreground, holding a new Apple optical mouse given away at the meeting. (Photo by George Copley, Jr.)

"Use of the classroom computers is proving to be a vexing issue. The first generation of classroom computers (Power Macintosh 7200s) were purchased from the Pi's education fund for the express purpose of teaching classes. Over the course of time, virtually anyone visiting the Pi office, members or not, considered these machines to be a free public service ..."

since the discovery of electricity; past attempts to move the meeting night met with mixed success), a couple Board members strongly pressed for another evening. Kristen moved, with a second by Richard, that the Board meeting be held the first Wednesday of the month, starting in September. The motion passed.

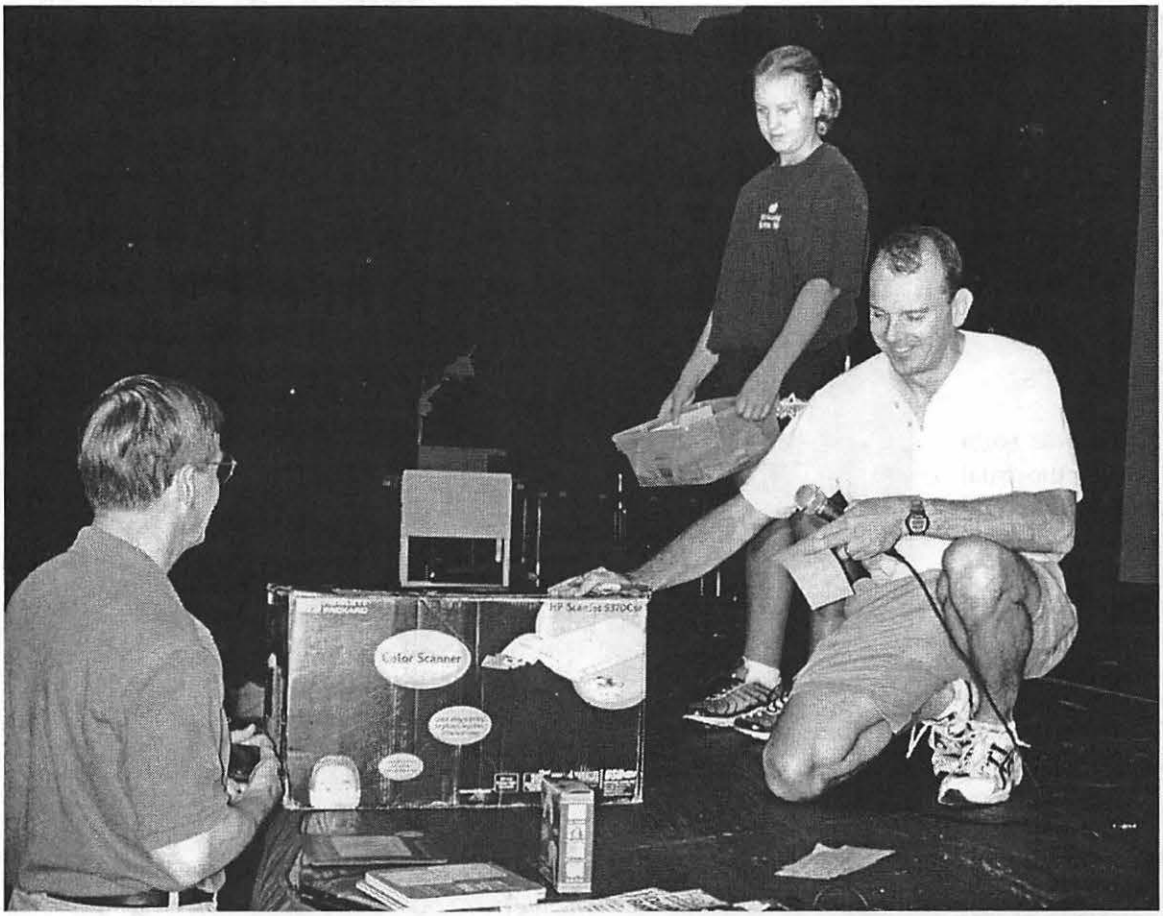
New Business

Use of the classroom computers is proving to be a vexing issue. The first generation of classroom computers (Power Macintosh 7200s) were purchased from the Pi's education fund for the express purpose of teaching classes. Over the course of time, virtually anyone visiting the Pi office, members or not, considered these machines to be a free public service for (a) testing virus-infected disks; (b) surfing the Internet, and (c) hosting demonstrations for friends, enemies, SIGs, and passing strangers. Classroom instructors are often confronted with one or more machines that cannot be used for teaching, rendered inoperable by the accumulated abuse of visitors.

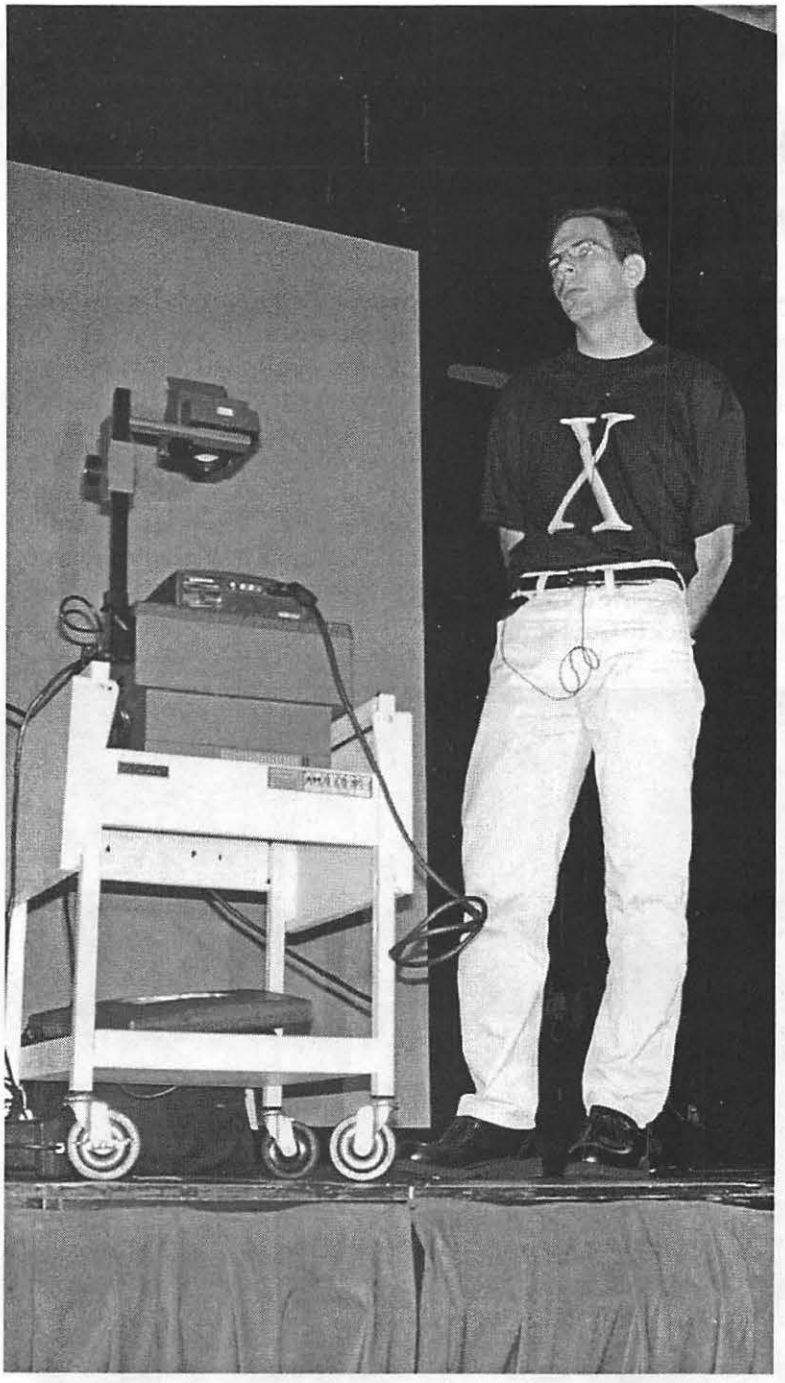
With the newer, far more powerful iMacs in the classroom, even more people are being tempted to try them out. Those responsible for scheduling the classes, maintaining the machines, and teaching the classes asked the Board to establish a policy on machine use. After extensive discussion, the Board adopted the following:

The Tutorial room computers are to be used only by the Tutorial program on days that tutorials are taught. They may be used by the Tuesday Night Clinic crew, or for other official Pi purposes, provided these activities do not conflict with the Tutorial program. No personal use of these machines by members or visitors will be allowed.

Pricing for the classes was also discussed. While the scope, coverage and quality of Pi tutorials has greatly increased over the past two decades, the tutorials are still priced much as they



Steve Kiepe, former Vice President for Programs, fills in one last time, giving away a Hewlett-Packard scanner at the July 22 General Meeting. (Photo by George Copley, Jr.)



Apple's J.D. Mankovsky, fresh from MacWorld New York City with all kinds of things to talk about, answers questions at the July 22 Pi General Meeting. One of the things he talked about was the forthcoming Mac OS X, his black shirt with electric blue X serving as a broad hint of things to come. (Photo by George Copley, Jr.)

"The Tutorial room computers are to be used only by the Tutorial program on days that tutorials are taught. They may be used by the Tuesday Night Clinic crew, or for other official Pi purposes, provided these activities do not conflict with the Tutorial program."

were in the days before the Pi had classroom machines and classes were taught with shadow puppets. This outdated price structure makes it difficult to fund "technology upgrades" (such as the recent conversion to iMacs) and to improve classroom materials and instructor stipends. The Board agreed to increase the tutorial rates in line with recommendations made by the Tutorial Coordinator, Pat Fauquet. The new pricing:

Introductory classes, such as Introduction to the Macintosh, will be $35.00 per member and $50.00 for associate members and non-members.

Intermediate classes, such as Scanners, Digital Cameras, FileMaker Pro and Microsoft Office, will be $50.00 per member and $75.00 for associates and non-members.

Advanced classes, such as the Web Page Workshop, Photoshop, Illustrator, etc., will be $75.00 per member and either $100.00 or $125 for associates and non-members.

Stipends for instructors were also increased.

Another issue concerned textbooks for the classes. Many instructors find it useful to have all students equipped with a specific textbook, yet the current (and even revised) pricing doesn't cover such expenses. The Board voted to allow the Tutorial program to sell books for classes, as appropriate.

In a complete change of topic, at the June meeting the Board agreed that Steve Fink could assist in scheduling programs for the General Meeting. This proposal was too vague to be of much use, so the Board formally elected Steve to fill the vacant Vice President for Programs position.

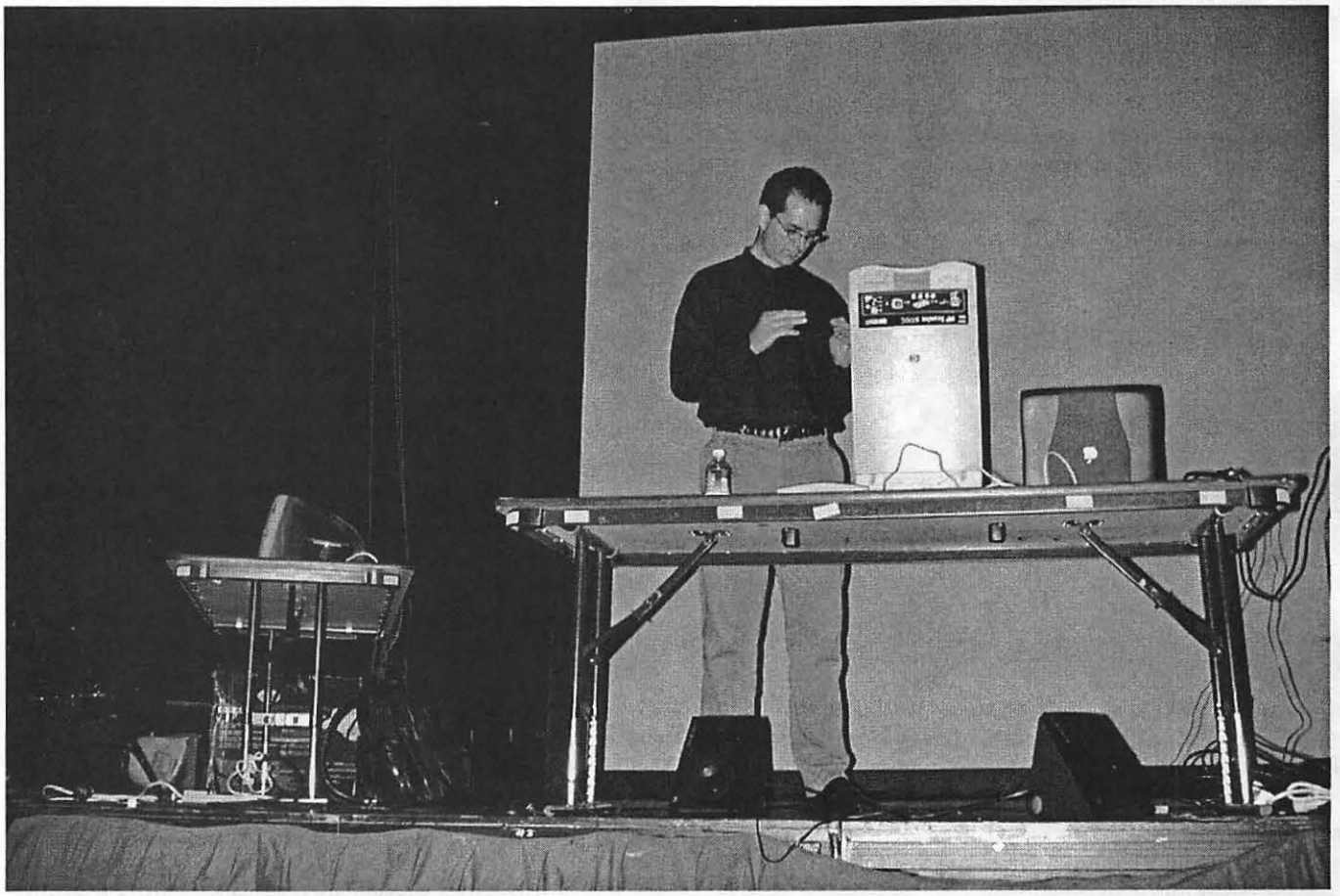
In response to a spontaneous outburst of support, the meeting adjourned at 9:20 p.m. ■

Washington Apple Pi Teen Summer Camp a Hit with Teens

TAKE MORE than a handful of teens, mix in Beth Medlin's famous cookies and a refrigerator full of soft drinks. Blend with computers, cameras, and software. Simmer for two weeks and the results are wild web pages and exciting graphics, QuickTime movies complete with remixed audio, virtual reality objects of the teens' favorite items and panoramas of homes, bedrooms, basements and dojos.

The Washington Apple Pi Teen Summer Camp began the Monday after MacWorld ended. We were honored to have Diane Cohn of the Apple Computer User Group Office and David Roemer, an Apple Student Intern from Emory University come for a visit on their way back to Cupertino. Since it was the first day of camp, the Pi teens were getting acquainted, filling in gaps in their knowledge of the Mac OS and learning about the plans for the next two weeks. They signed up for Apple iDisks and learned how to use the online software to produce web pages. Both Diane and David seemed impressed by the campers' knowledge and enthusiasm for the activities to come.

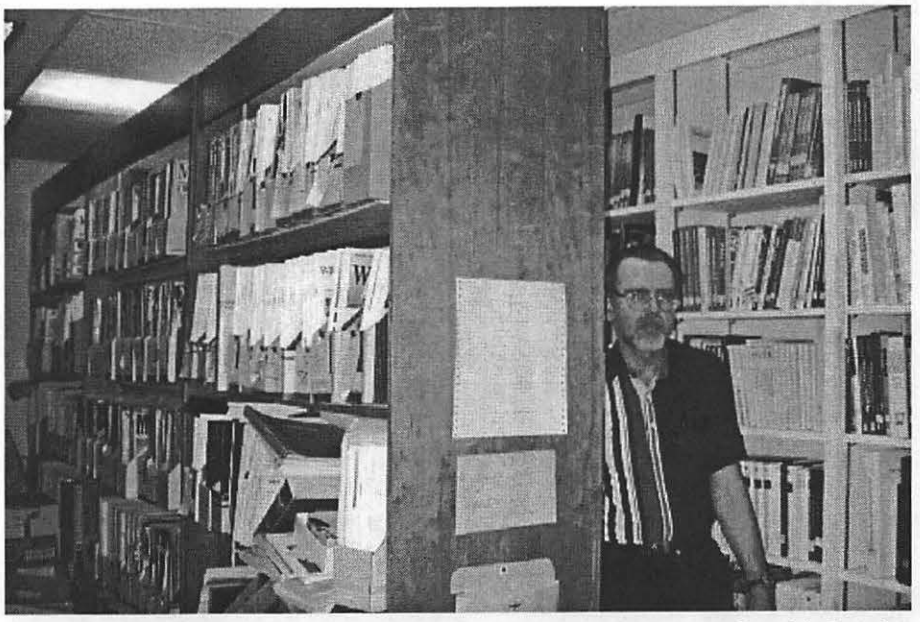
Camp continued with morning sessions on general computer issues, the use of applications such as AppleWorks, Adobe GoLive, GraphicConverter and Adobe PhotoDeluxe. They also learned about Web page and graphic design. Afternoons were spent applying their new knowledge. Campers were also



Hewlett-Packard, determined to regain their status as the leading manufacturer of Apple peripherals, came to the July 22 General Meeting to talk about printers and scanners. Here, the Hewlett-Packard representative opens the lid on a scanner. (Photo by George Copley, Jr.)

"As problems occurred with computers in the lab, campers worked on their troubleshooting skills and learned how to prevent crashes and freezes. They learned how to install software safely, how to deal with corrupted preference files and how to detect low memory situations."

Recent remodeling at the Pi's office in Rockville has included some additions to the Pi Awards Wall and its opposite number, the Pi T-shirt Wall. (Photo by George Copley, Jr.)



Brian Mason, a Pi director and head of the Reading Library, peers out from his domain. (Photo by George Copley, Jr.)

instructed in the use of digital cameras and scanners for the production of web graphics. They learned how to use the QuickTake 200 camera, tripod and a pan head to produce photographs for stitching QuickTime panoramas and objects.

As problems occurred with computers in the lab, campers worked on their troubleshooting skills and learned how to prevent crashes and freezes. They learned how to install software safely, how to deal with corrupted preference files and how to detect low memory situations.

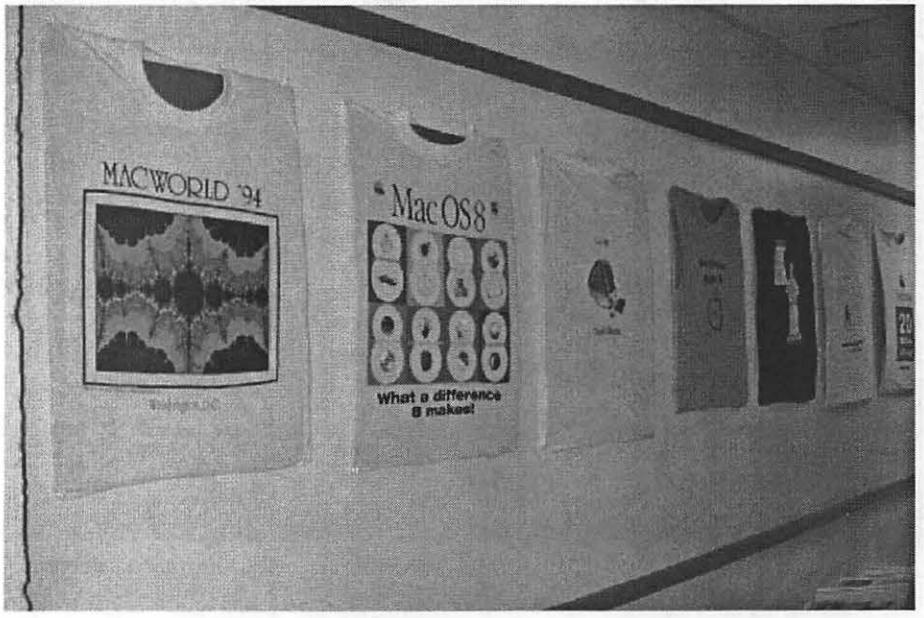
While searching for just the right background, font or clip art to use on their pages, campers learned of new search engines, search techniques, and strategies. They also learned how to re-purpose clip art and photos to create interesting backgrounds, dividers, bullets and buttons.

Campers also worked together to photograph and stitch together a virtual reality tour of the Washington Apple Pi office. They presented it at the QuickTime Festival during the August general meeting. They hope to be able to show it off on the Washington Apple Pi web page in the near future.

Camp ended on a Friday afternoon. Campers presented a cake and cards of appreciation to the adults who helped with camp— Beth Medlin for her unfailing support and never empty cookie jars, Wayne Foscue for his help and suggestions and Pat Fauquet for her leadership of the camp.

The teens have decided to approach the Board of Directors of the Pi for help in re-instituting the long-defuct Apple Seeds Teen Group. Look for further information about this exciting idea in future Journals and Pi announcements. ■

The Pi's second tutorial room, which so far has hosted few tutorials, does feature a System 7 kiosk and a NeXT poster. Few have seen it look this neat. (Photo by George Copley, Jr.)



With the arrival of iMac DVs in the Pi Tutorial room, it was time to update the posters with some new ones gathered at MacWorld New York City. (Photo by George Copley, Jr.)

New classes

See what is available for you by checking the Tutorial section starting on page 52.

Garage Sale

coming up on December 9th. Take advantage of the great buys on Mac equipment available all under one roof.

MacWorld New York City 2000: The Keynote

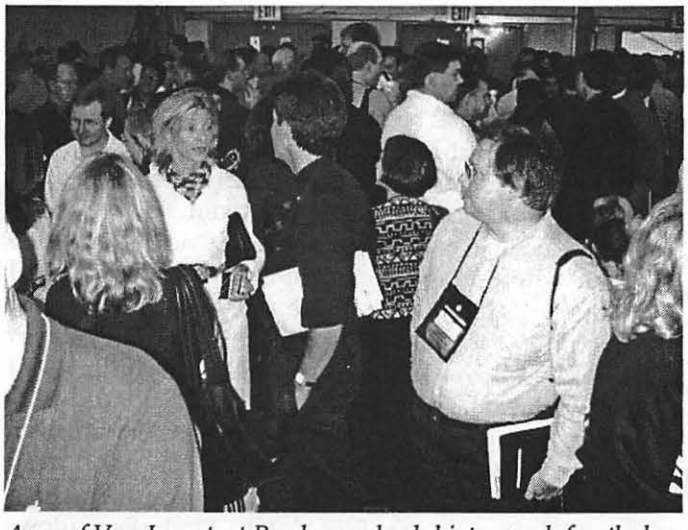
© 2000 Lawrence I. Charters

This gentleman is holding a pink sign that says "WW RKETS" (something like that). Presumably, this allows the other "WW RKETS" VIPs to gather together, compare notes on "WW RKETS" and meet with their peers in this exciting — whatever it is. Unfortunately, few of the guides ever displayed the signs in such a way that they could be seen, much less understood. None of the pink VIPs we met had the slightest idea what "WW RKETS" meant. (Photo by Lawrence I. Charters)

Very Important Sheep

MACWORLD is more than new and recycled computer products, of course. It is an Event, with parts of it as well-scripted as a spontaneous demonstration at a political convention. The Event is centered on the script; the audience (customers, investors) is secondary to the cameras (or, in this case, the satellite broadcast and Webcast audience). Take, for example, the keynote address.

Apple invited members of the media, stock analysts, celebrities, and VIPs to the keynote. If you fell into one of these groups, you were instructed to go to a pavilion just north of the Javits Center. Once there, you milled around for a while, trying to figure out which color-coded type of VIP you were. There were lots of different colors, each associated with signs with odd abbreviations, and most of the VIPs were segregated into their own holding pens. Apple employees and volunteers sometimes held up signs to assist the color-coded VIPs find their fellow color-coded peers, but most of the time forgot. I wandered into dozens of people I've met over the years; in one random gathering, the five participants had five unique colors on their badges. Since we all had similar backgrounds, we couldn't figure out why one person had a black VIP ribbon, one a green, one a red, one a blue, and one a lavender.



Acres of Very Important People were herded into pens before the keynote, to mill around and wonder what their particular color of VIP ribbon was supposed to indicate. (Photo by Lawrence I. Charters)

After lining up at the wrong doors, the mass of VIPs — hundreds of Very Important People, as rare a breed as rabbits, apparently — were ushered up and down various flights of steps, and into the darkened hall set up for the keynote. The volunteers and Apple employees occasionally waved their color-coded signs, mostly to indicate that, no matter where you were, your color-coded section was on the opposite side of the hall, located behind pillars, or a stand for video cameras, or a bunch of people who didn't have chairs and decided to stand in front of you. While Apple has many engineers who have studied queuing theory, none of them, obviously, were involved in planning the keynote.

Then the scripted portion began. Steve Jobs did his usual excellent job of hosting the keynote, complete with new product introductions, previews of coming Apple commercials and revivals of old commercials, software demos, and general cheerleading. After a while, even those who groused about being herded like cattle and

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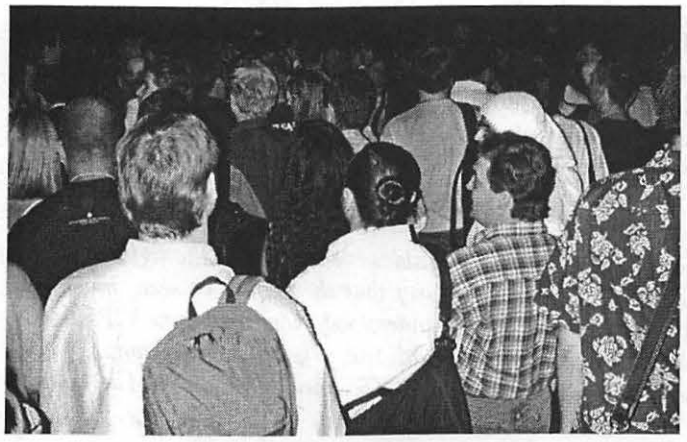
Before the keynote opened, "the media" set up shop on several raised platforms in the keynote hall. These platforms were placed strategically in front of several sections of VIPs, many of whom wondered allowed if there were any "UIPs" (Un-Important People) in the hall, and if they had better seating.



When Steve Jobs announced that each chair in the hall had a cardboard Apple logo good for one Apple Pro Mouse, hundreds of people dived for the floor, scrambling to find the cardboard logos. Then they jammed the sides of the room, where Apple employees traded cards for mice.

branded like preschoolers started to smile, applaud and generally get into the spirit of the event.

Then Steve Jobs announced that every seat in the hall had, taped to the bottom, a cardboard Apple logo, good for one brand-new Apple Pro Mouse. Given that these were august VIPs, many of them multimillionaires, or famous journalists, or influential stock analysts, or jaded network managers, the audience responded with appropriate grace and dignity: hundreds of people erupted out of their chairs and dived for the floor, scrambling for the cards.

Sadly, it was a bit too dark to catch on film, and the media cameras were pointed at the stage. ■

2000 MacWorld New York

by Neil Laubenthal

EXACTLY 31 years to the day (after) Neil Armstrong's famous "one small step", 90-odd Piters took a giant leap onto the New World Tours buses for the second annual trip to the Big Apple to see the Littlest Apple. Actually none of us had any inkling about the Littlest Apple until the day before we left -- but when you're writing the article you get to take a little journalistic license.

What follows in the remainder of the journal are comments from those who went along for the trip. Since I'm writing the opener . . . you get to read my thoughts first. I've listed both positive and not so positive comments using a 5 point rating scale (++, +, +/-, -, --). The only complicated scale point is the middle one which means I can't decide whether it's good or bad. I've left that as an exercise for the reader. So here it goes—standard disclaimer here, your mileage may vary, void where prohibited, my opinions are my own and not anybody else's, and you don't have to agree with any of them if you don't want to. I've listed in my comments things that caught my attention or that seemed to be noteworthy.

Pro Mouse and Keyboard (+): Both of these are a definite improvement over the puck and midget keyboard Apple has been shipping with iMacs and G4's. The keyboard feel is pretty much the same as my MacAlly keyboard but doesn't feel quite as sturdy as the venerable Extended Keyboard did. The mouse has a nice shape; but I'm not sure if the "no button, press the whole mouse down approach" is good or not. I found it a bit difficult to use; but perhaps that is just because it is different from what I've been using. I did find the lack of a second button disturbing as I use contextual menus extensively and having to press "Control" on the keyboard is too hard. In addition, since OS X is based on Unix (which depends heavily on a 2 button mouse). Two buttons seems like a logical addition to me. Fortunately, FinderPop allows "Control free" contextual menus.

New iMac models (+): These are mostly incremental improvements with the entry model price point down to compete with the other sub-$1000 el cheapo Windows based computers. I like the new colors, I am a fan of deeper colors over light and fruity. I really liked the Kermit commercial for the Sage model. Too bad Chiatt-Day didn't get the proper copyright clearance from the Muppet folks before using their material (the ad was pulled from Apple's website by Friday night of the Expo).

New G4's (+): Once again, an incremental improvement. The dual processor models are nice but until Apple ships an OS that can actually use two processors I don't really see the point. Currently, Photoshop can take advantage of the second CPU but otherwise about all a dual processor gives you today is a "gee whiz" feeling.

New Monitors (+/-): It's hard to get excited about monitors. The new smaller flat panel is nice; but it seems pretty expensive compared to what you get with a 17 inch screen. I didn't care much for the clear model.

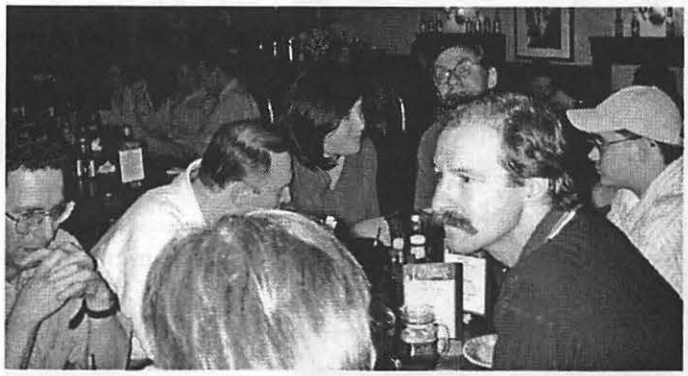
G4 Cube (+/-): I really couldn't decide what I thought about this one. In fact, I changed my mind three times before I wrote this article. On the positive side, it is cool, sexy and small. Unfortunately, it comes in second best in almost every other comparison with the equivalently priced G4 mini-tower. I can't figure out what the market is for this thing.

On the plus side, they will sell a lot of what is likely to be a high profit item, to executives who want something sleek and sexy on their desk. Paired with one of the new 15 inch flat panel displays you'll be the envy of all your email buddies, but the power doesn't go much beyond that with essentially no expandability. As noted above and as demonstrated with the OS X DR4 release running with both single and dual processors; OS X will run significantly more responsive on a dual processor but there isn't room for one of these inside the cube.

On the plus side, Apple has sold some 3.7 million iMacs since it's introduction and they are not expandable either. Most G4 minitowers don't have any cards in their slots, so maybe this isn't such a bad idea. At the least, lots of executive types will want them; and anything that can make a profit for our favorite computer company while increasing Macintosh visibility with upper management can't be all bad. In the end though, I personally find the lack of expandability to overcome the coolness factor. If it cost $1300, I might buy one but with a monitor it's well over $2300 at a minimum and isn't a good economic decision for consumers IMHO.

Overall Apple Hardware Introductions (+): Overall positive grade; lots of incremental improvements but there wasn't anything really new (the Cube is a new form factor but that's about it).

OS X (--): Big downer here, "X" was almost non-existent at the show. I saw the "demo" at the apple booth; but all they showed was a bit of fluff. I think it's time for Apple to get off their duff and ship "X". Instead, we got what amounts to another delay. After the repeated delays over the past several years due to the Copland/Rhapsody/new focus, the continual rescheduling is getting tiresome. I realize that they want to get it right, but perhaps releasing a public beta, followed by maybe a second public beta (if necessary) would be the way to go. They need to do something besides tell us "real soon now", over and over again. Even based on the last schedule given at WDC September isn't summer. Well, technically it starts before the autumnal equinox, so I guess it might be called summer . (Summer runs until



MacWorld New York City is grueling work. While this group, formed of Pi members and members of other user groups, seems to be enjoying themselves in a bar, few can believe the intense, exhausting work involved. (Photo by Pat Fauquet)

Washington Apple Pi sponsored two buses to MacWorld New York. On the return trip, careful checks were made to ensure there were no stowaways. (Photo by Pat Fauquet)

Labor day when the kids go back to school.) T echnically, I can't say that the stated release date isn't true, but it smacks of a lack of candor to me.

Other cool stuff I saw:

Rewind (++): This product (assuming it works) has a real chance of being a successful sleeper. Rewind keeps a database of all changes you make to any files on your hard disk and allows you to "Rewind" your hard disk to any previous condition. For instance, say you damaged your system file and restarted the machine before realizing your goof. They actually id this during the demo they ran an Applescript that deleted a whole bunch of required resources from the currently active system file and folder, then restarted the machine. The computer naturally crashed on reboot since the system was hosed. Rewind allows you to reboot from a hidden soft partition with a pristine system folder in it and restore the contents of your drive to where it was 10 minutes (or 10 days ago). You can also recover accidentally deleted files (or the revision of a presentation that you had 43 saves ago and that you have now decided is the one that you really liked). The only drawback I can see is that it has to be pretty much OS 9 specific, it would require a total rewrite for "X". W ith the not too distant actual arrival of "X", I'm not sure that this isn't a case of too little too late. If it works, (and in my experience, PowerOn Software only ships working products) it will be a great addition to your OS 9 toolbox.

Games (+/-): The emphasis on games was a lot lower than in previous shows. I'm not sure if this is good or bad. We need Mac to be seen as a valid gaming platform; but we need to be taken seriously as a professional platform too. I don't know what the lack of emphasis means. The Sims (a new game from the SimCity folks) looks like a sleeper hit as well.

Office 2001 (+): I didn't get to see this entire demo but this looks like a worthwhile upgrade from what I did see.

Scanner3D (+): This isn't the correct name but it's close to correct. It is a mirror type arrangement that fits over a standard flat bed scanner and allows you to scan a 2D picture of a 3D object. The alternative (say for product photos for a web page) has been to take a picture and scan that. This thing allows you to sit your product on the scanner and get a direct scan.

Attendance on the middle day of the show seemed to be higher than last year, overall, a highly enthusiastic crowd. The Apple booth was consistently crowded whenever I went by; I had to stand there for close to 30 minutes before I could get a chance to play with "X" on a dual processor box for a quick test drive.

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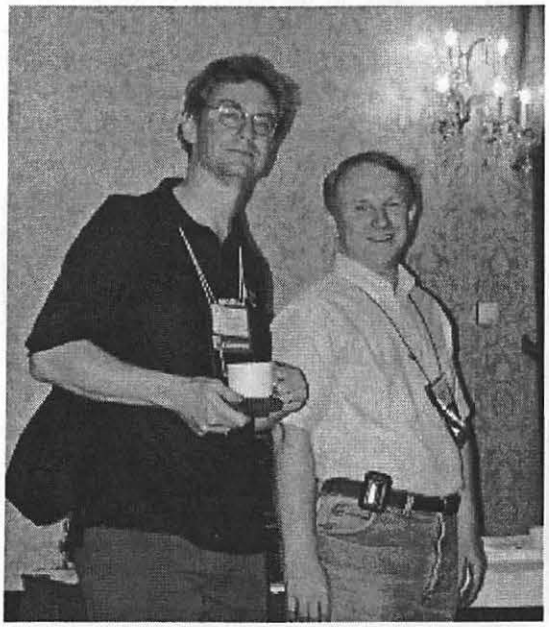
by Burt Rosenberg

Only going to the exhibition hall at MacWorld, rather than the seminars also, has its limitations. But, it is a splendid way to see each vendor putting their current "best" forward, live and all in one place. And I got deals on products I intended to buy anyway. Best exhibitor was Adobe, who did actual demos and mini-classes on using their new software. I'd have liked to have been there early enough to sign up for an Adobe teaching session, using one of their Macs. All in all, it was well worth while. Thanks for organizing it!



Members of various user groups gather together to beam information to one another in a frenzy of infrared information exchange. And yes, it looked just as funny in person. (Photo by Pat Fauquet)

At the MacWorld New York keynote address, Steve Jobs (lower right) cited some impressive numbers for iMac sales. Note the paparazzi at the edge of the stage. (Photo by Pat Fauquet)

My comment about the trip

by Don Wong

I have attended about six MacWorld conventions in San Francisco over the past decade, and this was my first to New

York. Although the January, 2000 SF convention seemed to be more subdued than previous ones, the NY experience seemed more upbeat (probably because of the many hardware/software announcements). In comparing the two, the NY convention was difficult to navigate and to find the booth you wanted; there were fewer companies represented also. The floor plan and booth numbers required a magnifying glass to read and I did not bring one. Overall, the experience was great and I was happy to see WAP represented with two bus loads. Thanks to MaryK and to others I don't know of, the logistics of the trip were handled with competence and grace!

I thought MacWorld was very interesting!! As a first time attendee, I found it to be very informative concerning the latest and newest stuff on the market or soon to be on the market. People were friendly and eager to help and answer questions. There was also opportunity to get demo discs and to see how certain software worked. Going with the WAP buses was a great way to go door to door and to meet other local Mac people.

Esta Gladstone

Interesting things I saw on my trip to Macworld
by Jay Darmstadter

I took the Apple Pi bus trip to Macworld Expo on July 20. Here are some of the interesting things I saw.

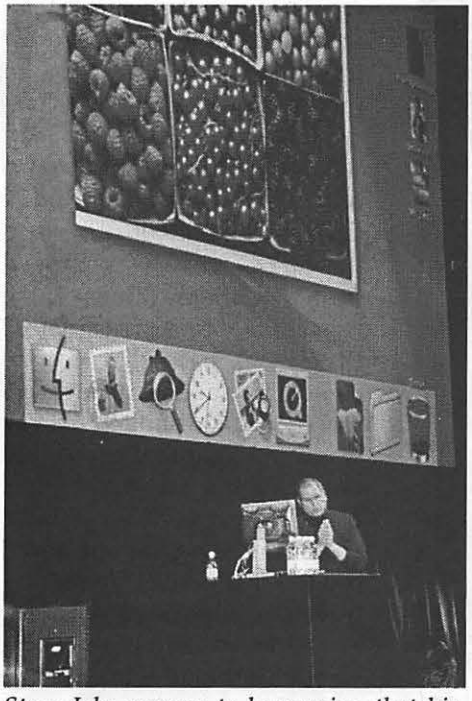
On a walk thr ough Manhattan, I saw 3 women who were in their mid-twenties. By the way they were dressed, I guessed they were hookers. Interesting. Definitely interesting.

Inside the expo, there was an exhibit (I never bothered to find out whose), I found quite novel. It was living room furniture made of Mac SEs, Pluses, etc. There was a working fish aquarium made of the shell of one of these old machines, and an easy chair made by stacking the machines up like children's building blocks. There was a couch made in similar building block fashion, and a fireplace that had a black Mac TV model in the middle showing animated fire. The footrest for the easy chair was a Lisa.

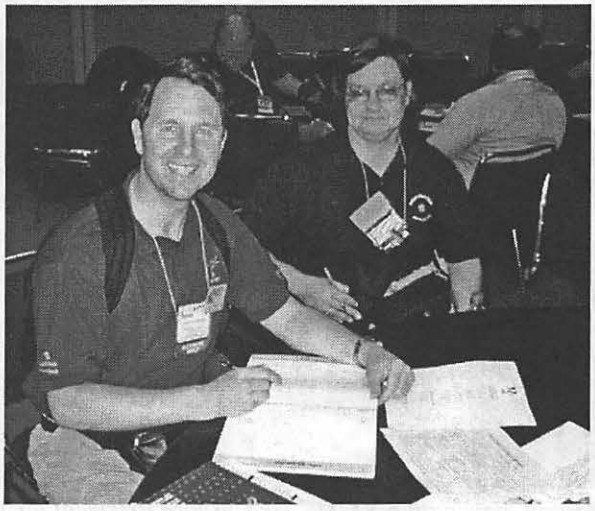
Naturally, there was the collection on new Apple products, but there will be enough discussion of that, I don't need to bother describing it. However, I would like to express my desire to own a G4 cube and the 22 inch Apple Cinema Display. Gimme gimme!

MacWorld, my perspective
by Ken Clare

When will the Information Technology (IT) marketing types learn the arcane science of effective booth design for computer shows. Even among the Macintosh-oriented hardware, software, and service peddlers at MacWorld; the marketing types seem to interpret "think different" to mean glaringly-bright contra-posed colors, loud noise(s), and multi-font juxtapositions of empty catchphrases. What have we wrought bringing up the majority of two generations immersed in MTV-like cacophony. Trying to make an association between a company's name and its product or service (much less the function of same) is an exercise in cryptography for almost any booth other than those with very-high market brand-name saturation; i.e., Apple, NEC/Mitsubishi, or Hewlett Packard. So, forget about doing a serious (much less efficient) data-gathering, cost-conscious acquisition, and/or new item finding visit to MacWorld. Just immerse yourself in the glitzy air of the carnival side show that computer expos, especially MacWorld, continue to be. Soon, the virtual experience ven-



Steve Jobs appears to be praying that his demonstration of Mac OS X will be a success during his keynote address. (Photo by Pat Fauquet)



MacWorld's User Group meeting room offers a chance for Tim Childers (Columbia Apple Slice) and Pat Fauquet (Pi Tutorial Coordinator) to sit down and compare notes. (Photo by Pat Fauquet's camera)

dors will be demo'ing immersive roller coasters, Ferris wheels, and parachute drops.

I had a wonderful time at MacWorld Expo in NYC. I spent most of my time browsing the booths, learning about new software and meeting the representatives. As a web designer, I was particularly interested in the latest web design software from Macromedia and Adobe. The music software was also interesting. As a long-time Digital Performer user, I appreciated the demo of their recent version. Also of interest was the new graphics software from Synthetik Software. The most interesting part was meeting new friends on the ride up and back. Our dinner stop was memorable--I'll have to take my wife there on our next road trip!

Ken Kinard

We arrived on time to the buses in Rockville, in spite of the fact that several of us went to the Pi office parking lot instead -- thank goodness for cell phones! A pleasant and uneventful ride to that other Apple, with only the minor concerns of no light in the on-board restroom (you think you don't need light for that? Think again!) and how to consume the large collection of various foodstuffs provided by our bus mommy, Mary.

After a rather cir cuitous tour around some New York blocks to arrive at the main entrance of the Javitts Convention Center, we gathered up our various and sundry containers destined to hold our loot, and entered MacWorld.

My first impression was one of awe; the second, of confusion. As a teacher, I go to many conferences and their exhibit areas. Trust me, they are peanuts in comparison. They do, however, have one advantage in my opinion -- they are always laid out in parallel rows or around a circle or square, with each booth clearly numbered, making it relatively easy to 1) make certain you hit all the booths, and 2) find a particular vendor.

MacW orld was a veritable maze, making it very easy to get lost; individual booths weren't numbered, although the hundreds were generally identified hanging above that section. I didn't even discover half of it until well into the day, and kept wondering where the other numbers were.

Although the program was thick, nowhere on the map or in the text did I find any mention of restrooms; there's something to be said about a program that makes certain that you know where the ATM's are and building columns (as if you couldn't see them?), but nothing about restrooms.

I went, I saw, I bought. Actually I would have bought more, except that there seemed to be a fairly large number of booths hyping a product which "isn't available yet -- go to our website." The Apple section, huge, just demonstrated; no luck in purchasing a cool new laser-beam mouse. However, that was better than the one young lady who, when I asked her how to obtain some software, said "I don't know; I'm not sure when it will be." Giveaways ranged from the sublime (iSubs) to the ridiculous (a two-eraser pencil? little black balls that no one could figure out what they were for?) An interesting giveaway was a red light that clips on to your clothing and flashes; lots of people seemed to want those. I'm trying to figure out how I can use that in the classroom -- it even has a replaceable battery.

Footsore and back-weary, we loaded the buses to go home. A dinner stop at Mastoris saw even more packages of different breads carried on to the buses

Former Pi member Chris Bastian, now with NYMUG, and Pi Vice President for Publicity Dave Ottalini meet at MacWorld New York. Note that Dave has a pager (shame, shame) and Chris appears to be using a Palm PDA as a saucer for his cup. (Photo by Pat Fauquet)

by people who often weren't able to finish eating the large amount of food served (or who were at the table that somehow got forgotten by the otherwise very efficient servers until it was almost time to leave). I got home finally around 3:00 a.m., exactly 24 hours after leaving it, to wake up the following morning (well, afternoon) to read the articles about MacWorld in the "Post," and to be pleasantly surprised to see the notice about the July 22 meeting of the PI.

Marilyn Barrueta

My thoughts about the trip
Mary Lou Kinna

What a pleasure to have joined the group for a thoroughly enjoyable trip for my first "MacWorld" visit. My decision to go was at the very last minute and I am really glad I did. I haven't taken a bus in many years, but travel was a really smooth ride in what seemed like record time to reach New York. Entering the center, one's eyes feasted on many Mac choices. Visiting exhibitors booths, and talking to vendors was a treat.

There were many workshop sessions one could attend - I was pleasantly surprised at the tips my favorite software names provided in their demonstrations. Time seemed to fly while having this New York fling. Before I knew it, it was time to gather for roll call, board the bus and embark on the journey back.

One additional treat was the tasty dinner we stopped for outside New York. The menu of choices was as large as the menu for MacWorld 2000. As a new member, the camaraderie of meeting other members, attending MacWorld, along with enjoyable travel arrangements surpassed my expectations. One could only hope for a trip lasting 2 days at the jam packed fest for "MacWorld 2001!" A big thanks for the planners, and our bus captain "Jim"—it was great! I want to reserve my seat on his bus for next year!

Macworld 2000 (NY)

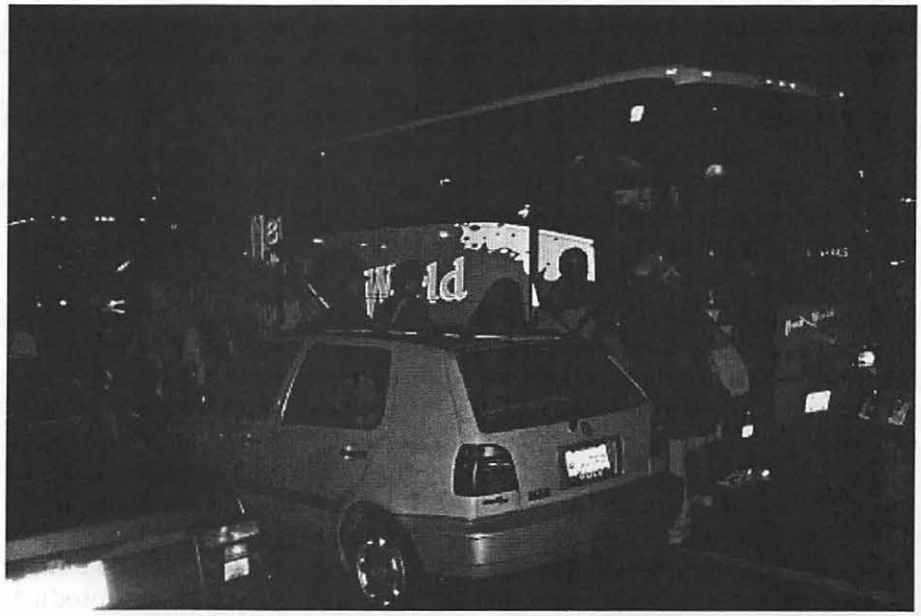
All I can say is, any of you that didn't go on the WAP. Bus trip to Macworld missed out on a wonderful opportunity! It was the best $62.00 I've spent in a long time.

Yes, I'm flat warn out from sitting on the bus for hours and walking for miles in NY, but what great conversations and debates with so many new and interesting friends. There's something about "Mac Heads", as I lovingly refer to them. The way we all want to share our knowledge and experiences, not for financial gains but just because we can. I have yet to meet even one person that feels so much passion for their "WINTEL" box and lame OS. Boy, this is turning into a sermon... anyway, we had a great trip and you missed it!

I have been a Mac guy since 1984 watching the ups and downs of Apple over many years. I have always wanted to attend one of these awesome events and finally the cards fell into place. I was even able to share the experience with my 11 year old son Trever who was able to go with me. What a great memory for both of us. Our 24 hour whirlwind trip to the Big Apple, Macworld 2000! (I made a funny, hehehe). It's one thing to see the new products on TV or read about them in hyped up magazines. It's another thing to be there in person and get hands on experience with the newest and most advanced technology.

The "Cube" Apple's newest G4 super computer is another fantastic piece of art and engineering. Once again Steve and the many wizards at Apple have created a machine that has as much "Got to have shine" as it has performance and friendliness. It isn't the machine for everyone but everyone wants one!! This is a recipe for success, possibly as much as the iMac has been the last few years.

The iMac line has been given new richer colors and even more improvements in basic design. They have also lowered prices to make it even more attractive than before. The iMac continues to become the computer for everyone. The G4



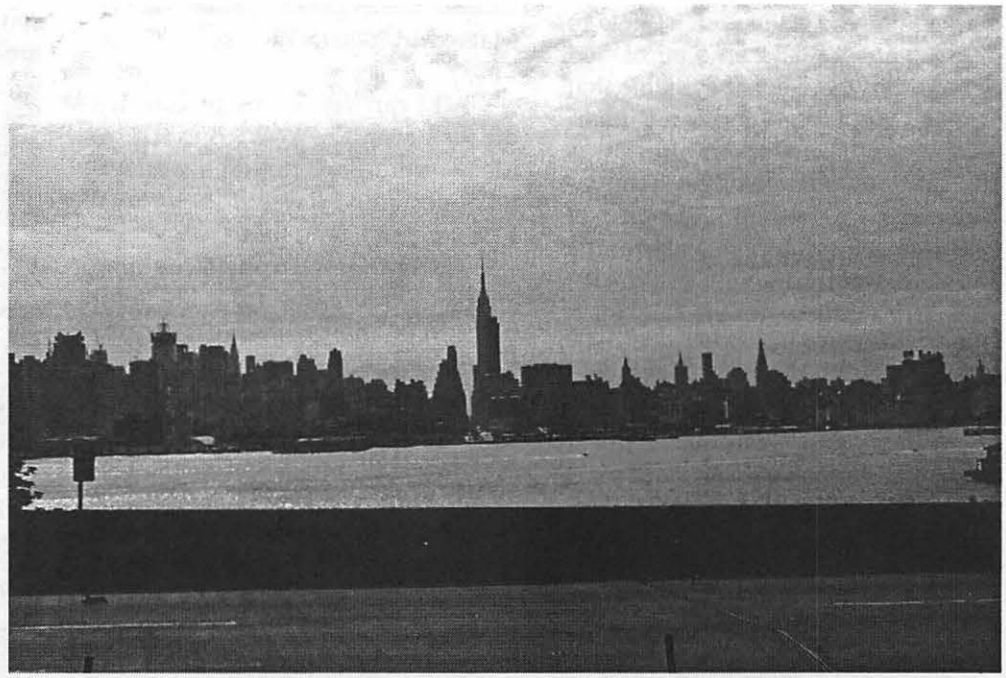
The commuter parking lot at Rockville Pike and Montrose Ave. At 4:45 am. You can see the big bus on the right hand side of the picture. If you look carefully, you'll also see some of the many bleary eyed but excited voyagers

tower line has been give twice the processing power with two G4 chips included in the 450 & 500 MHz machines—at no additional cost. Can you believe that, Wow!

Anyway, this is one event you should put on your ""to do" list for next year. It's something I will always remember. A BIG Thank you to everyone at WAP that worked so hard to make this possible.

I wasn't even a member before this, but my check will be in the mail today.

Terry & Trever Long



The Empire State Building in early morning. This is the wonderful view we got of the Empire State Building as we drove into New York City. Everyone was wide awake and ready to descend on MacWorld.

The trip to MacWorld was very beneficial, especially to a working pro who wants to keep abreast of current software and hardware. I have to compliment the Pi for the effort put forth to provide this experience. I realize that it takes a tremendous amount of time in arrangements and communications to get 100 people to one place at one time. Great effort. I do, however, want you to know that there are some areas that must be addressed for a future trip of this sort:

1. Organization. To arrange for 100 people and two buses and NOT HAVE AN ALPHABETICAL LISTING is ridiculous and near maddening. How simple it would be to set up a folding table or auto trunk with name cards in order. People arrive, put on their badges (akin to picking up a table place card at a wedding). No card, no seat! No check lists, no calling out who's here, no 1/2 hour delay.

2. Once in NYC, we don't need an orientation that explains we should submit a reply to the Pi on our feelings about the trip. Do that on the buses during the 5 hour jaunt to NY. Have sites prearranged for drop off and pick up. If they change, someone can be stationed at the prearranged pickup spot to direct folks to the new area.

3. Attempt to find out if some people have special health issues for snacks. Some fruit might have been nice for those that can't have donuts and cake. I realize they can fend for themselves, but some apples or oranges would be easy. All in all, we wasted a good 1.5 hours in trying to organize ourselves, needlessly. I, personally, found it maddening, especially on such a long day. Just my 2 cents.

Terry Popkin

This was my first trip to a MacWorld Expo and it was most worthwhile. A long time MAC owner since my Mac 512 replaced my Apple II, I am in the market for a new computer and wanted to see what was coming out. Apple did a super "show and tell" on the new products and answered many questions. It was also great being able to see and touch the range of new peripherals becoming available. The strong presence of Microsoft, as well as several of the other big guys, indicated they would continue their support. Similarly, a roundtable of game company folks showed they have renewed interest. The floor layout seemed somewhat confusing (probably better than I originally thought as I made my last tour of the day). Better groupings and numbers on the booths would have helped. Next time I will probably sit in on more tutorials and focus on specific areas (if I can figure out where they are). WAP did a great job in arrangements and travel. Mastori's for dinner lived up to the advanced billing. Bottom line, yes I would plan to attend next year.

Ross Hatch

I've been trying very hard to think of clever and interesting ways to tell about the whole Macworld/Apple Pi experience now that I've caught up on my rest inspiration may come a little bit easier.

The Javitts Center is colossal! First stop, the Apple "pavilion," where the Cube was rotating on an illuminated shrine. Next stop Adobe; I've seen their presentations at so many expose their presentations didn't seem worth the crush so I kept moving. Late in the afternoon I hovered at the Best of Show awards for awhile. The presenters described their Winning Picks more objectively (and informatively) than the products' reps did at their booths. The sensory overload of the show floor was stimulating, but every hour or so a break in the comfortable, if simply furnished User Group Lounge was essential. And that bag o' goodies got heavier and heavier

Resolutions for next year: 1. Attend again and try to get leave from work next day.) 2. Now that I have a sense of the how itself, I intend to take a workshop. The day was a long one but worth it real treat for Mac enthusiasts. Hope you can use some of this. Thanks again for a great trip!

Campbell David
Graphic Artist

My overall impression of the MacWorld Expo in New York is that there is a lot of work being done by third party developers and a lot of willing people to explain what they're doing. Demos everywhere! Of course, the Mac exhibits drew the most attention with their color-of-the-moment machines and their incredible new capabilities.

But the most lasting impression of the exhibit was the (almost palpable) electricity of excitement generated by the general public. Not so much "I wonder IF there's anything really new" as "I wonder WHAT ELSE is new."

The Expo was huge, colorful, noisy in spots and exciting. We were bombarded with beautiful banners and huge display pieces from the moment we stepped into the Javitts Center and throughout the exposition hall.

There were several cafes for eating and in which to rest and recuperate (if you could find a place not taken up by some geek and his laptop). I was a little concerned about getting a brain tumor because of the electromagnetic field generated by so many cell phones in use It seems every third person was talking on his phone, hopefully calling his boss to order a new iMac or G4 or Apple stock.

The MacWorld Expo is a wonderful experience and everyone could benefit from attending as it offers something for everyone at every level of expertise.

Chad Coppedge

MacWorld NYC 2000
by Ned Langston

MacWorld 2000 in New York City had more vendors and had a higher attendance than last year's show. I reached that conclusion by how tough it was to move in the aisles because of all the people.

There appeared to be a heavier emphasis on hardware versus software this year. The hardware products were based on "things" that use PCI slots, USB ports, and Firewire or can plug into 10/100/1 Gbit networks. My conclusion is that the Macintosh and WinTel boxes are converging in at least the hardware department. Both computers have USB and sometime Firewire ports, use AGP graphics, take PCI cards in their expansion slots, and can read each others 3.5" floppies or Zip drives. Styl-

Here you can see a less bleary-eyed and more wide awake crowd of Pi people eager to get their badges and badge holders so they can get to the Macs. If you notice at the back of the picture, you will see one wing of the massive building that constitutes Javitts Convention Center. You can also get an inkling of how long the building is in the front. Trying to describe the size and expanse of this building is very difficult. The sheer volume of glass and steel should be intimidating and yet, in a strange way, I find it a warm and welcoming building.

ing, price (with the cost difference shrinking each day), and operating systems, still separate the machines, but most new computer users probably won't notice the difference. It will come down to which machine is the most stable (i.e. doesn't crash) and is easiest to use. I think the Mac may still have a chance.

Apple Computer's prognosis is good if for no other reason than Microsoft's announcement of Office 2001. It was probably the most exciting thing at the show! [Note to MS representative monitoring the Pi, I put your plug in, so when can I get my software package?]

Yes, I know Apple made a few announcements of its own about new machines: iMacs in new colors and one model with a cubic shape, but really, how often do you buy a completely new Macintosh? Oh? You were one of the people who bought Apple's stock last year and sold it at its top price a few months ago? You are getting a Cube and the Cinema Display? Well, never mind.

Back to MS Office 2001. Ordinarily Office 98 is good enough for me, but I have been waiting years for the integrated alarm and calendar features found in their new Ensemble product. I tore through the Office 2001 demo CD and fully expect to be an early adopter once it is released. Lately Microsoft has been trying real hard to get on my good side and they seem to be succeeding. If I have to make Internet Explorer my default browser to unlock the power of Ensemble, then it just may happen. Fair warning Netscape!

I missed a few vendors at the show. If anyone talked with the REAL Software people about their REALbasic product let me know. All I found was a vacant spot on the floor where their booth should have been. Deneba Software with their new Canvas product was also missing. I hope they come next year.

I picked up two CDs from Netscape. One was Netscape Communicator, version 4.73 with 128 bit encryption. It saved me a 14.6 MB download over my 26.4 Kb "data straw" called Erols. Enough said. The second disk was i, preview release 1. When the Netscape person gave me the sample disk he acted like it was the British Crown Jewels. He was disappointed that I did not treat it the same.

I am a little jaded with Netscape lately. It may have something to do with AOL Instant Messenger being installed for me despite my best attempts to prevent it and then to delete it. Or perhaps it is being in the midst of a lengthy E-business transaction that is suddenly interrupted by Netscape with the sensitivity of a telemarketer's cold call asking me to stop what I am doing and fill out their survey. Regardless of my answer, my new home site is now www.netscape.com until I correct it.

As I said above, Microsoft Internet Explorer is looking better and better.

Moreover, Netscape 6 requires Mac OS 8.5 or later and 32 MB of RAM plus virtual memory. However the internal README files says at least 64 MB of RAM is needed with a 200 MHz or faster 604 or G3 chip. One hopes Netscape knows that Apple has G4 machines now. However, Netscape 6 will not run on low end (i.e. older) Macintoshes including those PowerBooks and Performas that used the 601 and 603e processors. Because I have to maintain comparable Internet installations between a beige G3 Mini tower and a 7200/75 PowerPC, Netscape 6 is not for me. Interestingly Netscape 6 system requirements for Windows and Linux are much less: a Pentium 133, Windows 95 and Red Hat Linux 6.0, and 32 MB of RAM. (Note to program VP: We should have Netscape as a WAP presenter to tell us why Netscape 6 is

These people were not savvy enough to book a seat on the Pi bus , nor did they preregister for MacWorld. They are concentrating so hard on getting registered by our favorite fruit that they fail to see the practiced eye of Charlie Chaplin lining up his next Movie scene. Can you begin to imagine what Charlie would have done with iMovie2? Between you an d me, I didn't really get the rationale for all the decoration" that hid the iMacs used for on site registration. I would have preferred to see the rows of iMacs.

worth the upgrade.) In the meantime, if you want to try out Netscape 6 for yourself, contact me for the disk. First come, first serve.

One intriguing product was Mimio made by Virtual Ink Corporation. They had booths throughout the hall advertising their whiteboard product. In one instance, two Mimio booths were across the aisle from each other! Mimio allows you to draw in color on a white board and have every stroke, in order, captured and displayed on a Mac or PC. It is a great teaching tool and good for people like me who need to doodle before finding the right solution. While I like their product, I didn't have the $500 for the show special price. They might be willing to come to a WAP meeting too.

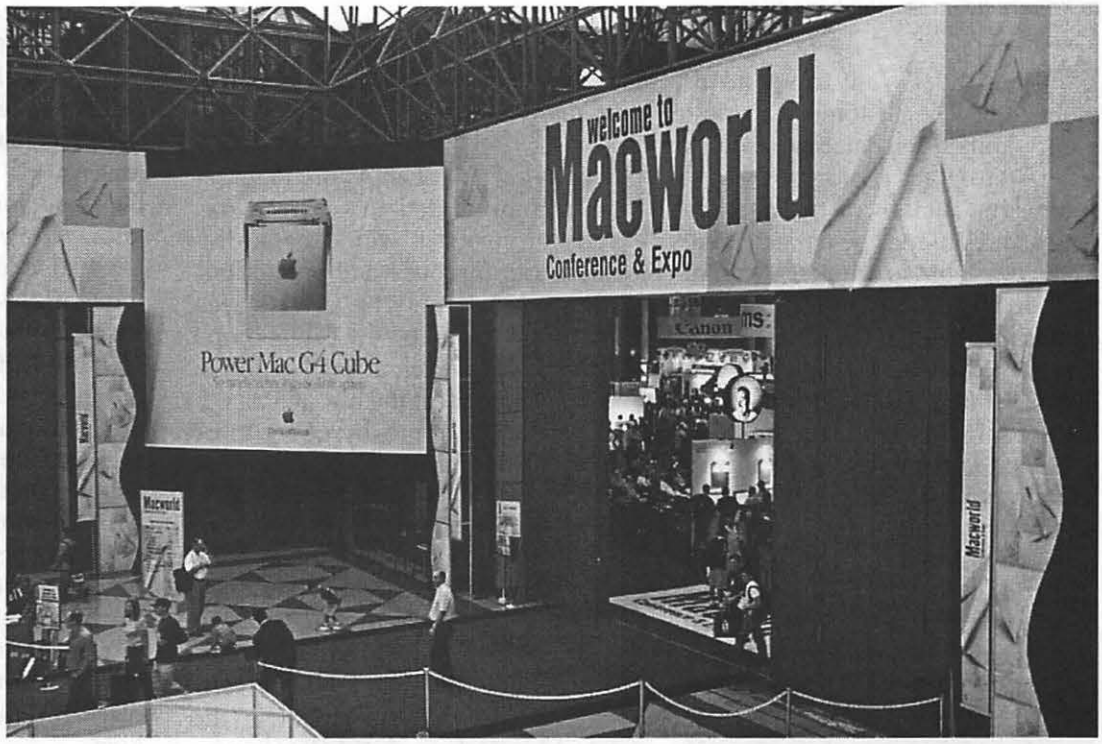
Speech recognition for control of the Macintosh and input to a program was big this year. MacSpeech had iListen and ListenDo, two of the speech recognition programs reviewed in the June 2000 issue of MacWorld and IBM had ViaVoice. I did not ask for a sample CD from IBM of their newest ViaVoice release. It requires a 300 MHz or better G3 processor. When I asked if my 266 MHz could handle their program, the IBM person said "no" and offered that even a 300 MHz G3 might be slow for the task. Today a ViaVoice capable Mac may be a $799 iMac, but I still have a (nearly) fully capable beige G3. Bottomline, I am looking forward to speech recognition and speech control of my Mac, but I hoped not to have to buy another computer to get it (unless it is a PowerBook 2000).

Besides speech recognition, IBM had a booth explaining their PowerPC line of processors. I picked up their sample CD hoping to learn when we could expect a 1 GHz G4 or what the G5 will look like. Sorry, they didn't have any of that material on the CD.

What did I buy? C&G's . I need it as one more tool for troubleshooting those mysterious crashes in the past year. I also got a two-year renewal to MacWorld for the price of one year. That deal was too good to pass up.

Finally, I bought Metroworks CodeWarrior Discover Programming version 5. I really do want to learn how to program my Macintosh. Version 5 allows me to write applications in native PowerPC code rather than running in 68K emulator mode. If I get any good at programming, I might ask the Pi if we could restart the Programming Special Interest Group (SIG).

"Speech recognition for control of the Macintosh and input to a program was big this year. MacSpeech had iListen and ListenDo, two of the speech recognition programs reviewed in the June 2000 issue of MacWorld and IBM had ViaVoice. I did not ask for a sample CD from IBM of their newest ViaVoice release."



The entrance to MacWonderland.
This is the official portal to the Apple portion of the expo floor. Inside are all the new and wonderful toys we have come to play with. In addition to Apple, this section houses Adobe, Iomega, Hewlett-Packard and many other 3rd party providers of additional Mac toys.

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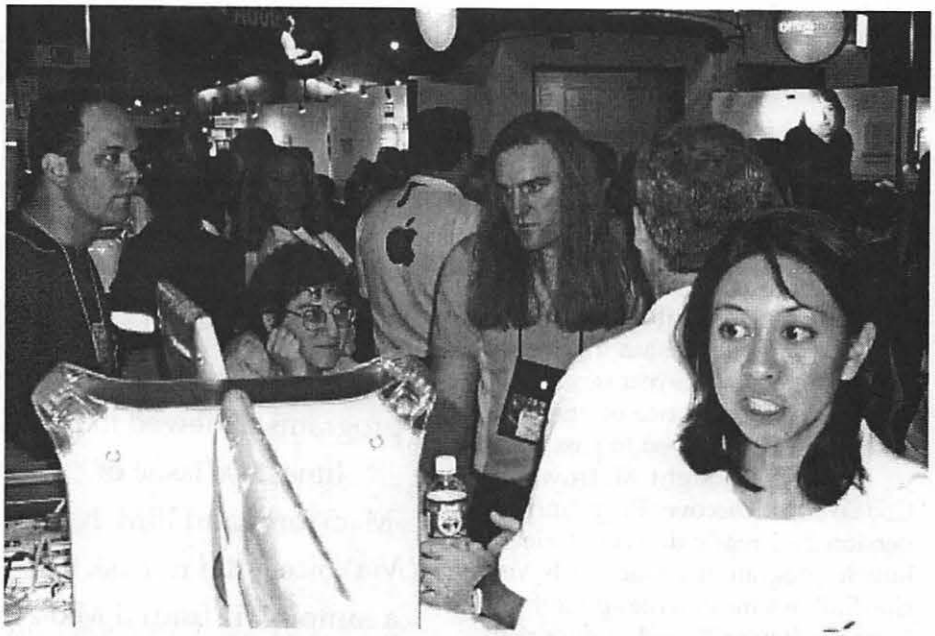

Tim Paul and other Mac fans study the new G4's and cinema display while listening to the Apple Tech person explain its features. You can see how packed the room is behind them. It is very difficult to convey the huge dimensions of this room and by extension just how many people it takes to create the crowed scene you can see here. In addition to all the people, there are many voices struggling to hear and be heard. Notice in the center right of the picture just behind Tim, the large red apple adorning one man's shirt to be sure no one mistook his allegiance.

"I cannot end my article without applauding the hard work and thorough coordination by Mary Keene and the other Pi members who made this year's bus trip go so smoothly. If you did not come on the trip this year for whatever reason, plan on coming next year."

What did I want to spend my money on? The customer version of the 4th Dimension database, a.k.a. the other Mac database program. The visual construction of the database tables and linking the data elements from one table to another made me want to buy it on the spot. However caution prevailed. Until I can duplicate the same feats at home as did the demonstrator, I'll stick to their full feature sample version on the CD. It is limited to "only" 50 records, but it lets me evaluate the product under all circumstances.

I cannot end my article without applauding the hard work and thorough coordination by Mary Keene and the other Pi members who made this year's bus trip go so smoothly. If you did not come on the trip this year for whatever reason, plan on coming next year. The dates are 17-20 July 2001, again in New York City. I hope to see you there!

So many macs!

I am a new member. Apple Pi teachers recommended this trip to me. They promised it would be educational and fun but I had my doubts. Group travel by bus has always been anathema to me so why I signed up I don't know. When it finally sunk in that I was to meet the bus at 5 a.m. I thought, "This is really going to be awful!" I had plenty of misgivings as the day approached and could easily have rationalized forfeiting my money because I was going to be leaving my work with serious deadlines looming. Well, I went and I'm glad and it was educational and I did have fun and not only that, I fell in love!

I fell in love at first sight with the new Mac iCube and its LCD Cinema Display. Of course I can't afford it and as a typographer and lettering designer I probably need a G-4 Tower but I can't stop obsessing over the iCube. Some one at Mac is really designing now! This is a machine that would not overwhelm the small space I work in. This is a machine that would make my work environment more inviting and pleasing. This is the first truly beautiful computer.

What was not promised with the trip was that I would learn as much from my seat mate on the bus and my table mates at dinner as I did at MacWorld which was information overload for me.) You Pi members know who you are I thank you.

I also deeply appreciate the thoughtful way this trip was planned. Even as one of 100 persons traveling, I felt my individuality was respected. Our privacy was protected regarding our exposure to advertisers, our wishes about whether or not to have a movie on the bus (we didn't), what we wanted for breakfast and last but not least, the choice of a place to have dinner on the way home was nothing short of terrific. The food and the service at Mastori's (sp?)was absolutely terrific. I don't know who found the place but I plan to go back first chance I get.

I might even go to MacWorld again. But can I afford to fall in love again?

Ann W. Hawkins

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MacWorld is made for user groups
By Dave Ottalini

These MacWorld events can get addicting. This was my third one in New York—and it was the best one yet.

I was lucky enough to spend the entire week this go-round - attending Mac-related events at both the New Yorker Hotel and the Jacob Javits Convention Center. Along with Lorin Evans and Pat Fauquet, I attended a number of User Group events - including a day-long series of seminars called the "User Group University" aimed at helping us do a better job helping our members and our communities. Apple was a driving force behind this - thanks to UG liaison Diane Cohn and those on her UG Advisory Board (our President, Lorin Evans is a member.) There were many corporate sponsors too - 13 in all by my count - with Adobe at the top of the list.

Macintosh users - and especially members of User Groups -are a unique lot who transfer their passion for a computer into lots of good works. We saw and heard about many projects around the country aimed at giving back to the communities in which we live. Recycling is just one area. I was impressed to hear about what various groups were doing in this regard. Lorin spoke thoughtfully about WAP1s own efforts later that week during a MacWorld session on User Groups.

Other sessions covered fundraising, regional partnerships, working with retailers, creating "killer" meetings and more. There were too many to attend—Lorin took part in three of the panels, I was part of one of them as well. Some of the main sessions were videotaped so maybe we1ll get to share them with you later on.

I can't tell you that everything is peachy and keen for these organizations. Previous articles from our president spoke to the problems many have had. We discussed them at these UG meetings. Because WAP is the only large group left at this point, we have to take the lessons learned by others to heart, to make sure that what happened to them does not happen to us.

And because we are such a large group, we are looked on to provide leadership and guidance at times. You would have been proud of our club at these events.

Beyond that, there were other User Group "challenges" during the week. For example, competing attempts at creating or involving Mac UGs in a larger "umbrella" computer user

"Vendors know of your club—and are anxious to come and tell you about their wonderful products. Apple specifically asked us to let them show you all their insanely great stuff that Saturday, the 22nd. We had to do some creative maneuvering and last-minute publicity—but it happened."

Mac, glorious Macs, a whole wall full of Macs. And this is only one of the Mac walls in the Apple section. Look closely and you can even see one of the great new mice sitting on a round pad next to the new keyboard. The iMac in the foreground is one of the new Sage DV+'s, next to it is a Ruby DV and next to that is the entry level Indigo and then it starts with Sage again. You can see another Apple Tech person answering questions. One Thing Apple does well at MacWorld is to be sure there are enough qualified personnel to answer all the questions the Macophiles ask. The new iMac colors are a completely different color palette unlike any of the previous ones. It is like the first fruit palette in that it has clear, jewel tone colors that are halfway between transparent and translucent. The colors are deep and rich and well chosen to be more "neutral" than the current fruit palette is. The Snow SE is more of a semi-opaque white than a transparent or translucent white. It is also a clear, neutral white neither warm nor cool, With light on it, it looks very much like the pristine, virginal whiteness of soft, fluffy, newly fallen snow with all the little sparkles that one would see on a snow bank on a bright and sunny day.

group caused some friction. The direction that will take us still has to be determined.

But overall, this aspect of the MacWorld experience was wonderful. Many interesting people, young, old, male and female all make up the user group communities around the US (and the world!) and it was a joy to meet and talk with them.

One other note - prior to one of the User Group Breakfasts, we handed out a number of our Journals. People were excited to get them, had many wonderful compliments and I saw more than one person plop down and start reading while waiting to go in for the presentation. Our Journal is our best calling card. I saw other excellent UG publications—but no one has the kind of magazine we have. You can be proud of that - and I hope it will inspire you to contribute now and again since this is a volunteer-driven magazine.

As I mentioned earlier, this was my third MacWorld and I suspect I11l be back again to recharge my Macintosh batteries. I returned with tons of stuff —I usually gather for my son1s elementary and middle schools —as well as for myself and Washington Apple Pi.

Vendors know of your club—and are anxious to come and tell you about their wonderful products. Apple specifically asked us to let them show you all their insanely great stuff that Saturday, the 22nd. We had to do some creative maneuvering and last-minute publicity—but it happened. As I said before, MacWorld Rocks—and so does Washington Apple Pi! ■

Our thanks to Terry Long for the great photos he took, shown on pages 21-28.

This is a picture of our youngest passenger, Trever Long. He and his dad who live in Winchester, W.VA, drove to the Apple Market Center in Reston for the live satellite feed of Steve Jobs' keynote address. Since we still had a few empty seats on the bus, I casually suggested Melanie might like to make an announcement about the seats being available so they could go play with the new toys. Terry, Trever's dad, asked me for the details on the bus and said he would think about it. About 8 or 9 pm Wed. night I got an email from Beth telling me they were making that long drive back from W.Va to go with us. Our passenger list ran the gamut of ages, Trever was the youngest and Stuart Bonwit is the one publicly admitting to being the oldest. We had newbies, new members, non members, old members, alumni from 1999, professionals in all fields, amateurs in many fields, and a few odds and ends. We were as diverse and homogeneous a group as we could be. It made for a lot of sharing, making new friends and getting ideas on how to "Think Different". Have you reserved your ticket for MacWorld 2001 yet?'

Lorin's MacWorld: At the Intersection of Computers and Humanism

IF YOU HAVE ever attended a MacWorld, you know that it operates at several levels. There is the glitz and noise that is the floor show; seminars in the side rooms; private booths on and off the floor where industry woos the committed with new toys and the inclined with presentations keyed to their needs; and this year, there was a semi-private meeting the afternoon of opening day where Apple's senior executives talked to trade journalists and financial analysts about the corporate health of the company and the direction in which they are taking it.

It can't be that the visibles are all that power the success of Apple. That may be enough for some. For them, opening their wallets after seeing new multi-colored iMacs or powerful G-series machines is enough. But someone must envision that stuff before it exists. After that, you need people who see that vision through to fruition, in a manner that brings to market a product that is feature-laden, priced competitively, and at a cost to Apple that is not break-even. Who are those people, and where might you find them all in one room willing to talk? Try MacWorld Wednesday afternoon. Now ask me what I found more interesting that day. If you want to know why this many Apple executives came together as they did, read the President's column at the front of this issue. As you read this piece, notice how sweating the details of Apple's operations makes all the difference in the bottom line, be it manufacturing, marketing, or running the on-line store.

In Attendance

The meeting was opened by Fred Anderson (Chief Financial Officer). He was followed by Tim Cook (VP of operations) and Mitch Mandich (s/VP of world-wide sales). Afterwards, Steve Jobs, Avie Tevanian (s/VP, software engineering), Jon Rubinstein (s/VP, hardware engineering), and Phil Schiller (VP of product marketing) joined in a question and answer session. Woven into the presentations were the financial health of Apple, the components thereof, from whence commeth new sales, and an idea as to how Apple is differentiating itself from the rest of the personal computer industry.

Dollars and Cents

Apple's quarterly revenues of $1.825 billion were about $100 million below original analyst estimates, largely due to declining sales of (now) discontinued iMac models. The decline was compounded because Apple got lower prices on the last of the iMac and G4 units due to something called price protection. Price protection is where dealers are guaranteed they can return systems purchased within 30 days if newer ones are released. The good news is that PowerBook sales were up so much that PowerBooks helped offset iMac declines. Further, PowerBook sales have not been seriously eroded by iBook sales. If you look at the product matrix that Steve Jobs likes to use, you understand why continued strong sales of those two products is essential until the next round of product releases.

Non-CPU revenues contributed 20% of the profit in Apple's most recent quarter. This includes such things as peripherals, in-house applications, and aftermarket services. FileMaker is growing at 30% per year, and is expected to exceed $100 million in fiscal year 2000. Sales of AppleCare extended warranty services, a highly-profitable item for the company are up. The EarthLink contract will bring in around $45 million. Final Cut Pro is selling about $30 million per year and even good old AppleWorks, chipped in $20 million per year. Add it up and you are looking at about 15% of total revenue and more than 20% of Apple's gross profit.

New Dollars and Cents

Apple believes that the previous entry-level iMac, priced at $999, was within the price range of slightly less than half of consumer computer purchasers. The new one, at $799, addresses about 70% of the potential consumer market which should result in significant growth in sales. That leaves only about 30% of purchasers who say they will not go as high as $799 for a computer. The expectation is that the new Power Macintosh G4 Cube will appeal to both the high-end of the consumer market and the low-end of the professional market. I bet it will even appeal to style conscious PC users as well. Apple says it learned, from the iMac DV Special Edition, that there is a significant market for a mid-range system which they believe the Cube addresses. For high end users, Apple sees the dual-processor Power Macintosh G4 systems providing the enhanced performance for design and publishing customers that they require.

New software will help. Mac OS X, which should come on stream in 2001. The iMovie upgrade at $49 per is another. It turns out that there have been more than 1.3 million copies distributed of the original, either bundled with iMac DV and DV Spe-

cial Edition computers, or downloaded from the Apple website.

The Apple Store

When the store first went on-line, it provided less than 1% of Apple's revenues. In the quarter that just ended, it was 25%. The on-line store provides extremely high-margin sales for Apple. Keep in mind that when you buy from the store, Apple has no third parties to pay; the entire sales price stays with the company. The store is popular with high-end customers who want customized systems, said Tim Cook. More of these customers are turning to Apple to provide them instead of spending that money with value-added retailers or third-party upgraders. Remember that for such an order, Apple gets 100% of the retail price of the system, plus the retail price of the add-ons. The store sells third party products: over 150 available now and more than 200 different items by the end of the September quarter. That alone provides Apple Computer with some $20 million per quarter. That is more than Final Cut Pro, WebObjects, and AppleWorks combined. Given those numbers, you can see why Apple wants to see its store percentage of Apple's overall sales grow above the 25% level.

Operations

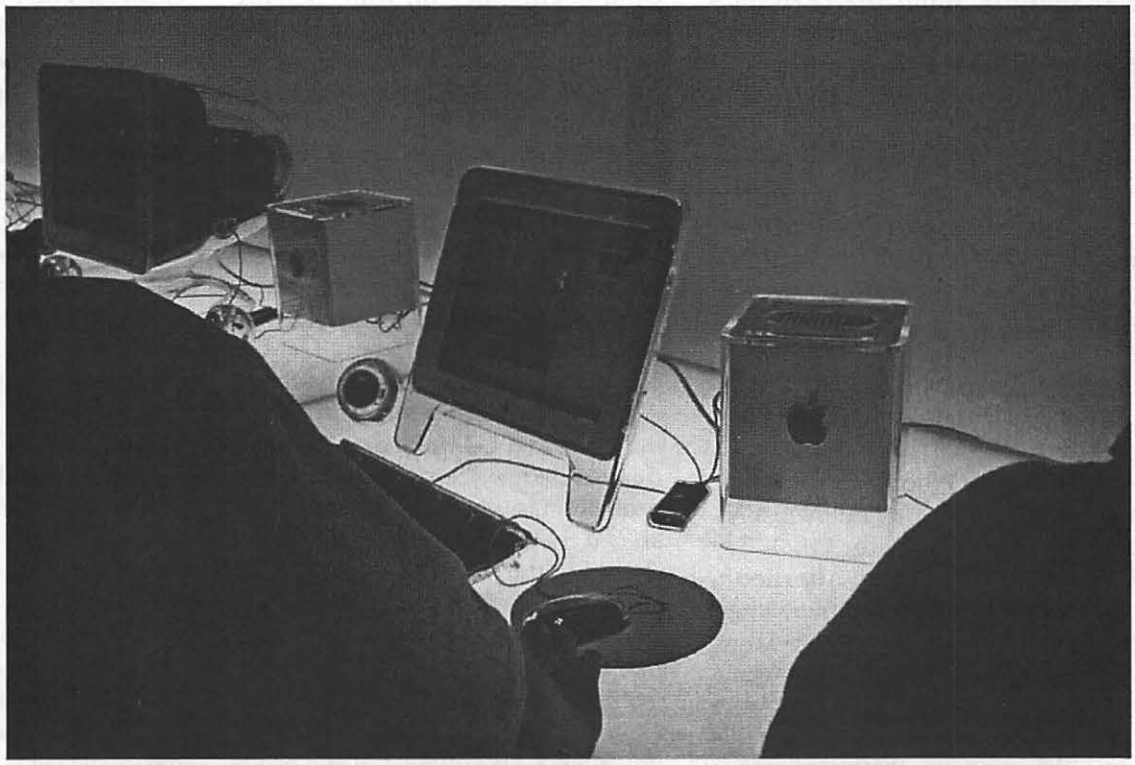
Tim Cook and his operations group is responsible, among other things, to turn the equipment others dream up into working units to sell. He is responsible to buy the components that go into a Mac, see that it is assembled, supply retail outlets or the Apple Store in as timely a manner as possible, as well as managing the inventory and its support. Those responsibilities were not ones that Apple handled well when Tim Cook arrived. Remember those national auctions of unsold Macs? Heard of one recently? Here is how his group has changed all that and its impact on the bottom line.

Operating Excellence

Tim Cook runs a largely underappreciated part of the Apple success story. Upon being hired away from Compaq, he began to turn the company's operations from an also-ran in the industry to its leader. Mr. Cook said that he had three goals for Apple's operations: reduce the inventory of finished goods; decrease the time it takes to get an order at the Apple Store out the door; and, reduce the time it takes for an order into the pipeline.

Inventory Management

Apple, like Dell, Gateway, etc. measure their inventory in days. There are two kinds of inventory: goods on hand, and in the pipeline. The on hand inventory is the measure of how many normal sales days it would take to dispose of the stock on hand, while pipeline inventory measurers the number of machines you have shipped to distributors and dealers which have not been sold. When Tom Cook arrived in 1998, Apple had a finished goods inventory of four weeks on hand and an additional seven to eight weeks of pipeline inventory. That is one long tail for a company to drag. Put another way,



Here up close and personal is the surprise of the show, the iCube with its mate the Cinema Display. To the left of the monitor, you can see one of the stereo speakers sitting there watching us as we play with the iCube. The quality of image on the Cinema display has to be seen to be appreciated. Just be careful you don't drool on it and short it out!

Apple could go on holiday for three months before it ran out of computers to sell. Or, if the mix has to change due to changes in demand, or some component has to be replaced, look at how long it would take to get a revised unit into the hands of consumers. Today, Apple measures its inventory in hours, not days. For the just-ended quarter, the company had in inventory slightly under ten hours.

Compare that with some PC companies: Compaq, Mr. Cook's former employer, had, at the end of its last quarter, an inventory of 30 days; Gateway had 12 days; and, Dell had 7. Cook said that if Apple had been operating with Compaq's inventory, then Apple's current inventory, worth $5 million, would be eighty times higher. Remember that the finished goods inventory is as much a cost of doing business as is the parts inventory or payroll. What Tim Cook has done in this regard shows up directly on Apple's bottom line.

Turn-Around Time

Two years ago, Apple shipped only 5% of orders for a stock configuration on the same day or the next day. Now, it ships 75% of those orders in the same time period, with a goal of shipping all of them on the same day. Two years ago, only 10% of custom configurations shipped within three days. Last year, it was up to 40%; today, almost 75% ship within three business days. That is not bad when compared with the rest of the PC industry. The stated goal is a two day turnaround for custom orders.

In Search of Parts

Someone has to find them and now there is more competition for them as well. Consumer electronics is calling on many of the same manufacturers for components as is the computer industry. The chips and parts used in your Macintosh are now increasingly used in cell phones, digital camcorders, DVD players, and other such devices. Cook said that

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"Tim Cook runs a largely underappreciated part of the Apple success story. Upon being hired away from Compaq, he began to turn the company's operations from an also-ran in the industry to its leader. Mr. Cook said that the had three goals for Apple's operations..."

DVD and CD drives are the most worrisome largely because the chips used to make them are selling as fast as the electronics companies can make them. Cook said, "Virtually every manufacturer [of these chips] is sold out, and some of them are over committed." There may be higher DRAM prices, but Cook says that's because Apple sees computers moving towards more megabytes per CPU. The semiconductor industry is spending an "enormous amount" of money to increase capacity, but Cook still believes that consumer devices will drive shortages more than computer makers will.

Sales Strategies

Where you place your product for sale and how those retail establishments treat what you have to sell is not an insignificant component of the Apple turn-around. The person responsible for that is Mitch Mandich.

Channel Management

Mandich reminded his audience that when he came on board, Apple's products were, as he put it, "clearly over distributed." Most of us have some horror story from that era that we experienced: floor units that did not work, indifferent salespeople who would steer you away from the Mac display, and other slights. Mandich blamed this on retailers who had "no sense of value around the product" and "no material or financial stake in Apple's success." So, Mandich significantly reduced the number of retail outlets. Apple pulled the plug on Computer City, Best Buy, Circuit City, OfficeMax, and Sears, leaving only CompUSA with its "store-within-a-store" as Apple's national reseller. Apple now has a three outlet strategy in place: full product national resellers; national consumer product resellers; and regional and individual retail outlets.

CompUSA remains the sole national reseller for Apple's full product line. Apple has added Sears, and now Circuit City for consumer products, like the iMac and iBook. Circuit City is offered as an example of the kind of national partner Apple wants. Circuit City has promised to train salespeople on the iMac, iBook, and AirPort. The chain will also advertise Apple's products in its flyers each week, and will promote the convergence of computers and video only for Apple's products. The third outlet is regional chains like Fry's Electronics on the West coast, The Wiz in the New York City area, and MicroCenter in the East and Midwest. Filling in the gaps are small "specialist" stores.

Mandich points out that over the past three years, Apple's sales have almost doubled through a channel that's 40% to 50% smaller than it was in 1997. Apple will continue to expand its distribution, but only selectively. Mandich is determined not to get Apple over distributed in either Internet or brick and mortar retailing, having seen first-hand what happens when Apple's products are in stores that aren't committed to them.

Pulling It All Together

During the questions and answer session, several themes arose:

Question: ". . . many companies see the PC industry as mature and

PCs as a dying business, . . . you're betting the company on PCs."

Steve Jobs replied, "We hope all of our competitors think what you said," to general laughter. He added: "Without going into much detail here, because we don't want to — the one thing I would point you to is iMovie. iMovie is huge. We believe that desktop movies are bigger than desktop publishing. We know a lot more people who want to make a movie of their family than want to put out a newsletter from home. Apple knows a lot about creating new markets, it helped created desktop publishing, and we are really far ahead of everyone. iMovie has been a huge hit ...There are more of those. We are working on them.

You will see the PC evolve. We believe it will stay the digital epicenter not only in the pro market but in the consumer market as well. What a PC looks like in the future may be substantially enhanced from even what it looks like today. We are not standing still and we believe our ability to do hardware engineering, system software engineering, application software engineering, marketing and operations all tightly integrated under one roof gives us a tremendous opportunity to innovate faster than anyone else in the industry."

Question: Should Apple be in the handheld market and is there a market for $799 iMacs at a time when some of Apple competitors are abandoning that low end market?

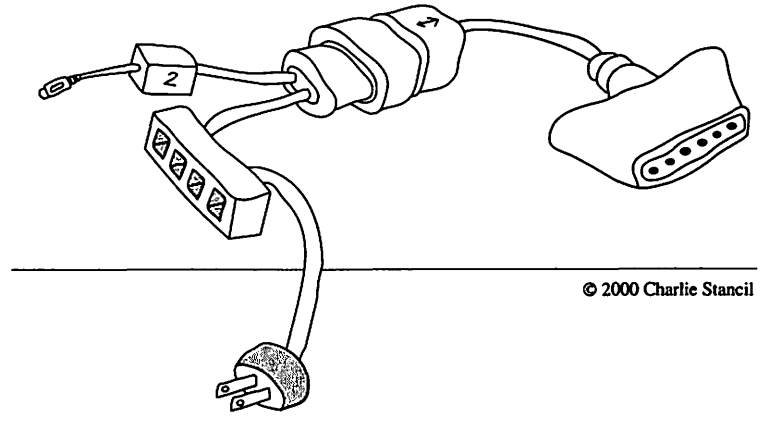
Steve Jobs: "You saw the reaction this morning [to the announcement of an $800 iMac at the keynote address]. We think it's going to be very strong. We'd like to have a Mac for $199. We want to draw the prices down over time as low as we possibly can. . . . [W]e think there is a very healthy market there. We think there's a very healthy market at $999, at $1299 and at $1499 too. But at the tip of the arrow, gaining new customers, we are very excited by $799 and some day we hope to drive the price even lower. I'm perplexed that others wouldn't want to do the same thing."

Phil Shiller added: "Our purpose in this [the new $800 iMac] was different than everyone else's. We did not rush out and make something cheap, which I think a lot of people did. We built what we think is a great home computer, a great school computer and over time brought it down (in price) and kept making it better as we brought it down. What we are bringing down at $799 now is a far better computer than what we originally introduced at $1299 just two years ago. . . .don't forget, we are the biggest company in education... All of us in America with kids in school know how tight budgets are. How they have to buy very affordable products. It's critically important that we continue to move that price down on this great education computer, and I think we are doing that with the iMac."

In Closing

Steve closed the meeting by saying: "We want to stand at the intersection of computers and humanism. Apple was the first computer that brought typography to computers, brought a graphical user interface to computers, let people who were liberal arts majors use computers and that's part of what is in Apple's DNA. iMovie is a prime example of that. We spent an awful lot of energy allowing mere mortals to make movies.

"How many people here have made an iMovie? If you want to understand Apple—you guys make a lot of money—go buy an iMac for a thousand bucks, and go buy a digital camcorder for a thousand bucks, and make an iMovie. If you really want to understand this company go spend the two thousand bucks and take some videos of your spouse and your kids, or the guy next door, or whatever, and make an iMovie, and then you will understand. It is the most emotional thing you will have ever done with a computer. You will start to get that we are very intellectual, but we are also very appealing to the creative side of things. That humanist



don't know either.... but I got it cheap at the Pi garage sale

side of things that nobody else in our industry gives a damn about and we do and we love it. We love it so. So that is what's driving us, it's not just making spreadsheets run faster but doing things like iMovie. You gotta go do it if you really care about understanding this company. It's much more important than crunching your numbers. Trust me on this . . . I don't have the words to tell you!" (1)

Credits

I will give you three names without whose assistance or prodding that meeting on Wednesday would not have been available to you and me. Eric Yang nominates Joan Hoover and Nancy Paxton over at Apple Investor Relations for being advocates of shareholder interests. He asks that you drop them a thank you e-mail at <investor_relations@apple.com> to show your support and appreciation for making the webcast possible. The other person is Arthur Levitt, the chairman of the Securities and Exchange Commission, who helped push Regulation FD through his agency <chairmanoffice@sec.gov>. Your tax dollars at work for you.

Footnotes (1) Our thanks to Wes George at The Mac Observer who transcribed several sections of the meeting as it streamed by, including the the question and answer quotes used here. You can find more at: <http://www.MacObserver.com/columns/appletrader/00/000724.shtml>. Additional thanks to MWJ, the Weekly Journal for Serious Macintosh Users , for providing context to otherwise baffling comments made by the principals. For information about their newsletter and a free sample, point your browser to <http://www.macjournals.com>. If you want to stream the whole two plus hour session into your home. point your browser to: <http://www.apple.com/quicktime/qtv/analyst_meeting/>.

Power Mac G4 Cube: What's In A Name?

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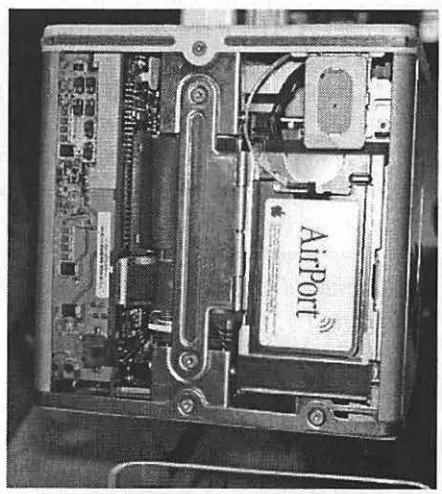
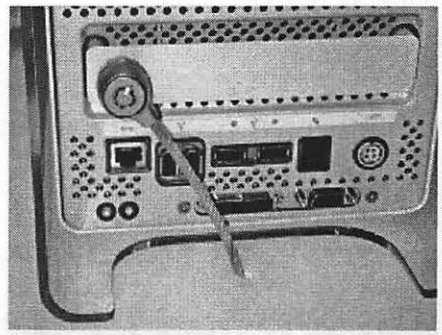
NAMES ARE important. Our favorite digital fruit company was once sued by underemployed lawyers who claimed the word "Apple" in Apple Computer Corporation would confuse potential buyers of Beatles records, owned by Apple Music. Why, just think of where the Beatles would be now if it weren't for Apple Computer!

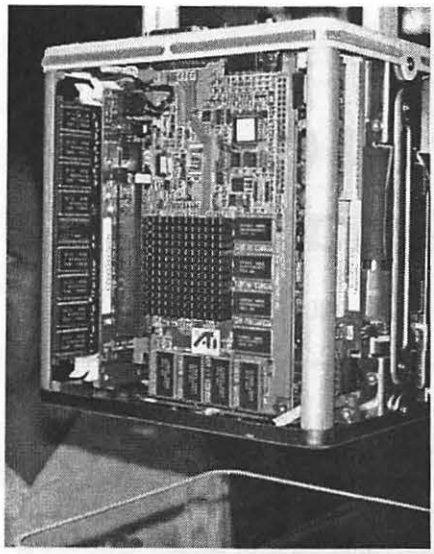
If names are important, new names are possibly even more important. For years, computer hardware and software companies have struggled to come up with new and different ways of saying something was new and different. The first commercially successful spreadsheet, VisiCalc, was noted as much for the unusual capitalization of the name as anything else, creating an enduring market for odd capitalization: WordStar, WordPerfect, WebSTAR,



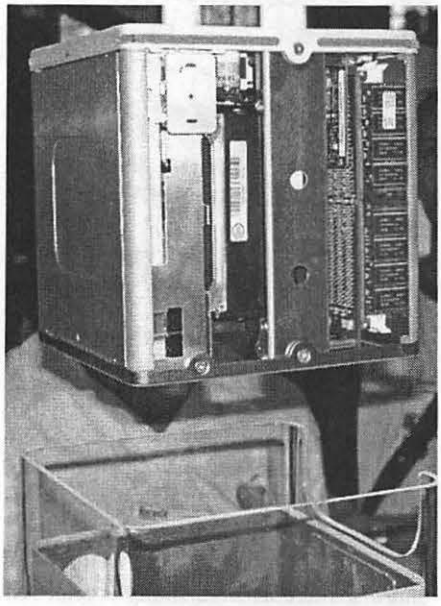
Dimly seen worshipers gather at the Power Mac G4 Cube altar, where they exchange whispered comments or simply stand in silent awe. (Actually, because of the sound of the MacWorld crowd, the worshipers would have liked to whisper, but had to shout questions to the Apple's G4 Cube priest, such as "Can I stack things on top of it?" (no), "How do I get files from my Mac Plus on to the Cube?" (be serious) and "Is Apple giving any of these away today?" (no). (Photo by Lawrence I. Charters)



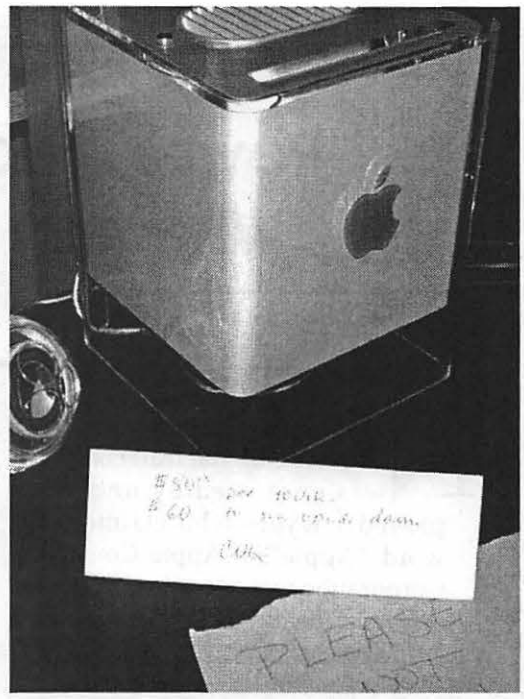
Harman Kardon, Apple and several other vendors found that the easiest way to draw a crowd at MacWorld was to set up a Power Mac G4 Cube with an Apple Cinema flat-panel display and the Harman Kardon SoundSticks, a combination of USB speaker towers and iSub woofer. In addition, this particular display also includes the striking crystal ball speakers included with the Cube, as well as the new 108 key keyboard and Apple Pro Mouse. The hand reaching into the picture is lifting a SoundStick; each speaker tower has a heavy metal base to keep it from vibrating. (Photo by Lawrence I. Charters)



While the G4 Cube might be a people magnet, that is both good and bad. One vendor put up this hand-written sign that reads, "$50 per touch. $60 to see upside down." This is funny for another reason: with all the high-quality printing and page layout software on display, a hand-written sign is a charming incongruity. (Photo by Lawrence I. Charters)



The top of the Power Mac G4 Cube is very plain: a slot for loading CD-ROMs (at the top in this picture), a central grill for radiation heat, and another air vent at the edge. Almost invisible between the two vents is the power switch. (Photo by Lawrence I. Charters)



Hidden on the bottom of the Cube are all the connectors. The security cable is connected to the handle used to pull the Cube from its case. Below that, from left to right is a 10/100 Mbps Ethernet port, two FireWire ports, two USB ports, the telephone jack for the modem, and the jack for the power supply (an external device that looks like a half-foot long muffler). On the bottom row are two tiny Programmer/Reset buttons (new challenges in accessibility!), the all-in-one video, sound and power jack for Apple's new displays, and a standard VGA port. (Photo by Lawrence I. Charters)

eBay, iBook, NeXT, etc.

Version numbers are also big: Excel, Excel 2.0, Word 4.0, AppleWorks 5.0. Version numbers can also be classical: FileMaker II, dBASE III (note: version numbers *and* mixed capitalization), Apple II, Apple ///. Clipper, a long-defunct company, started naming versions after seasons, such as Clipper Summer 1987. Microsoft liked the idea, and introduced Windows 95, Windows 98 and Windows 2000. (Windows 2001 will forcefully take over your home and send your car into orbit around Jupiter.)

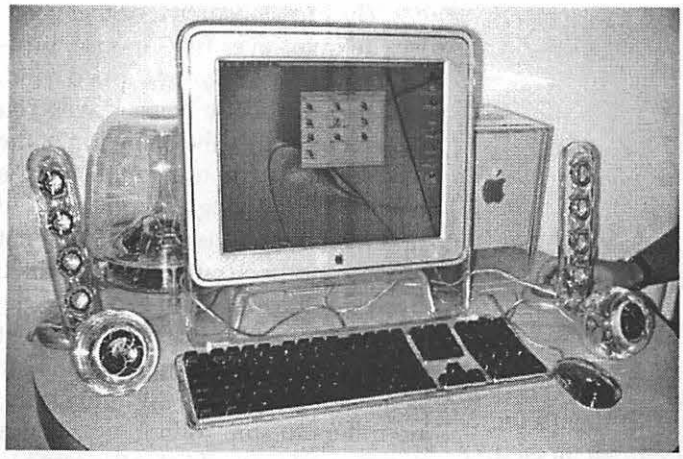
Sometimes, it helps to explicitly separate the riff-raff from the elite,

> "If names are important, new names are possibly even more important. For years, computer hardware and software companies have struggled to come up with new and different ways of saying something was new and different. "

such as with MacWrite Pro or Microsoft Office Professional. Clearly, only amateurs use anything other than Pro software. (And apparently only stupid pros read "Microsoft Office for Dummies.")

Every now and then, a company makes an extraordinary effort, and manages to incorporate virtually every known means for demonstrating "newness." The current champion may well be FileMaker Pro 5.0v3: it has a mixed-case name, it is a "Pro" package, and it has two different kinds of version numbers. About the only thing it lacks are Roman numerals.

Which brings us to Apple's Cube. For years, Apple insisted its line of computers, introduced in 1984, were "Macintosh" computers, not Macs. But the current lineup consists of the iBook, the iMac, the PowerBook G3, the Power Mac G4, and the Power Mac G4 Cube — not a "Macintosh" in the lot. So the most famous misspelling of a type of apple in history



With the outer shell off, the Cube is almost as interesting as it is with the skin on. This side shows the hard drive, mounted on its side, and memory chips. One side of the Cube, shown on the left, is a featureless metal plate. Note the plastic outer shell at the bottom of the photo. (Photo by Lawrence I. Charters)

Another side of the Cube reveals what it looks like inside with the optional AirPort card installed. (Photo by Lawrence I. Charters)

is now history, truncated to the long-standing nickname of "Mac" (or banished entirely, in the case of iBook and PowerBook).

Apple has tried Roman numerals before, and car-style funny suffixes (IIx, IIci, IIsi, IIvi), and curiously misleading numbers (Power Macintosh 8500, LaserWriter Pro 8500), but never a geometric shape. It is also unusual in that the parent line, while it may be called "Mac" now, comes from McIntosh, the aforementioned misspelled apple, and apples are not normally cube shaped.

Is having a computer called Cube good or bad? It may not make a difference. Consider the Chevy truck.

Trucks are designed to move, yet General Motors has a sales slogan that equates Chevrolet trucks with inanimate objects: "Chevy Trucks: Like a Rock." Is it fast? Is it comfortable? Is it sleek? Does it move? No, it is "like a rock," and apparently dirty, immobile, and painful if you fall on one.

But it works: General Motors sells lots of Chevy trucks. Could it work for other products?

Zale's diamonds: like a rock (hmmm)

Domino's pizza: like a rock (no)

Sealy mattresses: like a rock (no)

Boston Whaler: like a rock (no)

Nation's Bank: like a rock (maybe)

The Rolling Stones: like a rock (hmmm)

Jimmy Dean sausage: like a rock (no comment)

Caress body soap: like a rock (no)

The Whopper: like a rock (no)

Boeing 747: like a rock (no)

Nike shoes: like a rock (no)

Viagra: like a...

Power Mac G4 Cube: like a rock. Like a rocket, maybe? A white, toaster-sized rocket?

Power Mac G4 Cube: power cubed. (Not bad)

Power Mac G4 Cube: square, man, square (very 60s)

Power Mac G4 Cube: another roll of the dice. It is a gamble for Apple, but a worthy one. Come to think of it, they could create a special edition of the Cube, with patterns of black spots on the sides, and sell them in pairs as dice.

Power Mac G4 Cube: a 21st century toaster. ■

The shell-less Cube reveals how you get a G4 motherboard into a box this small: very carefully. Here you see the radiator from the G4 CPU, with memory chips along the left edge of the photo. Note the plastic outer shell at the bottom of the photo. (Photo by Lawrence I. Charters)

Apple Pro Mouse: A Quick Look

© 2000 Washington Apple Pi Labs

WASHINGTON Apple Pi Labs has a plethora of cool equipment. Well, not really, but it seems every article we've read recently used the word "plethora" so we thought we would use it, too. Rather than try and build suspense, we decided to get it over with, right at the start.

In reality, Washington Apple Pi Labs has plenty of equipment, but not much of it is cool unless it is either winter or the air conditioner is set too low. And we don't have a new, cool Apple Pro Mouse, either.

But we did, for a while.

It's smaller than it looks

When Steve Jobs introduced the Pro Mouse at MacWorld New York, it looked huge. In fact, it looked like it was the size of an armored car, when shown on a giant video screen. Even after mentally compensating for the fact that Steve's head really isn't 40 feet across and his hands aren't the size of giant squid, the Pro Mouse looked big.

It isn't. In fact, it is about the same height as the now-discontinued Apple USB Mouse, slightly narrower, and definitely longer. Length, width and volume are just slightly less than the very popular (but long discontinued) Apple Desktop Bus Mouse II. Unlike the ADB Mouse II, the new Pro Mouse is symmetrical, shaped like a giant cough lozenge. With a tail, of course.

Seeing Steve run the Pro Mouse through a maze of tasks in his keynote address, virtually every person in the audience said to themselves, "Gee, I'd like to try it for myself." Then Steve announced that everyone in the audience could pick one up, for free, on the way out. A fair-sized riot broke out as keynote attendees mobbed the poor Apple representatives assigned to mouse distribution duty.

"I got this Purple Heart giving out mice at MacWorld." "You don't say?"

But how does it work?

When Steve said it was the "best mouse ever," Disney probably objected, since Mickey Mouse has many movies, not to mention a famous song, to his credit. Besides, Steve says everything he introduces is "the best ever." He called the USB Mouse "cool," whereas most people call it a hockey puck, or many other things we won't repeat.

It was almost impossible to operate the hockey puck "eyes free;" you constantly had to look at the mouse to figure out how to hold it, since the round shape gave you few tactile clues. Steve thought it was "cool" that you could watch the multi-colored ball move through the translucent plastic case. Most users didn't appreciate such coolness since their hands almost entirely covered the hockey puck. Adding insult to injury, using the hockey puck was so disorienting that it was all but impossible to score well on games; you couldn't use the hockey puck to play hockey, which is sad. (They don't stand up well to a good slap shot, either.)

The Pro Mouse, on the other hand, is a definite "eyes free" mouse. It fits very naturally into your cupped hand, and the oval shape never leaves you disoriented. Since the entire top of the mouse acts as a mouse button, there is never any fumbling around trying to find the button. It is not too high, not too low, not too bulky, not too small. Even Goldilocks would like it.

But, most important of all, it doesn't have any moving parts. There is no mouse ball to get gummed up, no rollers to stop rolling, no springs to stop springing. (Actually, come to think of it, the top does move to allow you to click, so it has at least one moving part.) The same USB cable that plugs the mouse into the computer carries a small amount of electrical power to the Pro Mouse, which powers the optical circuitry used for tracking movement.

Traditionally, an optical mouse requires a special mouse pad for

Look, Ma, no rollers or ball! The bottom of the mouse does reveal a "Designed by Apple in California" label, and also mentions it was "Assembled in Malaysia." Note the three-position adjustment ring around the optical sensor in the center. (Photo by Lawrence I. Charters)

proper operation. The mouse pad features a grid pattern, which the optical sensors use to track movement. If you lose or damage the mouse pad, the mouse was worthless.

Apple's Pro Mouse doesn't require a mouse pad, of any sort. We used the mouse on a wood dining room table, on an office desktop, on a marble end table in a hotel, on a pair of Levi's canvas Dockers, and on various pieces of paper that covered the tables, desktops, and Dockers. The Pro Mouse was splendidly accommodating: it worked with no mouse pad at all, on any surface we tried.

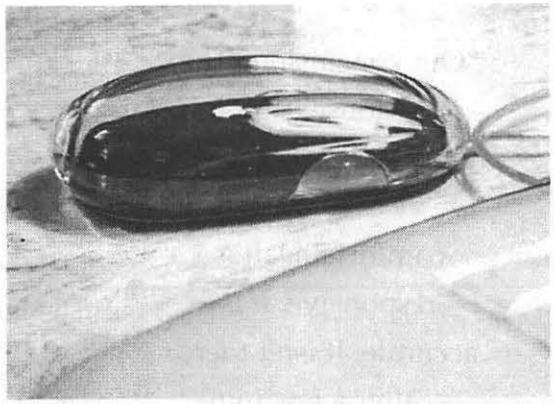
Apple cautions that the Pro Mouse won't work well on a mirror or a clear sheet of glass. We didn't try this, but we did try to see if it would work without actually being in contact with anything. And the answer is: "Yes!" If you have nerves of steel, the patience of a glacier, and nothing better to do, you can actually navigate around, successfully, holding the Pro Mouse a small fraction of an inch off the surface. (Note: clicking the mouse is extremely difficult without making contact with something.) This test had no practical purpose; we just wanted to see if it would work.

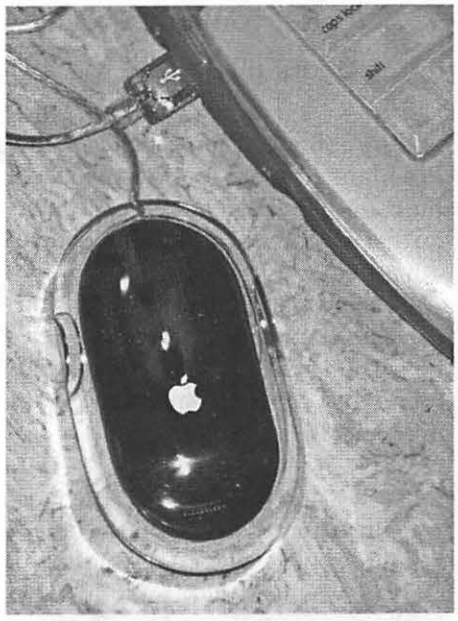
One colleague wanted to dump the Pro Mouse in a bucket of water, and see if it worked under water. We decided not to let him touch the mouse, or our computers, at all. (But if you happen to try this, write and tell us how it works.)

Our conclusion? The Pro Mouse is probably the best mouse we've ever used. It is comfortable. It is responsive. It is accurate. It isn't there — after a few minutes, you forget about it entirely.

Note, however, that the real test of a mouse, or any other pointing device (trackball, graphics tablet, light pen, joystick), comes with time. We've probably all had a love affair with a new rodent, only to discover in time that it turns rabid. Microsoft's IntelliMouse Explorer, for example, is also an optical mouse, it works with USB-equipped Macs, and it gets rave reviews — except for its unfortunate tendency to die an early death.

Will the Pro Mouse still seem just as fine after a couple months of use? We'd like to know, but (a) we have to finish this article and (b) we lost the Pro Mouse in a custody battle.





Seen from above or from the side, the Apple Pro Mouse is sleek and stylish. The low-profile design fits nicely in almost any hand. What appear to be buttons on the side are actually small indentations for helping you orient the mouse by touch, without looking at it. (Photos by Lawrence I. Charters)

Watch out for the farmer's wife

When the iMac was introduced, Steve Jobs had it on a platform that was lighted from underneath, and people thought the USB Mouse "glowed." It didn't. But the new Pro Mouse does glow a cheery red when the computer is on.

The red light changes intensity, depending on circumstances. There is also a rotating ring on the bottom to adjust the sensitivity of the light. We played around with it for a while, without much effect.

Then a fellow Pi member pointed out an Apple white paper on the mouse, "Apple Pro Mouse," Apple Computer Corporation, July 2000. We grabbed a copy, and discovered three interesting passages:

- This shell can withstand 700 pounds of force. Put in perspective, an elephant stepping on the shell would just mush it into the ground (but might break the pieces underneath).
- And yes, this mouse glows in the dark.
- This material is provided for information purposes only; Apple assumes no liability related to its use. Apple does not recommend allowing an elephant to operate a Mac in any environment.

Washington Apple Pi Labs briefly considered taking the Pro Mouse to either the Washington National or Baltimore Zoo and trying it out on an elephant. But we didn't. We also failed to find any additional information on the adjustment ring.

Our most serious failure: we couldn't find any reason for the short mouse cord. When the iMac was introduced, the USB Mouse had a short cord, but the computer also came with a USB extension cable. When the blue-and-white Power Mac G3 came out, the hockey puck mouse returned, and along with it a USB extension cable. But none of the current Macs ship

"Our conclusion? The Pro Mouse is probably the best mouse we've ever used. It is comfortable. It is responsive. It is accurate. It isn't there — after a few minutes, you forget about it entirely."

with a USB extension cable, and the Pro Mouse cable is too short to reach the computer if you put the computer on the floor, or on a shelf, or anywhere other than inches away.

Yes, Apple probably expects you to plug the mouse into their USB keyboard. But we didn't want to, and found the Pro Mouse tail cut too short for comfort.

Fine Print

Note that the Pro Mouse tested for this article was a "promotional copy" given away at MacWorld New York, not a retail version. There is some chance the retail version may differ in some way; maybe it will have a longer chord...

We tested the Pro Mouse on an iBook running Mac OS 8.6, without difficulties. We tested it on a blue and white G3 running Mac OS 8.6 and Mac OS 9.0.4, without difficulties. Finally, we tested it on a gray Power Mac G4 (the old-fashion one processor version) running Mac OS 9.0.4, without difficulties. In all cases, no software was installed: we just plugged the Pro Mouse in, and it worked.

We like the Pro Mouse. We like it a lot. We'd like to get it back. But as that's not going to happen, we've got one on order. The Apple store sells them for $59. ■

55 Minutes

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<Derrick@garbell.com>

[Editor's note: this was not written as an article, but as an E-mail addressed to the *Journal's* Review Editor. The Review Editor asked to reprint it as a *Journal* article.]

ALLOW ME TO preach to the Mac choir and also to some bystanders in the adjacent booth hearing me slurp my soup.

On Friday I performed a Mac server upgrade that went predictably, but is still remarkable when contrasted to the higher hurdles and significantly greater energy and time that a comparable Win server upgrade would have entailed.

Old server: Mac PowerPC 8150 601/110 128 MB RAM
New server: Mac G4/400 192 MB RAM

Here are the ten steps taken to set up the G4, to transfer needed data from the 8150, and to let the G4 be live and available on the network:

1) Removed G4's stock Apple 10 GB drive
2) Installed Western Digital 45 GB EIDE drive as master, and booted from OS 8.6 CD
3) Using Apple's Drive Setup, initialized and partitioned the 45 GB, then installed OS 8.6
4) Shut down, installed a second 45 GB WD drive as slave
5) Restarted from 45 GB's OS 8.6, initialized second 45 GB and partitioned it identically to #1 45 GB; then copied entirety of first 45 GB to second 45 GB as a preliminary backup.
6) Network capability was now active; accessing our support server, I installed Stuffit Deluxe 5.5, Speed Doubler 8.1.2, added Silverlining Pro 6.1 as a utility (not a CP), and installed Toast 3.5.7; (Without a separate support server, these four utility installations still would have been a breeze using their respective CD's.)
7) Installed the file sharing server software, "AppleShare IP" V.6.2 using the ASIP CD, & updated it to V.6.3.1
8) Network copied 1 GB of campus graphics file data from 8150 to G4 & also grabbed the 8150's Users & Groups data files, placing them in the G4's Preferences; created a share point in the G4 for the 1 GB of campus data, using the same folder name as before. Because we had copied the 8150's little Users & Groups files and had chosen an identical folder name to share, all Users & Groups as configured previously were available exactly as we had evolved them during the prior 4 years.
9) Backed up everything again to the second 45 GB drive; this took under 30 seconds, because Speed Doubler's smart-copy was activated
10) Shutdown the 8150 and sent an e-mail to all campus and dept. users who utilize this Mac server, announcing the new machine name, but reassuring them that their prior logins & passwords were still in place.

Elapsed time total: 55 minutes
The 45 GB WD drives were $189 each via Ingram Micro. ■

How to Change the Default Browser on Your Computer

by Pat Fauquet

SEVERAL YEARS ago, back in the days before the iMac, Apple Computer was in a bit of financial trouble. Microsoft Word 6 was old and buggy. Macintosh owners who were using Word needed an update of the program. Microsoft was having trouble winning the browser war and needed to have a way to compel Macintosh users to try Microsoft Internet Explorer; A deal was struck between Bill Gates and Steve Jobs. For the next five years all Macintosh computers and all new versions of the Macintosh OS would be shipped with Internet Explorer as the default browser. Microsoft would release a new version of Microsoft Office for the Macintosh.

The next version of the Mac OS included a new control panel, "Internet" that made it easier for Macintosh owners to choose which Internet application would be used for various tasks such as reading e-mail, browsing the web, and reading news groups. Have you discovered the power of this feature of your operating system?

Go to the "Apple Menu." Pull down to the "Control Panels," then pull out to "Internet." Figure 1 shows this process.

You will now see the Internet Control Panel. It is shown in Figure 2. Notice that it has four tabs. Each tab controls different activities that you might do while on the Internet.

Notice that several blanks might have already been filled in. This happened when you answered some questions when as you were setting up your computer for the first time or when you updated your operating system. If you want to change any of the information or fill in any additional information, do it now.

Sometimes when you get e-mails from people, you will see information at the bottom of their message. It may contain their phone number, address, favorite saying or even a picture made up of letters, numbers and symbols. This information can be placed in the "Signature" box at the bottom of this screen. It will automatically be placed at the bottom of each e-mail message that you write.

Now, back choosing Internet applications. Click on the "E-mail" tab. You will see a new set of blanks. See Figure 3. Depending on changes you have made in different applications on your computer, some or all these blanks might have been filled in. If they are not filled in, and if you can still get your e-mail, leave them alone. If you are having problems with receiving e-mail, this may be a good place to tweak your settings. The Internet control panel is closely related to the application known as Internet Config and performs many of the same functions while being more easily accessible in the Control Panels menu.

For the purpose of this article, only work with the button at the bottom of the screen entitled "Default E-mail Application. Note that there is a button after the phrase. Look at the up and down triangles connected by a short line. In the Mac OS the presence of this symbol means that the figure is a button with choices to be made by clicking and holding on the button, then dragging up or down to the appropriate choice. When your choice is highlighted, let up on your mouse button to make your selection.

If the Internet application you want to use does not show in the button, pull down to "Select. . ." Internet

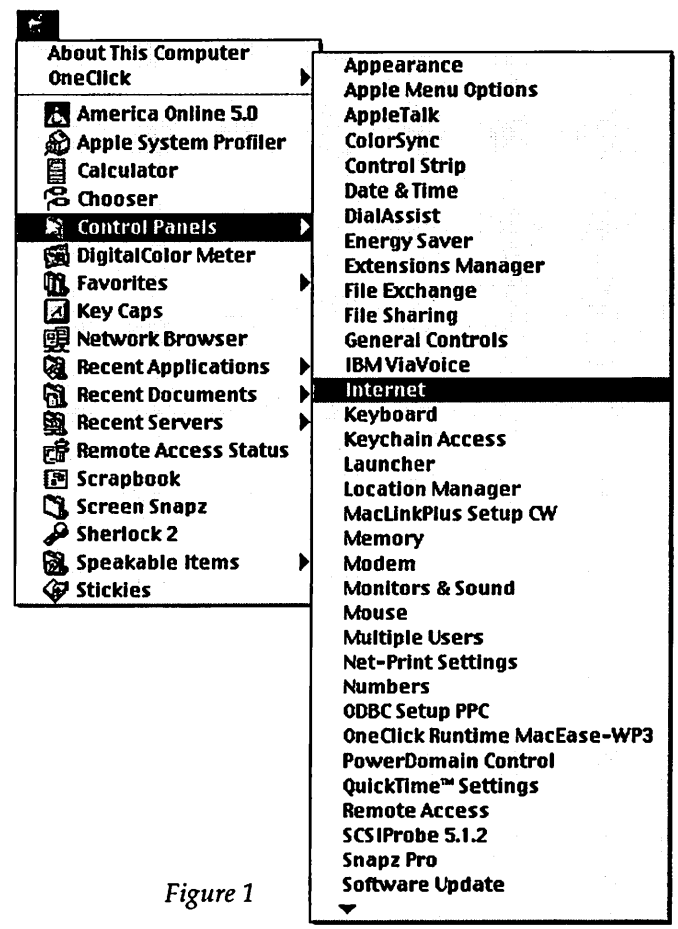

Figure 1

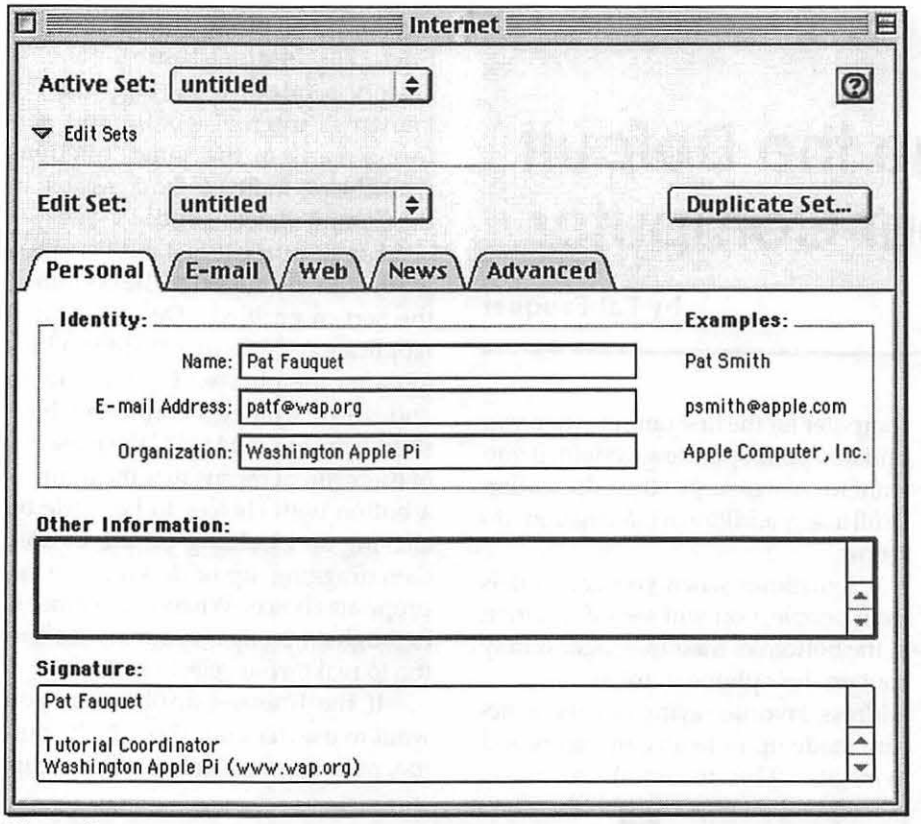

Figure 2

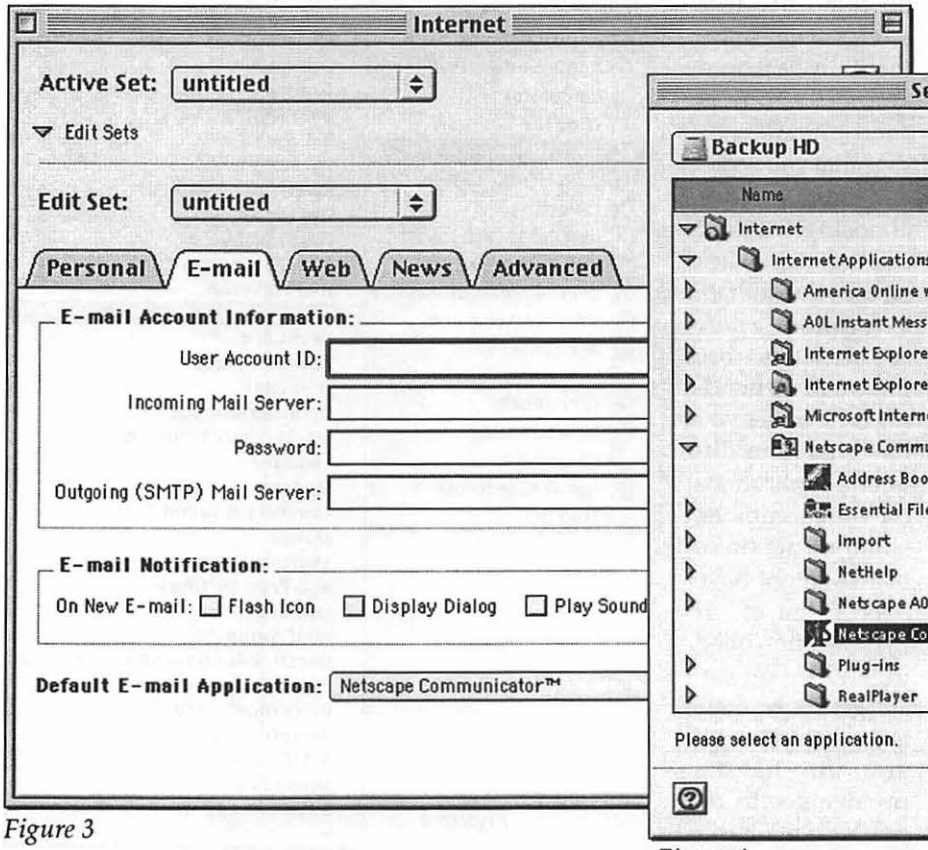

Figure 3

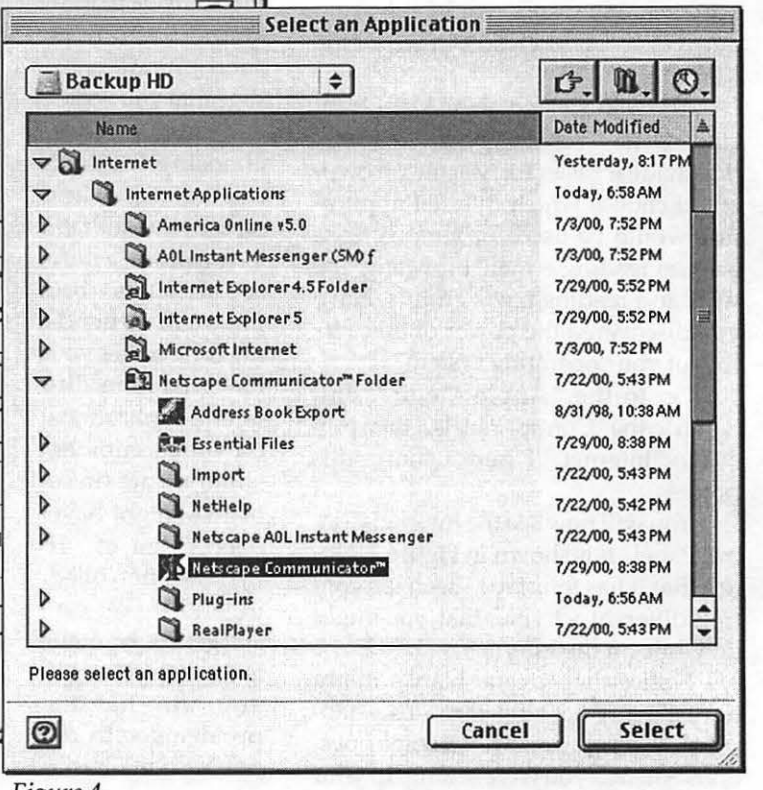

Figure 4

Applications are normally stored in the Macintosh HD in a folder labeled "Internet." Navigate to the desktop, then select the Macintosh HD. Use the disclosure triangles to open the various folders that must be opened to find the icon for the Internet browser you want to use. Highlight it, then press the "Select" button at the bottom of the dialog box. See Figure 4.

You have now changed the default application for e-mail. The "Web" and "News" tabs allow you to change whatever applications you normally use to view web pages and read newsgroup postings. The procedure to choose different applications is the same.

Changes made in the Internet control panel also affect which browser will be launched when you use the "Search the Internet" portion of Sherolck. ■

Pat Fauquet serves and the Tutorial Coordinator for Washington Apple Pi and teaches many of the daytime classes. She can be contacted at patf@wap.org.

Documentation for Those Who Don't Read Documentation

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COMPUTERS WERE supposed to lead us to a "paperless society." One wag noted that the opposite is true: a "paperless office" is about as common as a "paperless restroom." People are uncomfortable, if not downright panicked, without paper, in the office or the restroom.

Maybe so, though the paperless revolution does seem to be taking hold in the computer field. An Osborne-1, one of the first portable computers way back in 1980, weighed (at 20 pounds) only slightly more than the paper manuals that came with it. But buy a new Mac or Windows machine and you find almost no paper at all: no manuals beyond maybe a "quick start" guide. On-line documentation is so good, and computers are so easy to use, that paper manuals are unnecessary.

Oh, really?

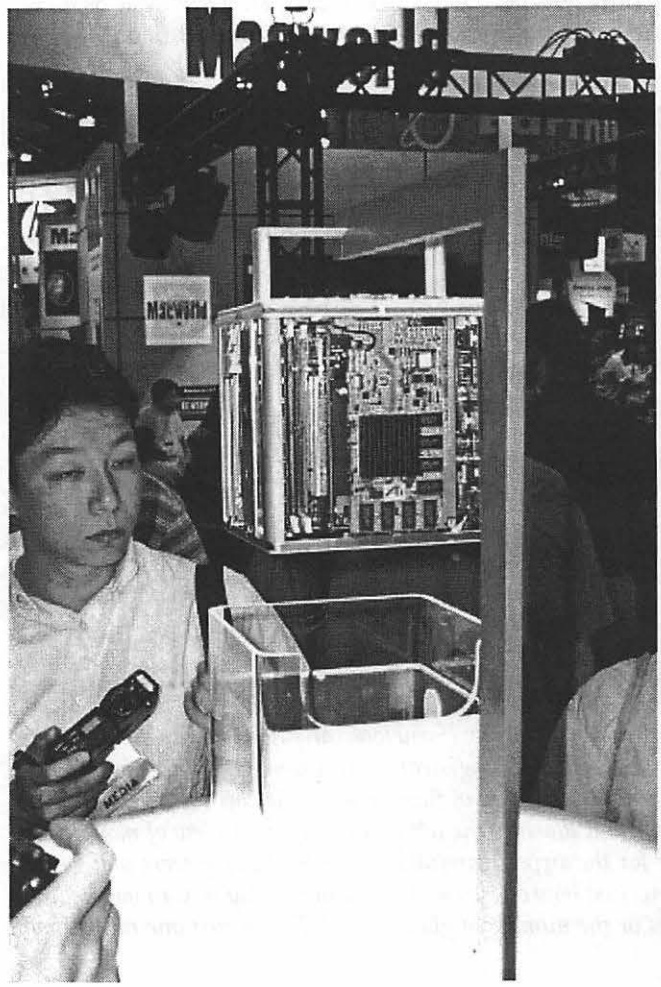
Palm: A Case Study

The easiest to use computer on the market today is the Palm, by Palm, Inc. Tens of millions of people who've yet to figure out how to keep their VCRs from flashing "12:00" have managed to take these hand-held computers and do useful things with them. The built-in programs may not be as sophisticated as other tools, but people still manage to enter and maintain name and address lists, to set appointments (and alarms) in the calendar, and maintain simple to-do lists. Most of the users have barely glanced at the included documentation.

Of course, the Palm documentation is not exactly easy to comprehend. When you buy any model Palm, you end up with several pieces of paper, some in booklet form and some not. Some of these are advertisements for optional Palm accessories, some of these are for registering your Palm, or for registering for services. There are also "oops" notices, things that should have been included in the documentation but were left out. The documentation itself isn't horrible, but it isn't exactly inviting or easy to use, either.

A couple years ago, Peachpit Press stepped into the gap with one of their famed Visual QuickStart guides: *Visual QuickStart Guide: Palm III and PalmPilot*. In 252 well illustrated, well-organized and indexed pages, Jeff Carlson told you everything there was to know about the Palm. It must have been successful; Peachpit has recently released a newer book (unseen), also by Jeff Carlson, called *Visual QuickStart Guide: Palm Organizers*.

What does this mean? It seems to mean that even the easiest to use computer, the Palm, still needs good documentation.



Here is your first glimpse of a naked iCube. It may not be your last glimpse however. In addition to sitting on desks looking pretty (when dressed) while it leaves other computers n the dust, naked it is being touted as the best network solution when cheap mainframes are required. Rack mounted and harnessed while naked, there is no end to how many can do how much work yoked into a team. For that matter, the networked CPUs could be in physically different locales to minimize terrorist or commercial sabotage of the units themselves. This unit has also been described as the ideal way to create a server farm on shoestring budget.

Little Mac Books

Robin Williams essentially invented the "documentation for those who don't read documentation" genre with her original *The Little Mac Book*, way back in 1990. On the title page of the latest version of this best-seller, *The Little Mac Book*, 6th Edition, Robin notes that "the book's not so little anymore. Neither is the Mac." Yet this 445 page volume is still the most approachable overview of all things Macintosh, from how the hardware works, to setting personal preferences, to understanding fonts. If you own just one Macintosh book, this should be it. If you own just one computer book, this should be it; then go out and get a Mac to go with it. You'll finally have a computer you can actually understand.

Honest. The table of contents alone is a marvel of clarity, design, and typography, and it only gets better further inside. Aside from, possibly, William Goldman's *The Princess Bride*, I've probably given away more copies of *The Little Mac Book* (in multiple editions) than any other title.

And if not *The Little Mac Book*, then possibly *The Little iBook* or *The Little iMac Book*, 2nd Edition. The former (co-written with John Tollett listed as the primary author) is obviously focused on the iBook, and lacks much of the comprehensive detail of *The Little Mac Book*. On the other hand, it explicitly addresses the many strengths and the few weaknesses of the iBook, paying more attention, for example, to the nuances of mobile computing. Tollett's famed cartoon character, Url Ratz, graces the pages, along with many more practical (if less amusing) illustrations. Url's demonstration of the difference between being at home and being at the office (on p. 13) is a classic.

Similarly, *The Little iMac Book* centers on Apple's multi-hued iMac, and

Terry found a terrific angle for this picture. If you look carefully, you can see in the mid ground and somewhat to the right is the registration area seen in another picture. Look down from there and you will see layers of floors and partial floors under that area. Looking back at the center and towards the left gives a different view of more layers. Study the center banner for the airport carefully or maybe the engineers will get out their slide rules and tell us just how enormous that banner really is. Can you begin to count the metal supports or the number of glass panes? This is just one rather small corner of MacWorld.

"On-line documentation is so good, and computers are so easy to use, that paper manuals are unnecessary. Oh, really?"

covers almost everything except which color goes with which style of home décor. This book actually has better coverage of the AirPort than the previous volume, in large part because the former was written before the AirPort technology stabilized. More attention is also paid to application programs, particularly applications bundled with the iMac (*AppleWorks*, *iMovie*, *Quicken*, *PageMill*, etc.). Both these volumes feature Robin's extraordinary internal design, layout, table of contents and indexing.

All of these volumes are highly recommended.

Visual QuickStart Guide: Mac OS 9

One of the most egregious examples of "no documentation is good documentation" is Mac OS 9. While it may look much like its grandparent, the poorly-documented Mac OS 8, Mac OS 9 is a major upgrade to the Mac's operating system, and yet it comes with almost no paper documentation. The on-line help is excellent, but suffers from two huge limitations: (1) the computer must be in working order for the user to read the documentation; and (2) it is almost impossible to "browse" through the on-line documentation, which essentially requires the user to know what they are looking for before they try to find it.

Maria Langer, a Visual QuickStart veteran, is back with a new book that thoroughly, and clearly, documents Mac OS 9. It is a mixture of the old (how to use KeyCaps, how to resize

windows, how to copy files) and the new (how to use Sherlock 2, and a particularly good summary of Mac OS 9 security and multi-user support). As with all Visual QuickStart guides, the book is heavily illustrated, and the topics broken down into small, digestible chunks. Highly recommended for Mac OS 9 users.

Curiously, Langer, Williams and Tollett all live in the dry, desert Southwest, yet write very lively books on usually dry computer topics. Williams moved from California to New Mexico several years ago (Tollett also lives in New Mexico); Langer lives in Arizona. Coincidence? Or clear air?

Mac OS 9: The Missing Manual

David Pogue also noticed the disappearing documentation phenomenon, and talked O'Reilley into publishing his "Missing Manual" series. The first offering is *Mac OS 9: The Missing Manual*, and the cover drives the message home with the note that this is "The book that should have been in the box."

Pogue has been writing about the Mac for as long as anyone, both as an editor and columnist. His style is somewhat more narrative than the Visual QuickStart guides, but in its own way just as "visual." He also tends to offer a more opinionated view, while still remaining detached and objective. Take, for example, his coverage of the Note Pad:

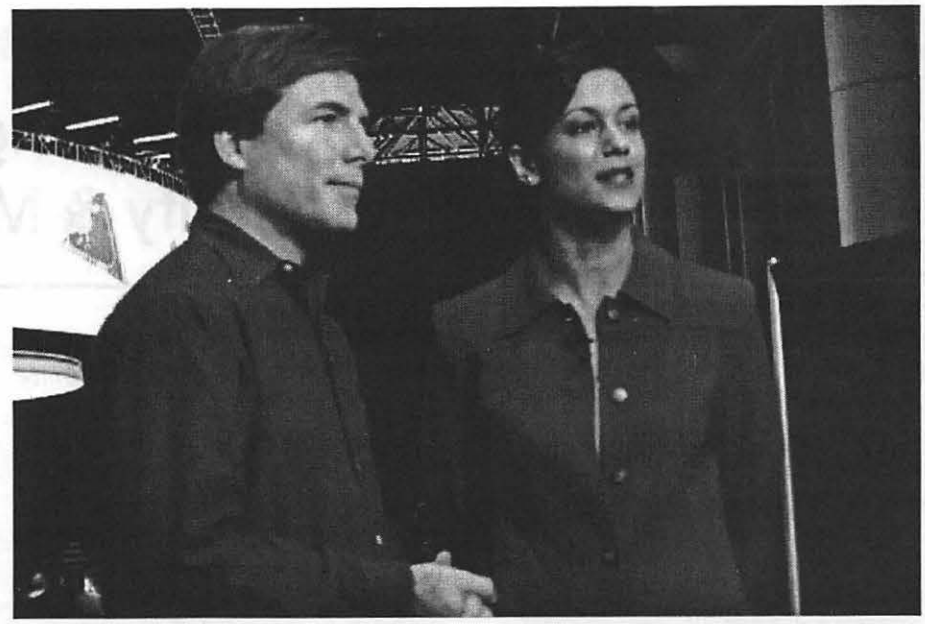
Steve Jobs may have brought Apple back from the dead when he returned to run the company in 1997, but he's one arbitrary fellow. Among the changes he made upon his return: taking the Note Pad, a favorite [apple] menu item since 1984, out of the [apple] menu.

This banishment to the Apple Extras folder is a shame, because the Note Pad is a handy little storage center for phone numbers, to do lists, Web addresses, brainstorms, and other bits of text you run across in your day-to-day activity. Here's what you can do with the Note Pad:

Pogue then goes on to detail a number of useful Note Pad characteristics. He closes with a highlighted "Tip" that was news to me:

Have you ever wished you could edit or add to a "Read Me" file, but couldn't because the Read Me was, of course, a read-only SimpleText file? [...] The solution: Open Note Pad and drag the Read Me icon into the Note Pad window. Now you have normal, editable text in your Note Pad.

If the rest of the "Missing Manual" series is like this first volume, Pogue has a winner: the book is a gem, and highly recommended for Mac OS 9 users. Two more volumes are out (unseen): *AppleWorks 6: The Missing Manual* and *iMovie: The Missing Manual*.



Here are more iMacs performing some of the many clerical/administrative tasks involved in an undertaking of this size and magnitude. High above the floor, almost in the sky itself is a banner of another one of Mac's favorite people—Francis Ford Coppola, the legendary late film director. I wonder if Hollywood begins to understand the potential threat they face from Desktop movies. Remember "The Blair Witch Project?" Made on a shoestring with Macs by amateurs, it is a solid gold cash cow.

HTML User's Interactive Workbook

Macs aren't the only things that are undocumented, or underdocumented. Consider the World Wide Web: the vast majority of Web sites were created by people who had, literally, no idea what they were doing.

Overlook, for the moment, that *HTML User's Interactive Workbook* is a very good guide to learning HTML, aimed at the complete novice — the complete novice with a Windows machine. All the internal screen shots are from Windows machines, and the "recommended" HTML software is either Notepad or Wordpad, two very simple text editors bundled with Windows.

On the other hand, Alayna Cohn and John Potter really do assume you are a rank beginner, and skip no steps. If you use the book as intended (doing things in order and not jumping over sections), you will emerge with a far better understanding of the Web

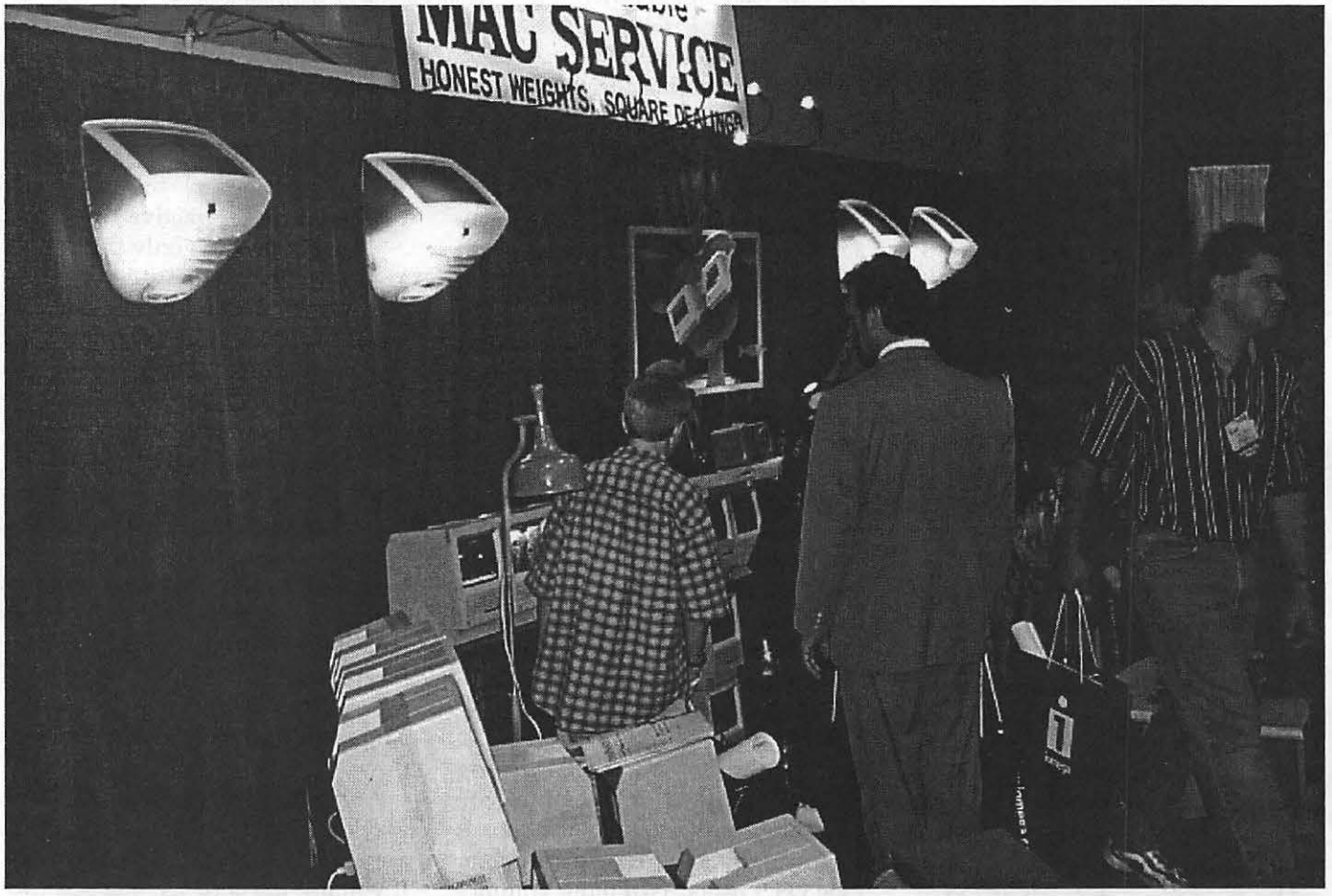
and HTML than many Web "professionals," most of whom use Web-layout packages that mask how HTML actually works.

The book is also done with care and wit and, aside from the minor distraction of the Windows screen shots, can be recommended to almost anyone who wants to learn HTML and the Web. For those who already know HTML, however, you won't find anything new. Keep in mind, however, that if you "know" HTML through using *GoLive, DreamWeaver, PageMill,* or Claris *Home Page,* you really don't know HTML at all. ■

Administrating Web Server, Security & Maintenance

ERIC LARSON and Brian Stephens designed *Administrating Web Server, Security & Maintenance* as an "interactive workbook" for a course leading to "professional Webmaster certification." The only thing peculiar about the book is the word "administrating" in the title. Though there are some Windows screen shots right at the start, the book does present a solid introduction to the skills, paranoias and details that go into efficiently and safely operating a Web server, regardless of platform.

There are cynics who will say that

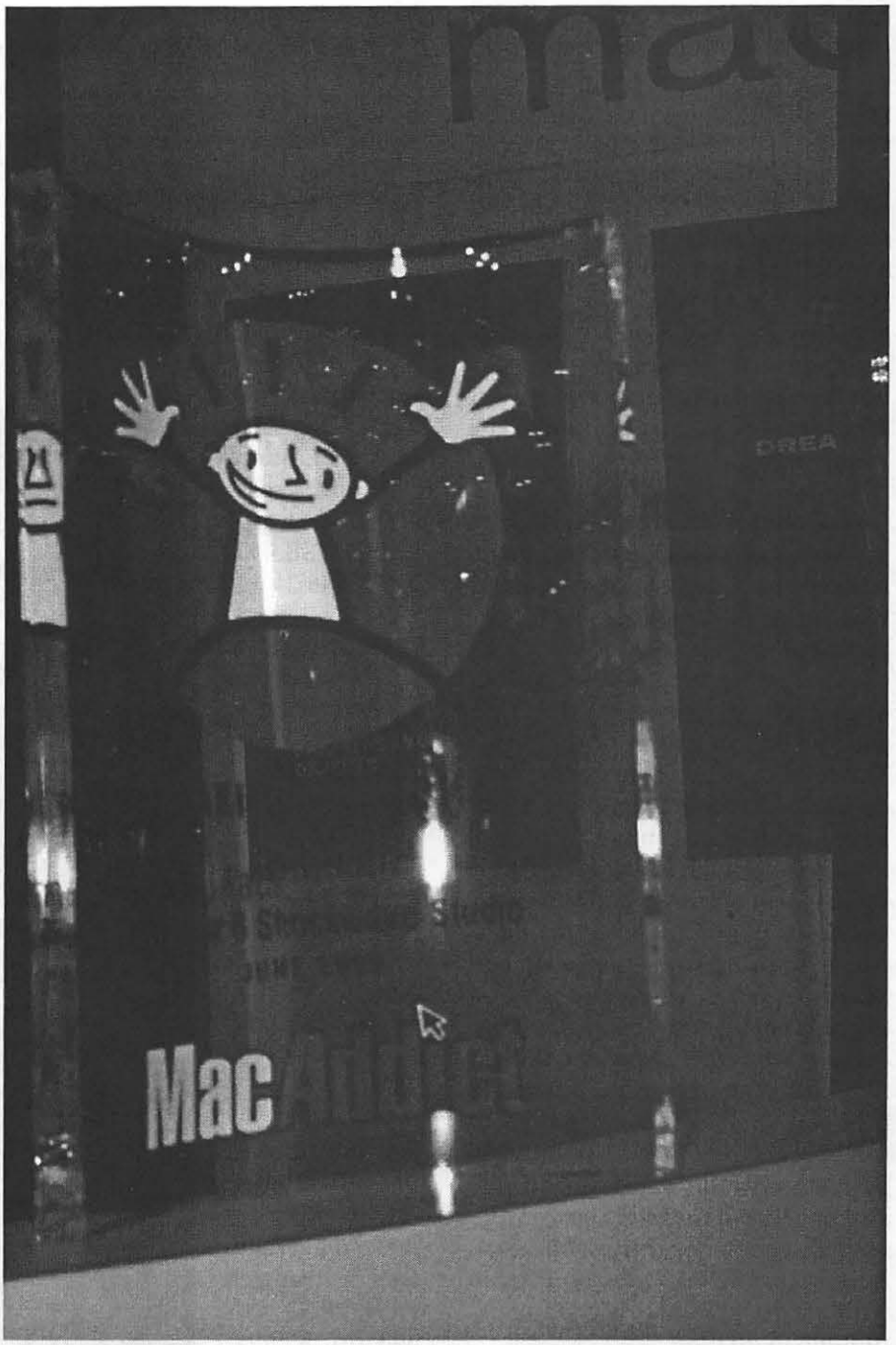


Wherever you find a gathering of Mac people, sooner or later you will also find a gathering of Mac Classics and Mac SEs, Notice the special fashion accent provided by the tangerine iMac wall sconces. Imagine how warm, cosy and inviting it would be regardless of where they were used. If nothing else, it would be a great ice breaker for social situations. I give it a max of 12 minutes to start a friendly and lively conversation between strangers.

"One of the very first sections of Michael Floyd's book is titled "HTML and the Balkanization of the Web." This brief vignette addresses the swift decline of the Web from being a universal Internet communications tool to a mass of warring, incompatible camps formed around proprietary technology. "

anything about Web administration appearing in a book must, by definition, be out of date. This overlooks the fact that the *principles* of Web administration, or more generally of network administration, are well defined. Furthermore, most of the naysaying cynics don't even know these basic principles, having grown up in an overheated, reactive culture that leaps onto the Next Big Thing before fully understanding the Previous Big Thing. This volume packs in a solid body of knowledge that, with a bit of mental discipline, should take you far beyond where the Web's ambulance chasers will ever go.

Split into two sections, the first part of the book covers Web server administration. Planning your server is covered in detail, as is configuring the server, programming server-side includes, detailing how search engines and Web robots work, and why and how to analyze log files. The second section covers Web security, starting with basic network security and moving to Web server security, CGI security, Web client security risks, online



Hi Maxx! Since MacAddict banished him from the cover, I am glad he has found a good home with all the wonderful people who make the best Mac things. Did you notice how many vendors proudly displayed their Maxxs? I saw one booth that had 3 or 4 of them. Ellen, Steve Dockery and I stumbled on the MacAddict hideout where they were having a private party with the door open and sign saying "By invitation only". That just didn't feel like MacAddict and begged us to crash the remnants of their party. I told them how much I liked the Maxx awards and suggested the Pi really deserved one for the best MUG. Would you believe Balin Brandt, the marketing manager, gave me his business card and said to email him about it. If you happen to find his email address lying casually somewhere in the pages of this magazine, feel free to write him a letter telling him about your favorite MUG and why you like it so much. Feel free to suggest strongly, we deserve a Maxx. bbrandt@macaddict.com

transaction security, and the arcane art of intrusion detection and recovery.

The fill-in-the-blank exercises do get a bit old after a while; it may be suitable for a college workbook, but does anyone like college workbooks? On the other hand, if you've ever struggled to explain to a novice what a MIME type was, or how to read a Web log file, or what IP spoofing is and why it is bad, you'll appreciate both the clarity and the breadth of the book. Highly recommended for Webmasters and wannabe Webmasters.

Building Web Sites with XML

Some books offer good documentation of bad ideas, such *as Building Web Sites with XML*. It is a well done book, but —

One of the very first sections of Michael Floyd's book is titled "HTML and the Balkanization of the Web." This brief vignette addresses the swift decline of the Web from being a universal Internet communications tool to a mass of warring, incompatible camps formed around proprietary technology. Since the entire book discusses XML from the perspective of Microsoft Windows-proprietary Active Server Pages and Microsoft Windows-proprietary Access database files, this is an ironic introduction to the book. On the other hand, if you'd like to get started in XML (which still hasn't been fully defined) and you also have a Windows NT server running IIS, and have a copy of Microsoft Access handy, the CD-ROM included with the book will have you up and running in no time.

And if you have all of those things, you probably don't spend much time reading this magazine. Which is a pity: the Microsoft Way is not the same as The Right Way. For XML to have a future, it needs to become more generic, and less centered around the great software monopoly.

Jeff Carlson, *Visual QuickStart Guide: Palm III and PalmPilot*. Peachpit Press, 1998. x, 252 pp. $15.99. ISBN 0-201-35390-3

Robin Williams, *The Little Mac Book*, 6th Edition. Peachpit Press, 1999. 445 pp. $19.99. ISBN 0-201-35433-0

John Tollet and Robin Williams, *The Little iBook Book*. Peachpit Press, 2000. 231 pp. $18.99 ISBN 0-201-70093-X

Robin Williams, *The Little iMac Book*, 2nd Edition. Peachpit Press, 20000. 311 pp. $17.99. ISBN 0-201-70446-3

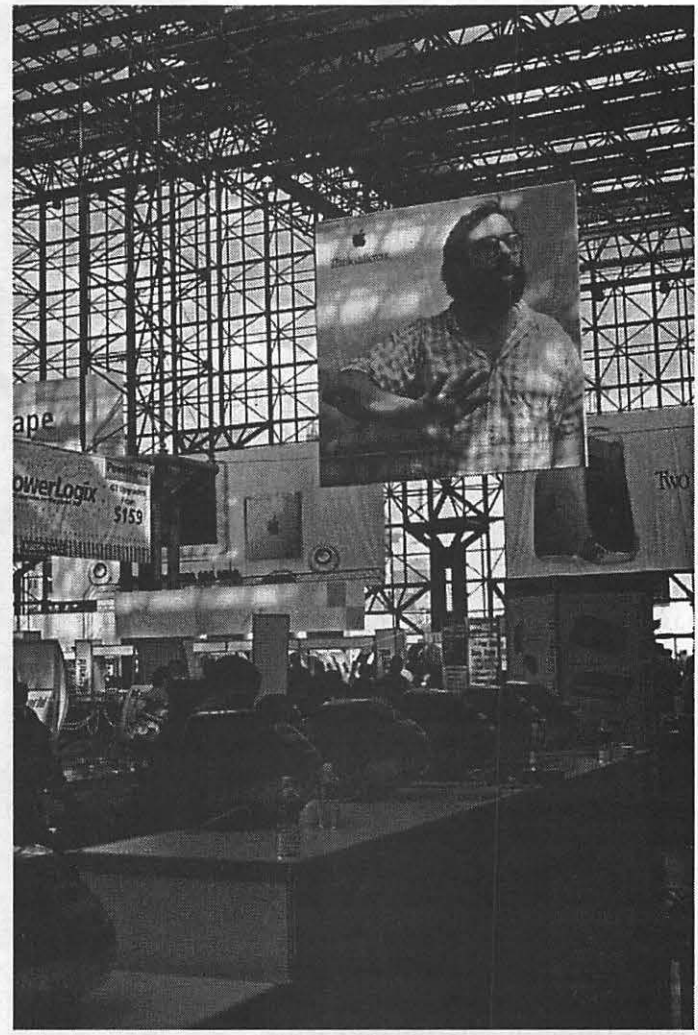
Maria Langer, *Visual QuickStart Guide: Mac OS 9*. Peachpit Press, 2000. xiv, 360 pp. $17.99. ISBN 0-201-70004-2

David Pogue, Mac OS 9: The Missing Manual. O'Reilly, 2000. x, 461 pp. $19.95. ISBN 1-56592-857-1

Alayna Cohn, and John Potter, *HTML User's Interactive Workbook*. Prentice Hall, 2000. xvi, 348 pp. $39.99. ISBN 0-13-017004-6

Eric Larson and Brian Stephens, *Administrating Web Server, Security & Maintenance*. Prentice Hall, 2000. xxiv, 567pp. $40.00. ISBN 0-13-022534-7.

Michael Floyd, *Building Web Sites with XML*. Prentice-Hall, 2000. xxxii, 418 pp. $39.99 (includes CD-ROM). ISBN 0-13-086601-6. ■



Jim & Sumi, ZDTV (Ziff Davis) on air hosts are seen in this picture. ZDTV is owned by Paul Allen's Vulcan Ventures, who purchased it from Ziff Davis on November 19, 1999.
See links for more info:
Jim Louderback http://www.zdtv.com/zdtv/aboutus/onairhosts/story/0,4840,2430400,00.html
Sumi Das http://www.zdtv.com/zdtv/aboutus/onairhosts/story/0,4840,2425684,00.html

Hotline–The hotline service is only for members of WAP. Please do not call after 9:00 pm or before 8:00 am.

Name	Telephone	Heading	Subjects
Apple General			
Bob Sherman	305-944-2111	Communications	DBMaster
Ron Evry	703-490-1534	Hypermedia	Hyperstudio
Bernie Benson	301-951-5294	Miscellaneous	IIe Card for the LC
Harvey Levin	301-299-9380	Programming	Apple Script
Eric Sheard	908-782-6492	Spreadsheets	Advanced Visicalc (eves) 908-782-6492 (days) -2242
Allan Griff	301-654-1515	Spreadsheets	Apple Works
Eric Sheard	908-782-6492	Spreadsheets	Visicalc (eves) 908-782-6492 (days) -2242
Ken DeVito	703-960-0786	Telecomm	
Apple //			
Bernie Benson	301-951-5294	Accounting	Apple SSC (Super Serial Card)
Neil Laubenthal	703-691-1360	Apple IIGS	General
Allan Griff	301-654-1515	Apple Works	General
Ken DeVito	703-960-0786	Apple Works	General
Paul Campbell	313-255-6497	Apple Works	General
Ray Settle	410-647-9192	Apple Works	General
Allan Griff	301-654-1515	AppleWorks	General
Ken DeVito	703-960-0786	Beagle Buddies	
W. T. Cook	410-995-0352	Beagle Buddies	
Don Avery	202-362-1783	Beagle Buddies	
Dale Smith	301-294-2287	Communications	
Allan Griff	301-654-1515	Database	Apple Works
Morgan Jopling	410-721-7874	Database	Apple Works
Milt Goldsamt	301-649-2768	Database	Apple Works
Guy Durant	202-575-0414	Epson Printers	
Ron Evry	703-490-1534	General	
Harold Polk	301-662-6399	General	
Ken DeVito	703-960-0786	General	
Guy Durant	202-575-0414	Hard Drives	
Guy Durant	202-575-0414	Hardware	
Ron Evry	703-490-1534	Hypermedia	Hyperstudio
Bob Sherman	305-944-2111	Laser Printing	
Ron Evry	703-490-1534	Word Processing	AppleWriter
Allan Griff	301-654-1515	Word Processing	
Apple // e			
Morgan Jopling	410-721-7874	Upgrade	
Apple // GS			
Rich Sanders	703-450-4371	Drawing/Graphics	Deluxe Paint II
Dick Grosbier	301-898-5461	General	
Eric Grupp	410-315-8331	General	
Seth Mize	410-766-1154	General	
Rich Sanders	703-450-4371	Word Processing	Multiscribe GS
Apple // GS			
Ken Carter	301-834-6516	General	
Apple ///			
Dave Ottalini	301-681-6136	General	
Paul Campbell	313-255-6497	General	
Seth Mize	410-766-1154	General	
Robert Sambolin	203-853-2512	General Repair	
Steve Truax	304-263-5749	Integ. Packages	3 Easy Pieces
Dave Jernigan	540-822-5137	Integ. Packages	3 Easy Pieces
Paul Campbell	313-255-6497	Repairs	
Dave Jernigan	540-822-5137		3.5" Super Drive
Dave Jernigan	540-822-5137		SCSI Drives
Steve Truax	304-263-5749		Stemspeller
Dave Jernigan	540-822-5137		Stemspeller (before 9 PM)
Carey McGleish	313-332-8836		Word Juggler (evenings)
Cross Platform			
Ken DeVito	703-960-0786	Transfers	MS/DOS-Apple-Mac
IBM/Compatibles			
Etana Finkler	301-891-2821	Illustration	General Can call until midnight
Tom Cavanaugh	301-627-8889	Printers	General
Internet			
Dan White	301-843-3287	General	
Walt Francis	202-966-5742	General	
Will DeKroney	410-626-7716	General	
Curt Harpold	301-762-0887	Programming	JAVA
Craig Contardi	410-796-4562	World Wide Web	Netscape Navigator
Seth Mize	410-766-1154	World Wide Web	Sailor
Jaque Davison	703-644-7354	World Wide Web	Web Site Builder
Macintosh			
Nancy Seferian	202-333-0126	Art & Video	General
Robert Sambolin	203-853-2512		General
John Engberg	301-262-9347 or 301-604-8348		Basics
Tho. Snowberger	410-757-4656	Contact Managers	Now Contact/UTD
Mort Greene	703-522-8743	Database	File Maker Pro
Bill Waring	410-647-5605	Database	Filemaker Pro
Bob Wilbur	703-426-0556	Database	Filemaker Pro
Rick Shaddock	202-321-2110	Database	FoxPro
Harvey Levin	301-299-9380	Database	Helix
Bob Wilbur	703-426-0556	Database	Helix Express
Mort Greene	703-522-8743	Database	MS-File
Dick Nugent	703-425-1056	Database	FileMaker Pro
Elizabeth Mangan	703-750-2710	Database	Pro-Cite
Dave Weikert	301-963-0063	Databases	Panorama
Bob Wilbur	703-426-0556	Database	General
Blake Lange	301-942-9180	Desk Top Pub.	PageMaker
Mort Greene	703-522-8743	Desk Top Pub.	PageMaker
Eric Grupp	410-315-8331	Desk Top Pub.	Quark Xpress
Paul Schlosser	301-831-9166	Desk Top Pub.	Quark Xpress
Ron Johnson	410-315-8764	Drawing/Graphics	Adobe Illustrator 3.0
Nancy Seferian	202-333-0126	Drawing/Graphics	Aldus Freehand
Bob Wilbur	703-426-0556	Drawing/Graphics	Canvas
Lloyd Olson	410-544-1087	Drawing/Graphics	ClarisDraw
Etana Finkler	301-891-2821	Drawing/Graphics	Freehand Can call until midnight
Nancy Seferian	202-333-0126	Drawing/Graphics	General
Neil Laubenthal	703-691-1360	Drawing/Graphics	General
Etana Finkler	301-891-2821	Drawing/Graphics	General Can call until midnight
Bob Wilbur	703-426-0556	Drawing	General
Blake Lange	301-942-9180	Drawing/Graphics	Illustrator
Etana Finkler	301-891-2821	Drawing/Graphics	Illustrator Can call until midnight
Mort Greene	703-522-8743	Drawing/Graphics	Photoshop
Blake Lange	301-942-9180	Drawing/Graphics	Photoshop
Mort Greene	703-522-8743	Drawing/Graphics	SuperPaint 2.0
Dave Jernigan	540-822-5137	Foreign Languages	FlashWorks
Dave Jernigan	540-822-5137	Foreign Languages	Greek Tutor
Dave Jernigan	540-822-5137	Foreign Languages	Hebrew Tutor
Dave Jernigan	540-822-5137	General	

September 2000

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	Office Closed 4 Labor Day	**Clinic** 5 *Intro to Mac-P1* *Internet Intro*	*Photoshop 1* 6 *Digital Camera Intro* *Scanner Intro* **WAP BoD**	7 *Intro to Mac-P2* *Netscape* **Columbia Slice**	8 *Appleworks - Intro* *PhotoDeluxe Intro*	**Frederick Slice** 9 **Graphics SIG**
10	11 *Intro to Mac-P1* *i Visit i Mac-P1*	**Clinic** 12 *Intermed Mac-P1* *Internet Dunloading* *Photoshop 2*	13 *Intro to Mac-P2* *i Visit i Mac-P2*	14 *Intermed Mac-P2* *Spreadsheet Intro* **Stock SIG**	15 *Web Page Workshop*	**Annapolis Slice** 16 **Linux SIG**
17	18 *Mouse Mousse* *Mac Intro Lab* *Web Pages Fast&Easy*	**Clinic** 19 *WriteIt-SaveIt-PrintIt* *Mac Intro Lab* *Web Page Clinic*	*Finder Basics* 20 *We Need a Picture* *Mac Intro Lab* **Excel SIG**	*Digital Video Camera Intro* 21 *Mac Intro Lab* *Surfing 101*	*Simplify Your Computer Life* 22 *Mac Intro Lab* *iWant an iMovie*	NoVa ComCol 23 **WAP General Meeting**
24	25 *Adobe Go-Live Intro*	**Clinic** 26 *iMade an iMovie-Now What?* *In Design-Intro*	27 *Adobe Go-Live P2* *Quark Intro*	28	29	30

October 2000

WAP Office Phone: 301- 984-0300
TCS 2400 bps: 301-984-4066;
TCS 14400 bps: 301-984-4070

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 *Web Pages - How To's* *Networks/Networking*	**Clinic** 3 *Ride the I-Net Wave* *Brush Up Mac Skills*	4 *PageMill/Homepage* **WAP BoD**	5 *Downloading +* *Brush Up Mac Skills* **Columbia Slice**	6 *Jazz Up Web Pages*	7
8	Office Closed 9 Columbus Day	**Clinic** 10 *Communicator e-mail* *Mac-Digging Deeper*	*Digital Video Camera Intro* 11 *iWant an iMovie* *Photoshop 1*	12 *Appleworks - Intro* *Mac-Deeper P2*	13 *iMade an iMovie-Now What?*	**Frederick Slice** 14 **Graphics SIG**
15	*Scanner Intro* 16 *Mouse Mousse* *Mac Intro Lab*	**Clinic** 17 *Photoshop Intro* *ImproveDigitalPhotos* *WriteIt-SaveIt-PrintIt* *Mac Intro Lab*	*Finder Basics* 18 *Digital Camera Intro* *Mac Intro Lab* **Excel SIG**	19 *Surfing 101* *Web Pages Fast&Easy* *Mac Intro Lab*	*Simplify Your Computer Life* 20 *We Need a Picture* *Mac Intro Lab*	NoVa ComCol 21 **WAP General Meeting**
22	23 *Adobe Go-Live Intro*	**Clinic** 24 *QT VR - Panoramas*	25 *Quark-Intro* **Retired SIG**	26 *Adobe Go-Live P2*	27	28
29	30 *Adobe Go-Live P3*	**Clinic** 31 *QT VR - Virtual Objs.* *In Design-Intro*				

Unless otherwise noted, call the SIG chairs or Slice officers for meeting information. A list of the SIG and Slice chairs is on page 3 of every Journal. Calendar events in italics are tutorials, workshops or seminars.

Meeting Notices

Annapolis Slice
3rd Saturday; 9:30 AM; Severna Park Library on McKinsey Rd. (off Rt. 2), Severna Park, MD
Answering Machine: (410) 647-5605

AOL SIG, contact John Barnes at JDBarnes@aol.com or in the evening at 301 / 652-0667.

Apple III SIG
Quarterly on 2nd Saturday; 10:00 AM; WAP Office.

Columbia Slice
1st Thursday; 7:00 PM. Call for location
BBS (410) 964-3706

DataBases (Mac) SIG
Volunteers needed to restart this SIG

Delmarva Slice
At the campus of Salisbury State University, but will rotate throughout Delmarva area when appropriate. Email Shelly Wetzel form more information. <sawetzel@ssu.edu>

Excel SIG
3rd Wednesday; 7:30 PM; WAP office.

FileMaker Pro SIG
3rd Thursday; 7:30 PM; WAP office.

Frederick Slice
General meeting time, 2nd Saturday; 10:00 AM; United Methodist Church; 22 Main Street in Walkersville.

Game SIG
1st Thursday; 7:30 PM; Call for location.

Genealogy SIG
Not meeting in July or August. Volunteer needed.

Graphic Arts SIG
2nd Saturday of the month

Linux SIG
Contact Will Byrd or Gregory Kelley (wbyrd@fred. net or grekell@earthlink.net)

Mac Programmers' SIG
Volunteers needed to restart this SIG

Newton Developers' SIG
Volunteer needed

NoVa Education (Ed) SIG
Call SIG chair for times & locations.

QuickTime SIG
2nd Tuesday of each month; 7:30 PM; WAP office.

Retired SIG
4th Wednesday of each month; 11 AM to 2 PM; each meeting will have a topic, but be run informally. WAP office.

Stock SIG
2nd Thursday; 7:30 PM; WAP Office. (Morris Pelham who chairs StockSIG is Sysop of the Investment/StockSIG board on the TCS. Contact him on that board.)

Telecomm SIG
Call SIG chair for times & locations.

WAP Garage Sale— December 9, 2000

WAP General Meeting
4th Saturday; 9:00 AM; Northern Virginia Community College, Annandale Campus, Community Cultural Center Auditorium.

Women's SIG
At the Pi Office at 6:00 PM dinner ($2) followed by 7:00 PM meeting/presentation. Call SIG chair or office for next meeting.

Notice: Plans change! Anyone with calendar information please call the Calendar Editor, Bill Wydro (301) 299-5267 or Beth Medlin at the WAP Office (301) 984-0300.

Hotline–The hotline service is only for members of WAP. Please do not call after 9:00 pm or before 8:00 am.

Name	Telephone	Heading	Subjects
Joan Jernigan	540-822-5137	General	
Dan White	301-843-3287	General	
Dick Grosbier	301-898-5461	General	
Russell Robinson	301-739-6030	General	
Eric Seidel	540-667-5289	General	Networking
Eric Seidel	540-667-5289	General	Hardware
Robert Sambolin	203-853-2512	General Repairs	Older Mac through SE30
Neil Laubenthal	703-691-1360	General	
Tom Cavanaugh	301-627-8889	General	
Tom DeMay	410-461-1798	General	
Tom Witte	703-683-5871	General	
Bob Wilbur	703-426-0556	General	
Jim Kelly	301-926-2949	General	Applescript
Henry Miller-Jones	703-478-3721	Answering Syst.	Mac Commcenter,FAXcilitate, GV
Henry Miller-Jones	703-478-3721	General	Fax Software
Joan Jernigan	540-822-5137	Hypermedia	HyperStudio
Jerry Iler	410-987-5432	IIsi	General
Bill Geiger	703-237-3614	Integ. Packages	ClarisWorks
Sandy Kowalczuk	410-268-3149	Integ. Packages	ClarisWorks
Ray Settle	410-647-9192	Integ. Packages	Clarisworks
Henry Miller-Jones	703-478-3721	Integ. Packages	ClarisWorks
Joan Jernigan	540-822-5137	Integ. Packages	ClarisWorks
Jim Ritz	301-770-1405	Integ. Packages	MSWorks
Ray Settle	410-647-9192	Integ. Packages	MSWorks
Tim Childers	410-997-0066	Integ. Packages	MSWorks
Dave Weikert	301-963-0063	MacDisketeria	Disk Library
Dave Jernigan	540-822-5137	Mail List Manager	My Mail List Manager
Mort Greene	703-522-8743	Miscellaneous	File Transfer & Backfax
Sandy Kowalczuk	410-268-3149	Miscellaneous	HyperCard
Blake Lange	301-942-9180	Miscellaneous	Hypercard
Tom Witte	703-683-5871	Miscellaneous	Hypertalk
Jeff Dillon	301-434-0405	Miscellaneous	MX-80
Dave Jernigan	540-822-5137	Miscellaneous	Online Bible Mac
Dave Jernigan	540-822-5137	Miscellaneous	Soft Windows Mac
Rick Chapman	301-989-9708	Miscellaneous	Hypercard
Tom Witte	703-683-5871	Miscellaneous	Hypercard
Peter Combes	301-445-3930	Multi Media	Director
Peter Combes	301-445-3930	Multi Media	Language
Mort Greene	703-522-8743	Multimedia	Image Studio
Mort Greene	703-522-8743	Multimedia	Macro Mind Director
Stuart Bonwit	301-598-2510	Multimedia	Quicktime
Tom Witte	703-683-5871	Multimedia	Quicktime
Mort Greene	703-522-8743	Multimedia	Video Works
Joan Jernigan	540-822-5137	Multimedia	HyperStudio
Frank PappaJohn	703-922-3851	Music Notation	Finale
Henry Miller-Jones	703-478-3721	Networking	AppleTalk
Jerry Iler	410-987-5432	Older Claris	Genera
Henry Miller-Jones	703-478-3721	Online Services	AOL, CISI
Jerry Iler	410-987-5432	PB180C	General
Lester Morcerf	410-987-0685	Performa 550	General
Tho. Snowberger	410-757-4656	Performa System	General
Rick Shaddock	202-321-2110	Pers.Contact Mgr.	ACT
Mel Benson	410-647-6873	Personal Finance	Dollars & Sense
Bill Geiger	703-237-3614	Personal Finance	Manage Your Money
Mel Benson	410-647-6873	Personal Finance	Manage Your Money
Clarence Goldberg	410-263-5189	Personal Finance	Quicken
Henry Miller-Jones	703-478-3721	Personal Finance	Quicken
Bob Wilbur	703-426-0556	Personal Finance	Quicken
Tom Cavanaugh	301-627-8889	Printers	General
Walt Francis	202-966-5742	Printers	General
Michael Hartman	301-942-3717	Programming	C
Michael Hartman	301-942-3717	Programming	General
Harry Erwin	703-758-9660	Programming	General (e-mail at herwin@gmu.edu)
Joshua Juran	301-231-8622	Programming	Perl, C, C++, Pascal
Michael Hartman	301-942-3717	Programming	Pascal
Charles Schindler	410-437-4624	Spreadsheets	Excel
Lloyd Olson	410-544-1087	Spreadsheets	Excel
Walt Francis	202-966-5742	Spreadsheets	General
Roger Burt	301-424-6927	Spreadsheet/Chart	ClarisWorks
Bob Wilbur	703-426-0556	Spreadsheet	ClarisWorks
Dave Jernigan	540-822-5137	Spreadsheet	ClarisWorks
Mark Pankin	703-524-0937	Spreadsheet/Chart	Excel
Dick Byrd	703-978-3440	Spreadsheet/Chart	Excel
Mort Greene	703-522-8743	Spreadsheet/Chart	Excel
Rick Shaddock	202-321-2110	Spreadsheet/Chart	Excel
Tom Cavanaugh	301-627-8889	Spreadsheet/Chart	Excel
Bill Waring	410-647-5605	System	General Mac Help
Lloyd Olson	410-544-1087	System	Mac OS
Neil Laubenthal	703-691-1360	System	Mac OS Modems General
Henry Miller-Jones	703-478-3721	System	Mac OS
Bernie Benson	301-951-5294	Telecomm.	Modems Hayes Smartmodem
Henry Miller-Jones	703-478-3721	Telecomm.	ProTerm
Henry Miller-Jones	703-478-3721	Telecomm.	General
Henry Miller-Jones	703-478-3721	Telecomm.	MacTCP, Free PPP
Dave Jernigan	540-822-5137	Utilities	Conflict Catcher, Retrospect, Stuffit Deluxe, Tech Tools
Henry Miller-Jones	703-478-3721	Utilities	General
Jaque Davison	703-644-7354	Virtual Reality	Alien Skin Texture Shop
Jaque Davison	703-644-7354	Virtual Reality	Bryce 2
Jaque Davison	703-644-7354	Virtual Reality	Specular Logomotion
Jaque Davison	703-644-7354	Virtual Reality	Virtus - 3-D
Jaque Davison	703-644-7354	Virtual Reality	Virtus Walkthrough Pro
Dave Jernigan	540-822-5137	Word Processing	Word Perfect
Charles Schindler	410-437-4624	Word Processing	WordPerfect
Eric Grupp	410-315-8331	Word Processing	WordPerfect
Bob Wilbur	703-426-0556	Word Processing	WordPerfect
Walt Francis	202-966-5742	Word Processing	General
Tim Childers	410-997-0066	Word Processing	Hebrew
Tom Cavanaugh	301-627-8889	Word Processing	MS Word
Joan Jernigan	540-822-5137	Word Processors	Claris Works
Dave Jernigan	540-822-5137	Word Processors	Word Perfect
Henry Miller-Jones	703-478-3721	WWW	Netscape Navigator
Craig Contardi		410-796-4562	WWW Netscape Navigator
Macintosh & Apple			
Ginny Spevak	202-244-8644	Miscellaneous	Dvorak Keyboard
Mike Spevak	202-244-8644	Miscellaneous	Dvorak Keyboard
Bob Sherman	305-944-2111	Telecomm.	General
Dale Smith	301-294-2287	Telecomm.	General
John Barnes	301-652-0667	Telecom	AOL
Dale Smith	301-294-2287	Telecomm.	TCS
Nancy Seferian	202-333-0126	Telecomm.	TCS
Paul Schlosser	301-831-9166	Telecomm.	TCS
David Harris	703-845-1331	Telecomm.	TCS
Networking			
Douglas Ferris	301-924-4180	Networking	Novel
Douglas Ferris	301-924-4180	Networking	Windows
Dave Weikert	301-963-0063	Networking	Mac/AppleShare

We're updating the hotline!!

To have any changes or additions made, simply call the office during normal business hours or send the information via e-mail to Jim Ritz at <jim.ritz@tcs.wap.org>.

Let us know if any of this information is incorrect. Thanks.

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 TCS Help Hotline phone numbers.

Macintosh Tutorials

Overhaul of the Tutorial Program

LET'S BE honest, one of the main reasons that you joined the user group was to learn how to use your baby. From the fundamentals through the neat tips and tricks that will allow you to do all those things you just dream about doing with your Mac, the tutorial program of your user group has tried to fulfill your wants and needs. However, with the new Macs being able to do more and the programs you have come to depend on requiring more muscle, the Power Mac7200's in the tutorial room have outlived their usefulness for this task. Many of you have asked when new machines and new programs would be offered in the tutorial room.

Heard Your Call

Well, the Board of Directors and the Tutorial Coordinator heard your call, and approved an overhaul of the tutorial room and program. The tutorial room now has 8 new iMac DV's with 192 megabytes of RAM in each. The wiring in the room has also been upgraded to 100 baseT from 10 baseT with a new Asante Hub. A new Focus video adaptor has been purchased to allow the continued use of the overhead television monitor. New and upgraded version of programs have been installed on the iMacs. And finally the tutorial instructors have been busy working on a whole new set of offerings to entice you to use your Mac even more.

For new user, we will begin offering a set of five introductory classes. These classes will be in the new format of two hours of instruction and one hour of lab time. These classes were created specifically with the new user in mind. The pace will be slow, with lots of time for practice and questions. The instructors are VERY patient, they don't mind repeating information, and they have never heard a "dumb question". It is strongly recommended that the new user of the Mac take this new five part class as a set.

If you are not a new user, but have been a casual user of your Mac for some time, please look for classes such as Brush Up Your Mac Skills, The Mac—Digging a Little Deeper, Introduction to AppleWorks, and Ride the Internet Wave. For these medium level users we are updating the category-specific classes to cover the latest and greatest information and tips.

For the sophisticated user we have started adding to the classes on the higher end programs. Specifically with the Adobe Photoshop, Illustrator, GoLive, and InDesign classes we will be including a copy of the Classroom in a Book for each of these programs with the tutorial. Students will pay $10.00 for the book at the time of class registration or $27.00 if the book is purchased separately. The books will be given to the student during the first program level class and required for the students to bring during the upper level classes on that program.

The Fine Print

Now the catch yes, there is always a catch all of these changes and upgrades means that it is necessary to restructure the price schedule of the individual tutorials. The new pricing schedule will go into effect beginning with the October schedule of classes. The exception to this is the Higher Level classes, some of which will now receive a book with the class. These classes will start with the classes in September and the new pricing will start in September. The new price schedule outlined below reflects the price for each three hour session.

The **General Level** Classes will remain priced at $35.00 per member and $50.00 for Associate Members and non-members.

The **Middle Level** are now priced at $50.00 per member and $75.00 for Associate Members and non-members.

The **Higher Level** Classes are now priced at $75.00 per member and $125.00 for associate members and non member.

General Level Classes

Mouse Mousse - (Part 1 of 5 Part New User Set)
Your new pet needs care and training. This two hour class with one hour lab session will teach you how to tame the little beast! Tricks such as clicking, double clicking, pointing and dragging will be taught along with hints for care and feeding. If you own an iBook and would like to use that during the class, please bring it to class with you. This class may be retaken for free by members if further training is needed.
Prerequisite: None.
Number of Sessions: One (2 hours of class time and 1 hour of lab time)
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members:
$50.00
Instructor: Pat Fauquet, Jim Ritz
9/18/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm

10/16/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
11/6/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
12/4/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
1/16/01- 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm

Write It!- Save It! - Print It! - (Part 2 of 5 Part New User Set)
This introductory class will focus on using AppleWorks to write, print, and save your first computer documents. Write It! will include elementary text formatting skills. Save It! will help you learn to save documents in a central location and then find them again. Print It! will help you set up your printer, preview your document, make choices about color, and paper quality.
Prerequisite: None.
Number of Sessions: One (2 hours of class time and 1 hour of lab time)
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
9/19/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
10/17/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
11/7/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
12/5/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
1/17/01- 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm

Finding Your Way Around the Finder - (Part 3 of 5 Part New User Set)
Your computer desktop fills with windows and icons quickly! Learn the secrets of the Finder to deal with them!
Prerequisite: None.
Number of Sessions: One (2 hours of class time and 1 hour of lab time)
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
9/20/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
10/18/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
11/8/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
12/6/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
1/18/01- 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm

Surfing 101 - (Part 4 of 5 Part New User Set)
Learn how to catch your first Internet wave! This class will give an introduction to the browser window, show you some great Internet sites, teach you how to make bookmarks to find your way back and send your first email messages.
Prerequisite: None.
Number of Sessions: One (2 hours of class time and 1 hour of lab time)
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
9/21/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
10/19/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
11/9/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
12/7/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
1/19/01- 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm

Simplify Your Computer Life - (Part 5 of 5 Part New User Set)
Are you tired of having to open so many folders to get to AppleWorks or the Internet? Do you save things only to lose them? Can you throw something away when the trash can is covered? This class will teach you how to make your computer easier to use!
Prerequisite: None.
Number of Sessions: One (2 hours of class time and 1 hour of lab time)
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
9/22/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
10/20/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
11/10/00 - 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm
12/11/00 - 1 pm - 3 pm and Lab from 3 pm - 4 pm
1/22/01- 9:30 am - 11:30 am and Lab from 11:30 am - 12:30 pm

Brush Up Your Mac Skills
This class is meant for the new user as well as the user who has just upgraded to a new computer and wants to learn more about the basic operation of the Macintosh. This class is also recommended for Macintosh owners who are new to Mac OS 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.
Prerequisite: None.
Number of Sessions: Two.
Price: Standard Members: $70.00, Associate Members: $100.00, Non-Members: $100.00
Instructor: Pat Fauquet, Jim Ritz and Cordell Ratner
9/5/00 and 9/7/00 - 9:30 am - 12:30 pm each day

9/11/00 and 9/13/00 - 9:30 am - 12:30 pm each day
10/3/00 and 10/5/00 - 1 pm - 4 pm each day
11/14/00 and 11/16/00 - 9:30 am - 12:30 pm each day
12/12/00 and 12/14/00 - 1 pm - 4 pm each day
1/9/01 and 1/18/01 - 9:30 am - 12:30 pm each day

Ride the Internet Wave
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 window 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 America Online customers. It is suggested that all participants enroll in one of the e-mail courses to complete their introduction to the Internet.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00
Instructor: Pat Fauquet, Jim Ritz
9/5/00 - 1 pm - 4 pm
10/3/00- 9:30 am - 12:30 pm
11/14/00- 1 pm - 4 pm
12/12/00 - 9:30 am - 12:30 pm
1/9/01- 1 pm - 4 pm

Introduction to AppleWorks
This class will introduce the student to the integrated software package known as 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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet and Jim Ritz
9/8/00 - 1 pm - 4 pm
10/12/00 - 9:30 am - 12:30 pm
11/30/00 - 1 pm - 4 pm
12/21/00 - 9:30 am - 12:30 pm
1/25/01 - 1 pm - 4 pm

Web Pages Fast and Easy
Want a web page, but don't want to have to buy new software, learn HTML, learn about FTP, and find a page host? Let Apple do it for you! In this three hour class you can make a web page and publish it on the web! Use that page to show off family pictures or items you want to sell on eBay, post a family newsletter, put your resume online for all to see, post an invitation to a party or even make a place to share files with other people. This class works best for people using Mac OS 9, but instructions will be given that will allow users of Mac OS 8 to also use the iDisk. Bring a few photos to scan and leave with your pages on the Web!
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
9/18/00 - 1 pm - 4 pm
10/19/00 - 9:30 am - 12:30 pm
11/9/00 - 1 pm - 4 pm
12/7/00 - 9:30 am - 12:30 pm
1/19/01- 1 pm - 4 pm

Introduction to Digital Video Cameras-Finding the Right Camcorder
When you shop for a camcorder, the choices among features can seem overwhelming. This class will help you choose the right camera for your needs. Features such as automated controls, media format, image stabilization, low light shooting, batteries and accessories will be discussed. We will also discuss places to shop and how to get good prices on cameras, batteries and accessories.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: One
Price: Standard Members: $35.00, Associate Members: $50.00, Non-Members: $50.00.
Instructor: Pat Fauquet
9/21/00 - 1 pm - 4 pm
10/11/00 - 9:30 am - 12:30 pm
11/15/00 - 1 pm - 4 pm
12/13/00 - 9:30 am - 12:30 pm

Medium Level Classes

The Mac-Digging a Little Deeper
The Mac—Digging a Little Deeper will follow up on the concepts taught in Brush Up Your Mac Skills. 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 Sherlock to find files on the computer, to find

text phrases in saved data, and to find items on the Internet.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: Two
Price: Standard Members: $100.00, Associate Members: $150.00, Non-Members: $150.00
Instructor: Pat Fauquet, Jim Ritz and Cordel Ratner
9/12/00 and 9/14/00 - 9:30 am - 12:30 pm each day
10/10/00 and 10/12/00 - 1 pm - 4 pm each day
11/28/00 and 11/30/00- 9:30 am - 12:30 pm each day
12/19/00 and 12/21/00- 1 pm - 4 pm each day
1/23/01 and 1/25/01- 9:30 am - 12:30 pm each day

Making your Mac Sing
Making your Mac Sing will follow up on the concepts taught in The Mac—Digging a Little Deeper. 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 remove installed 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 will be discussed and demonstrated. Students are encouraged to bring their Macs 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 those to back up important data.
Prerequisite: The Mac—Digging a Little Deeper
Number of Sessions: Two
Price: Standard Members: $100.00 Associate Members: $150.00, Non-Members: $150.00
Instructor: Pat Fauquet and Jim Ritz
Call Office for Dates

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

Some Specifics

Who Standard members are those who have paid the standard membership dues and includes all family members living within the household of a standard member. Associate members are those who have only paid the associate membership dues.

What The tutorial program of Washington Apple Pi is hands-on training for our members in the use of Macintosh computers. The tutorial room is furnished with computers so that each student has the use of a computer during class.

When Classes are held each month at different times. Since the listing of classes in this Journal was done months in advance pleasecheck the web site at http://www.wap.org/classes/ for any changes or updates to the class calendar.

Where Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 12022 Parklawn Drive in Rockville, Maryland. A map to the office may be found on the web site at http://www.wap.org/info/about/officemap.html.

How To register for a class please call the Office during normal business hours. If you would like to inquire about a class and the office is not open, please send email with the classes you wish to know about along with a daytime phone number were the office may reach you to the email address of office@wap.org. The office will get back to you either by email or by telephone.

Fees Class fees vary due to the level of the class. Please see the specific class description for the fee for that class. Pre-registration and Pre-Payment must be made to hold a seat.

Class Size Class size is limited to 6 students per class.

Instructor Cancellation If a class is canceled 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 student cancellation must be received 72 hours prior to the scheduled class time. Student Cancellations may only be made via telephone during Washington Apple Pi's 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.

checkbook. They will learn how to make a favorites list in Internet Explorer, use the address book and send a file to someone using Outlook Express. They will also learn how to install and look up items in the World Book Encyclopedia, and 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. This class now includes the new Kid Pix Deluxe, a children's graphics and animation program.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: Two
Price: Standard Members: $100.00, Associate Members: $150.00, Non-Members: $150.00
Instructor: Pat Fauquet and Jim Ritz
9/11/00 and 9/13/00 - 1 pm - 4 pm each day
Call Office for other Dates

Networks and Networking - What does it all mean?
AirPorts, Ethernet, Router, Hub, Server, Appletalk, LAN, WAN, etc. Do you want to have a better understanding of just what all of this means and how it works? If you do then this class is for you. This class will be a discussion of all these different topics as well as just how to create a network. Come learn the possibilities offered by the Macintosh platform to share not only printers, but also files, applications and even modems between two or more computers. 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, - switch boxes, serial port expanders, USB ports and hubs, ethernet, cards and transceivers. Hubs, routers 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.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00.
Instructor: Pat Fauquet
10/2/00 1 pm - 4 pm
11/1/00 - 9:30 am - 12:30 pm
12/1/00 - 1 pm - 4 pm

E-mail with Netscape Communicator
This class will deal specifically with the e-mail capabilities of 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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00
Instructor: Pat Fauquet, Jim Ritz
9/7/00 - 1 pm - 4 pm
10/10/00 - 9:30 am - 12:30 pm
11/28/00 - 1 pm - 4 pm
12/19/00 - 9:30 am - 12:30 pm
1/23/01 - 1 pm - 4 pm

E-mail with Microsoft Outlook Express
This class will deal specifically with Microsoft's Outlook Express e-mail application. 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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00
Instructor: Pat Fauquet
Call Office for Dates

E-mail with America Online
This class will deal specifically with the e-mail capabilities of 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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00
Instructor: Pat Fauquet
Call Office for Dates

Downloading, Installing and Using Files and Software From the Internet and from CD-Rom'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 session class is intended for students who have completed Ride the Internet Wave 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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members:
$75.00
Instructor: Pat Fauquet, Jim Ritz
9/12/00 - 1 pm - 4 pm
10/5/00 - 9:30 am - 12:30 pm
11/16/00 - 1 pm - 4 pm
12/14/00 - 9:30 am - 12:30 pm
1/11/01 - 1 pm - 4 pm

We Need a Picture Here
Calling all people who don't want to be graphic professionals, but who would like to be able to put Photos, Clip Art, Draw, Paint, Vector, and Bitmap into an email, flyer or newsletter. In this three hour class students will be introduced the secrets of drawing and paint programs for the computer. They will learn how to use graphics from computer programs, clip art CDs and the Web to enhance their documents. They will learn how to re-size and re-color graphics that are "just about right" to make them "just right." Elementary retouching of photos will also be covered.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members:
$75.00
Instructor: Pat Fauquet
9/20/00 - 1 pm - 4 pm
10/20/00 - 9:30 am - 12:30 pm
11/10/00 - 1 pm - 4 pm
12/11/00 - 9:30 am - 12:30 pm
1/22/00- 1 pm - 4 pm

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: 5 Part New User Set or Brush Up Your Mac Skills. 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: $50.00, Associate Members: $75.00, Non-Members: $75.00.
Instructor: Pat Fauquet
Call Office for Dates

AppleWorks Advanced
In this class we will take AppleWorks to a new level! Learn how to make easy outlines, lists, and check-off 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 AppleWorks. 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: 5 Part New User Set or Brush Up Your Mac Skills and Introduction to AppleWorks or a good knowledge of the basics of AppleWorks.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00.
Instructor: Pat Fauquet
Call Office for Dates

Introduction to FileMaker Pro
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.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00.
Instructor: Pat Fauquet, Jim Ritz
11/2/00 - 1 pm - 4 pm

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: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members:
$75.00.
Instructor: Jim Ritz
9/14/00 - 1 pm - 4 pm
11/2/00 - 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/zip a sample of things you would like help.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00
Instructor: Pat Fauquet
Call Office for Dates

Introduction to Scanners
Bring your scanner, the software, manual and some photos to class and learn all about scanning. Learn to install the software and update it. Learn how to scan into programs like AdobePhotoDeluxe, PhotoShop and Graphic Converter. Learn about the scanner controls such as resolution, brightness, contrast, sharpness and how to use them. Learn how to prepare a photo file to attach it to an e-mail message. Learn the secrets of OCR and when to use it. If you do not own a scanner, but are in the market for one, use one of the classroom scanners and get tips on which scanner will meet your needs.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00
Instructor: Pat Fauquet
9/6/00 - 1 pm - 4 pm
10/16/00 - 9:30 am - 12:30 pm
11/6/00 - 1 pm - 4 pm
12/4/00 - 9:30 am - 12:30 pm
1/16/00- 1 pm - 4 pm

Introduction to Digital Cameras
Bring your digital camera and accessories to class and learn how to use it. Learn about media types, batteries, card readers, flash units, accessory filters and lenses and how to use them. Learn shooting and editing tips, how to print photos, how to attach them to e-mail, and how to put them on web pages. If you do not have a digital camera, come anyway and learn how to choose one. A variety of digital cameras will be available for student use during class.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00
Instructor: Pat Fauquet
9/6/00 - 9:30 am - 12:30 pm
10/18/00 - 9:30 am - 12:30 pm
11/8/00 - 1 pm - 4 pm
12/6/00 - 9:30 am - 12:30 pm
1/18/00- 1 pm - 4 pm

Improving Digital Photos and Scans
Now that you have scanned that photo, taken a picture with a digital camera, or had photo disks made, learn how to improve your photos using inexpensive programs like Adobe PhotoDeluxe and GraphicConverter. Learn to lighten, darken, crop, and combine pictures to make them ready for printing, emailing and putting them in web pages.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00
Instructor: Pat Fauquet
9/8/00 - 1 pm - 4 pm
10/17/00 - 9:30 am - 12:30 pm
11/7/00 - 1 pm - 4 pm
12/5/00 - 9:30 am - 12:30 pm
1/17/01- 1 pm - 4 pm

Web Pages-The How To Dos
When your web page grows to more than two pages, its time to get organized! Learn how web pages differ from printed documents, what you can and can't control in web page design. Learn how to organize your files to make it easier to update your pages. Learn how to register a domain, upload pages to a web server and how to get people to visit your site. Learn about graphic types and when to use them. This class replaces Web Page Workshop and is the prerequisite for all other web page classes at Washington Apple Pi.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00.
Instructor: Pat Fauquet
9/19/00 - 1 pm - 4 pm
10/2/00 9:30 am - 12:30 pm
11/1/00 - 1 pm - 4 pm
12/1/00 - 9:30 am - 12:30 pm

Making Web Pages with Adobe PageMill or Claris HomePage
Learn how to make web pages, format the text, add pictures and link pages together. Learn about tables and how to and use them. Learn about the site

Other Educational Opportunities

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

EEI—Training 703-683-7453 www.eeicommunications.com

MacAcademy 800-527-1914 www.macacademy.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

management features of these programs and how to upload your pages to the web server.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills along with Web Pages-The How To Dos or the permission of the instructor.
Number of Sessions: Two
Price: Standard Members: $100.00, Associate Members: $150.00,
Non-Members: $150.00.
Instructor: Pat Fauquet
9/15/00 - 9:30 am - 4 pm
10/4/00- 9:30 am - 4 pm
11/3/00- 9:30 am - 4 pm
12/15/00- 9:30 am - 4 pm

Jazz Up Your Web page
In this all-day workshop students will learn how to make and prepare backgrounds, headlines, clip art, buttons, rules, dividers and animations for web pages. They will also learn how to construct graphic sets. 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 a web page class in addition to this class.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills along with Web Pages-The How To Dos or the permission of the instructor.
Number of Sessions: Two
Price: Standard Members: $100.00, Associate Members: $150.00,
Non-Members: $150.00.
Instructor: Pat Fauquet
10/6/00- 9:30 am - 4 pm
11/13/00- 9:30 am - 4 pm
12/18/00- 9:30 am - 4 pm

iWant to make an iMovie!
Bring your digital video camera with some footage in it and learn how to make iMovies. Learn shooting tips, how to use the software, and what to do with completed movies. This is an introductory class and is intended for new users to the program. If you do not have a camera yet, come anyway and learn the basics on some stock footage. Three hours.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00.
Instructor: Pat Fauquet
9/22/00 - 1 pm - 4 pm
10/11/00 - 1 pm - 4 pm
11/15/00 - 9:30 am - 12:30 pm
12/13/00 - 1 pm - 4 pm

I've made an iMovie—Now What?
Bring your digital camera with a video you have begun to edit. Learn more about transitions, titling, adding audio tracks and saving your masterpieces. Learn what codecs to use, how to save to QuickTime formats for the web and how to burn your masterpieces to CD.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills
Number of Sessions: Two
Price: Standard Members: $100.00, Associate Members: $150.00,
Non-Members: $150.00.
Instructor: Pat Fauquet
9/26/00 - 9:30 am - 4 pm
10/13/00 - 9:30 am - 4 pm
11/17/00 - 9:30 am - 4 pm

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 de-

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.

signed 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 pre-defined templates such as the letter template that are included in Word.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00.
Instructor: Cordell Ratner
Call Office for Dates

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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One.
Price: Standard Members: $50.00, Associate Members: $75.00, Non-Members: $75.00.
Instructor: Cordell Ratner
Call Office for Dates

Higher level Classes

Coming soon: Adobe LiveMotion also DreamWeaver.

Adobe GoLive 1: Introduction
This class will cover the first three lessons in the Adobe GoLive Classroom in a Book. Students will learn to start a page, add and format text and pictures, use tables, and link pages together. They will learn about dynamic components, templates, and image maps. They will also learn elementary site management.
Prerequisite: Web Pages-The How To Dos OR Making Web Pages with Adobe PageMill or Claris HomePage OR the permission of the instructor.
Number of Sessions: Two.
Price: Standard Members: $150.00, Associate Members: $250.00,
Non-Members: $250.00
Book Price: $10.00 to be paid with class registration.
Instructor: Pat Fauquet
9/25/00- 9:30 am - 4 pm
10/23/00- 9:30 am - 4 pm
11/20/00- 9:30 am - 4 pm

Adobe GoLive 2:, Frames, Animation and Site Management
This class will cover lessons four, five and eight in the Adobe GoLive Classroom in a Book. Students will learn how to build a web page using frames. They will learn how to use rollovers and floating boxes to add interest to their web pages. They will also learn how to use the site management tools in Adobe GoLive to convert old site and update sites easily.
Prerequisite: Adobe GoLive 1: An Introduction OR the permission of the instructor.
Number of Sessions: Two.
Price: Standard Members: $150.00, Associate Members: $250.00,
Non-Members: $250.00
Book Price: same book as for Adobe Go Live 1.
Instructor: Pat Fauquet
9/27/00- 9:30 am - 4 pm
10/26/00- 9:30 am - 4 pm
11/27/00- 9:30 am - 4 pm

Adobe GoLive 3: Editing QuickTime Content
Adobe GoLive has a great QuickTime editor built into the program. This class will cover its use in making and editing QuickTime movies. Instruction will also be given for how to add QuickTime VR scenes, panoramas, and objects to web pages
Prerequisite: Adobe GoLive 1: Introduction OR the permission of the instructor.
Number of Sessions: Two.
Price: Standard Members: $150.00, Associate Members: $250.00,
Non-Members: $250.00
Book Price: same book as for Adobe Go Live 1.
Instructor: Pat Fauquet
10/30/00- 9:30 am - 4 pm
12/20/00- 9:30 am - 4 pm

QuickTime VR—Making a Panorama
They're showing up everywhere—tours of homes, museums, businesses and scenic spots. Learn how to shoot a panorama, how to stitch one together, and what software and equipment is needed. This class will include the use of freeware shareware

and commercial software. Students will use a range of digital cameras to produce several panoramas that will be stitched into tour with nodes linking the panoramas. Pan heads and leveling devices will be used and discussed. Adding panoramas to web pages will complete the day.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills along with Web Pages-The How To Dos or the permission of the instructor.
Number of Sessions: Two.
Price: Standard Members: $150.00, Associate Members: $250.00, Non-Members: $250.00
Instructor: Pat Fauquet
10/24/00- 9:30 am - 4 pm
11/21/00- 9:30 am - 4 pm

QuickTime VR—Making a Virtual Object
Imagine being able to manipulate a picture of a three dimensional object! Rotate it, turn it, bring it closer. Learn to produce object movies that can be placed on web pages. This class will include the use of freeware shareware and commercial software. Students will use a range of digital cameras to produce several VR objects. Adding these object movies to a web page will complete the class. This is a three hour class. -suggest it is offered at higher price level.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills along with Web Pages-The How To Dos or the permission of the instructor.
Number of Sessions: Two.
Price: Standard Members: $150.00, Associate Members: $250.00, Non-Members: $250.00
Instructor: Pat Fauquet
10/31/00- 9:30 am - 4 pm
11/29/00- 9:30 am - 4 pm

Beginner Final Cut Pro
This three hour beginning Final Cut Pro class is the jump off point for people who would like to start using this powerful program for making videos. Topic to be covered are listed below. Hardware and Software Setup: System/Memory settings; Camera/Deck/Monitor connections; Scratch Disk setup; Final Cut Pro preferences. Final Cut Pro — The Interface: Browser; Viewer; Timeline; Toolbar. Logging and Capturing: Setting the log bin; Transport controls; Ins and outs of timecode; Selected capture; Handles.Editing: Trimming clips; Keyboard shortcuts; Transitions; Dynamic previewing and rendering. Titles: Title and action safe areas; Drop shadows. Filters and Effects: Applying. Audio: Importing from audio CD. Final Output: Print to Video vs. recording from Timeline; Exporting QuickTime file.
Special Instructions: Students should bring their Digital Video Camera, cables and software with them to class.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One.
Price: Standard Members: $75.00, Associate Members: $125.00, Non-Members: $125.00
Instructor: Barrett Thomson
Call Office for Dates

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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00, Non-Members: $125.00
Book Price: $10.00 to be paid with class registration.
Instructor: Paul Schlosser
10/11/00 - 6 pm - 9 pm
11/8/00 - 6 pm - 9 pm
12/13/00 - 6 pm - 9 pm
1/10/01 - 6 pm - 9 pm

Adobe PhotoShop Part 2
Learn how to isolate different parts of an image or layers. Edit layers as discrete artwork with unlimited flexibility in composing and revising an image. Create more complex effects in your artwork using layer masks, clipping groups, and adjustment layers. This class includes both layer basics covered in the Photoshop tutorial and advanced layer techniques covered in the Classroom in a Book, Lesson 8.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills along with Adobe PhotoShop Part 1 or a knowledge of the topics covered in that class
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00, Non-Members: $125.00
Book Price: $10.00 to be paid with class registration.
Instructor: Blake Lange
10/17/00 - 7 pm - 10 pm
11/14/00 - 7 pm - 10 pm
12/19/00 - 7 pm - 10 pm
1/16/01 - 7 pm - 10 pm

Adobe InDesign 1
Work through a demonstration of Adobe InDesign providing an overview of the key features. Get to know the navigation features for using the drawing, layout, and editing capabilities. Learn the work area including the document window, the pasteboard, the toolbox, and the floating palettes. This class covers ""A Quick Tour of Adobe InDesign" (the same as Chapter 1 in the User Guide) and "Lesson 1: Getting to Know the Work Area" from the Adobe Classroom in a Book.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00, Non-Members: $125.00
Book Price: $10.00 to be paid with

class registration.
Instructor: Blake Lange
9/26/00 - 7 pm - 10 pm
1/30/01 - 7 pm - 10 pm

Adobe InDesign 2
Learn to use the tools for setting up pages to ensure a consistent page layout and to simplify your work. Learn how to set up master pages and use columns and guides. Work with frames to hold either text or graphics. Learn how InDesign gives you flexibility and control over your design. This class covers "Lesson 2: Setting Up Your Document" and "Lesson 3: Working with Frames" from the Adobe Classroom in a Book.
Prerequisite: 5 Part New User Set or Brush Up Your Mac Skills along with Adobe InDesign 1 or a knowledge of the topics covered in that class.
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00,
Non-Members: $125.00
Book Price: Same book as used with Adobe InDesign 1.
Instructor: Blake Lange
10/31/00 - 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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00,
Non-Members: $125.00
Book Price: $10.00 to be paid with class registration.
Instructor: Blake Lange
11/28/00 - 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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00,
Non-Members: $125.00
Instructor: Paul Schlosser
9/27/00 - 6 pm - 9 pm
10/25/00 - 6 pm - 10 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 bring along on floppy a sample of things for which you would like help.
Prerequisite: Introduction to Quark XPress or a good working knowledge of QuarkXpress and its interface.
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00,
Non-Members: $125.00
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: 5 Part New User Set or Brush Up Your Mac Skills.
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00,
Non-Members: $125.00
Book Price: $10.00 to be paid with class registration.
Instructor: Blake Lange
Call Office for Dates

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: 5 Part New User Set or Brush Up Your Mac Skills along with Introduction to PageMaker or a good knowledge of the basics of PageMaker and its interface.
Number of Sessions: One
Price: Standard Members: $75.00, Associate Members: $125.00,
Non-Members: $125.00
Book Price: Same book as used with Introduction to PageMaker.
Instructor: Blake Lange
Call office for dates ■

PROFESSIONAL SELF-TRAINING CD'S
FreeHand • Photoshop • Acrobat • PageMaker • InDesign

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Can you create a document correctly?

Oy Europrint Ltd has produced professional self-training CDs to meet with its customers requirements related to the application softwares of graphic design. The self-training CDs of FreeHand, PageMaker, Photoshop, Adobe Acrobat and InDesign (Mac/PC) are destined to the design and implementation of printed products. Euro Print's self-training CD's are designed to be used for learning document design and imposition skills and as teacher's aid.

PRODUCT	PRICE	4-10 CD'S
SEFL-TRAINING CD	60 USD	+25 USD
TWO SEFL-TRAINING CD'S	120 USD	+25 USD
DESIGNER 300 Broschure bank	340 USD	+25 USD

The prices includes the mailing and sending expences and VAT. The ordeder will be responsible for the possible tax charges. The additional postal payment of 4-10 CD's + 25 USD.

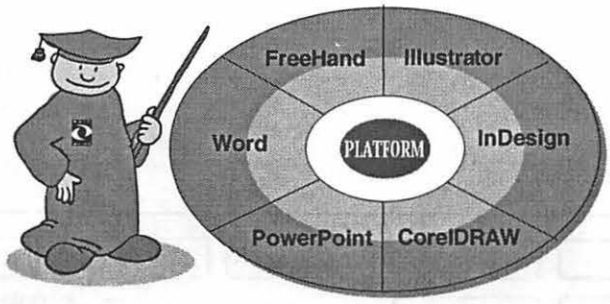
Do you want to reduce your brochure design and implementation costs to half?

More and more companies design and print their brochures by themselves. Enterprises and the public administration have acquired the most common application softwares (PowerPoint, Word, CorelDRAW, FreeHand, PageMaker, Photoshop, Acrobat and InDesign) in order to produce their basic products of communication by themselves.

The DESIGNER 300 brochure bank enables you to produce basic products of communication without any specific skills of graphic design. Its 300 templates permit the end user to plan different end products by simply adding the text and image material related to the idea in question.

It is as easy as this?

Choose DESIGNER 300 on a platform, in which you already have an application software licence.

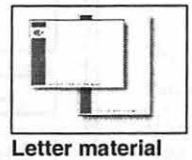


Brochures

Invitations

Posters

Business cards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Personal Backup™

by David L. Harris

BACKING UP at least your data files is always recommended as one of the top priorities for any computer user. But if it is a difficult chore, it is less likely to be done. I have used Personal Backup since I got it with my Zip drive in 1995. It may not be the most sophisticated backup hardware, but I find it easy to use—and therefore, I actually use it—after almost every computer session. Peace of mind...

Personal Backup is low-cost, generally easy-to-use software from ASD Software, for backing up your hard drive to another hard drive, floppies, Zip, or Jaz disks, plus SyQuest or magneto-optical cartridges. It generally will not work with DAT tapes or CD/DVD discs. It will back up data to another drive on a network.

Personal Backup produces copies of your files the same way the Finder does, not compressed or coded in any way, so that the backed-up files can be immediately accessed, without the need for any additional software to recover them. One thing it cannot do is save blocks of data that are so large that they must be split across several disks. If you can divide information that you want to back up into parts small enough to put on one disk at a time, Personal Backup will do that just fine.

Personal Backup is a Control Panel. If you have enough room on your Menu Bar, it will put up an access menu there. If not, you can turn off its menu and access it in the Control Panels folder, or put an alias of it elsewhere (I have mine in my Favorites folder).

So that you can decide if Personal Backup is for you, I will attempt to show, with pictures, how to use it.

Getting Started and Setting Up

Figure 1 shows Personal Backup when you first start it. In order to back up anything, you must first create a "script" to tell the program where to find the material, what to back up, and to what drive to copy it. Click on the "New" button and you see the Configuration panel, Figure 2. It has buttons to locate the Source and Destination of the files to be copied. In each case you navigate with the familiar Macintosh dialog box to choose the source drive and file or folder, and the destination drive and folder.

Figure 3 shows that I have chosen source and destination drives, and I am going to back up the contents of a folder, which I named "Internet" on both the drives. There are controls for setting times for a backup to automatically occur, as well as other options. At this point the "Exceptions" button is available; I can define some of the contents of the Internet folder that I do not want backed up—for instance, maybe a Web browser's cache folder. See Figure 4. Add items to the exceptions category with the "Add" button.

Clicking on the Configure button at the lower right of Figure 3 produces what you see in Figure 5: backup options. These are pretty self-explanatory. You can set different ones for each Source item. I have some folders whose contents I back up without regard to what files may have changed or been deleted within them. With others, before I back up, I have Personal Backup show me a list of items that are in the Destination folder

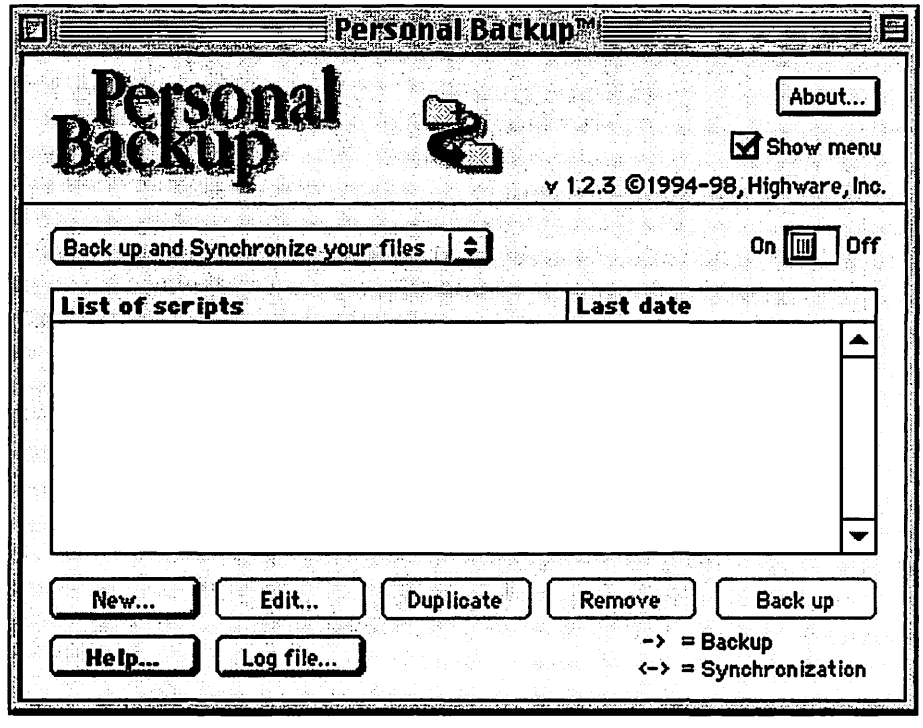


Figure 1

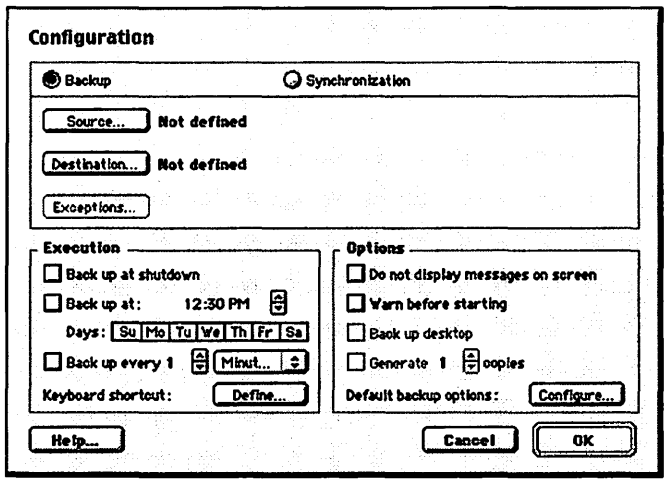
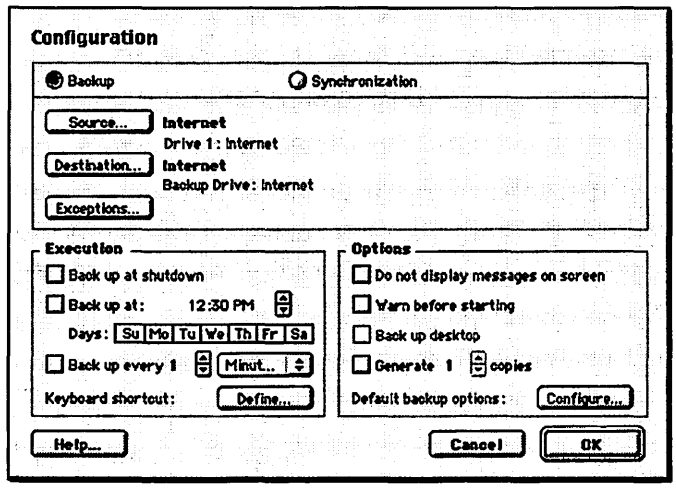


Figure 2 (above) Figure 3 (below)



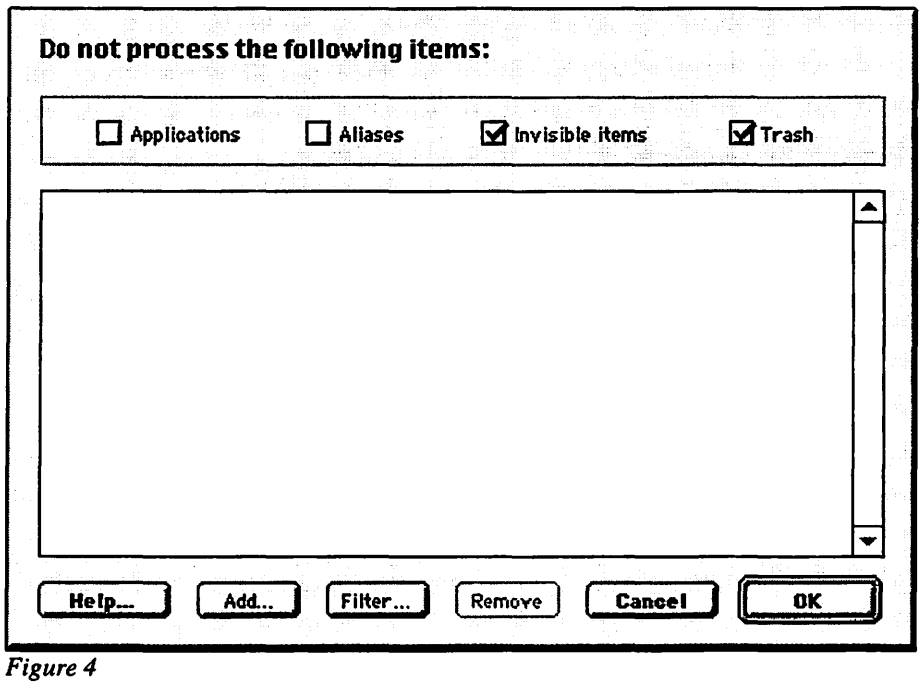


Figure 4

but not in the Source folder.

Figure 6 shows that I have created an entire script list of folders to back up. I usually name those folders on the source and destination disks with the same name. I have clicked on the Internet folder, and all the buttons at the bottom of the panel are available.

Backing Up

Now I click on "Back up;" see Figure 7. I set the Internet script to always inform me if there are files in the destination folder that are not in the source folder. If I do nothing but click "OK," all those files will be deleted, and a new set written to the destination Internet folder from the source Internet folder. That is indicated by the little trash cans to the left of each file name. Those are files on the destination drive that are not in the source. Sometimes I discover I deleted a source file, but now want to keep it. By clicking on the trash can, I can choose to keep the file in the destination, even though it has been deleted from the source.

Once I have decided what to do with possible orphan files, I click OK; the result is shown in Figure 8. Personal Backup shows the files that are being copied or deleted. It only copies files that have been changed or are new; it does not copy unchanged ones. And the process is very rapid—usually too fast to see most of the file names.

Help!

As you can see from many of the illustrations, help is usually a button away. Figure 9 shows an example.

Other Options

By referring to Figure 6 again, you can see that it is also possible to synchronize files between two sources. This is useful if you have two computers, perhaps a desktop and a PowerBook, with many files that are the same. You can use Personal Backup to compare the two, replacing older files with newer ones, whichever computer has the newer version. I have not used this feature.

There is also, from the pulldown menu at the upper center, an option to record keystrokes. This is another way of preserving data in case of catastrophe. See Figure 10. I haven't used this option (you can see that it is turned off, while backup is turned on).

Personal Experience

I used Personal Backup with my Performa 475, and backed up to Zip

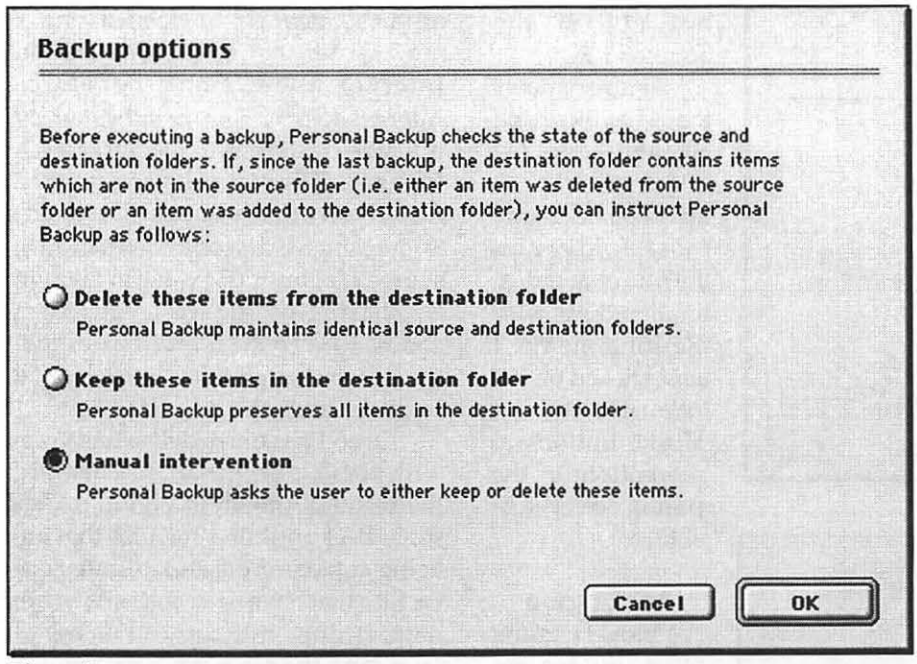


Figure 5

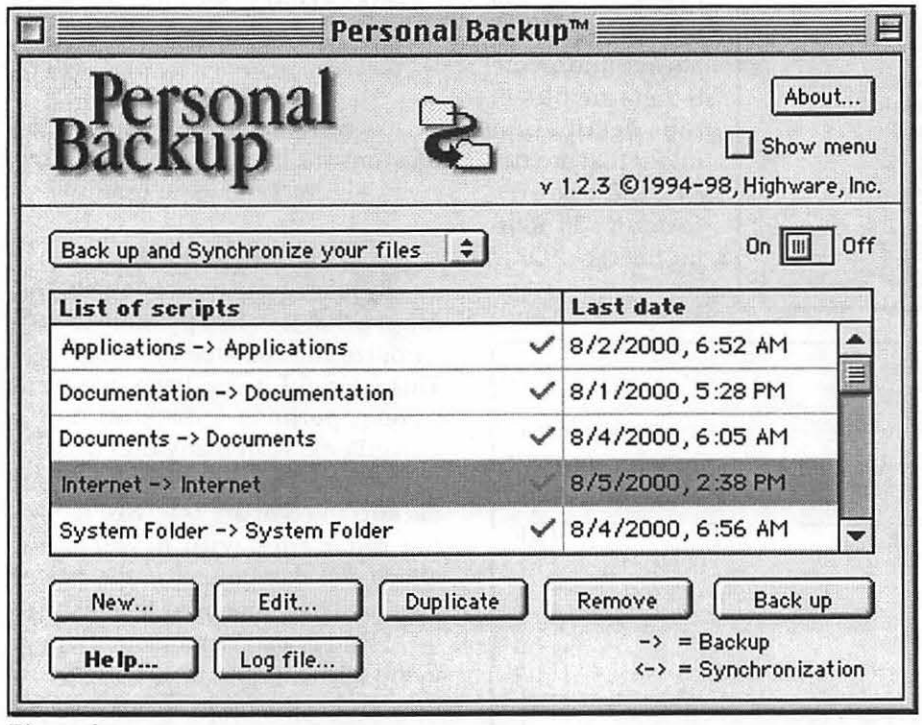


Figure 6

disks. When I got my B&W G3, I used it the same way. But Zip disks are too small to back up many entire folders these days. I bought a backup 8 GB IDE hard drive, and formatted it as HFS+. Personal Backup failed to cope with the changes: it usually complained that my 8 GB disk was full, and it could not copy files to it. I had to upgrade to a newer version: 1.2.3. The upgrade cured these problems—most of the time. Even though version 1.2.3 is supposed to be HFS+ compatible, unfortunately it still occasionally

"Personal Backup is low-cost, generally easy-to-use software from ASD Software, for backing up your hard drive to another hard drive, floppies, Zip, or Jaz disks, plus SyQuest or magneto-optical cartridges. It generally will not work with DAT tapes or CD/DVD discs. It will back up data to another drive on a network."

says that my backup drive is full, though it contains gigabytes of free space. I have found that by deleting a sub-folder or its contents on the backup drive, I can get Personal Backup to complete a backup. But only experience, and a sense of which sub-folders have probably been written to in a computer session, let me guess which is probably the offending one. This bug, if it is not confined to my system, makes me hesitate to recommend Personal Backup to its most likely audience: new or average home users.

Except for the bug's sporadic appearance, once the scripts are set up, using Personal Backup is extremely easy. Because my computer is not always on, I do not use the automatic backup options. All I do is launch the program (I have the menubar menu turned off), click on the folder to be backed up, or shift-click on a range of folders, then click the Back up button. It goes through the process, showing you, if you have chosen the option, which destination files are not in the source folder, then copying files rapidly. A couple of minutes at the very most to back up all my frequently-

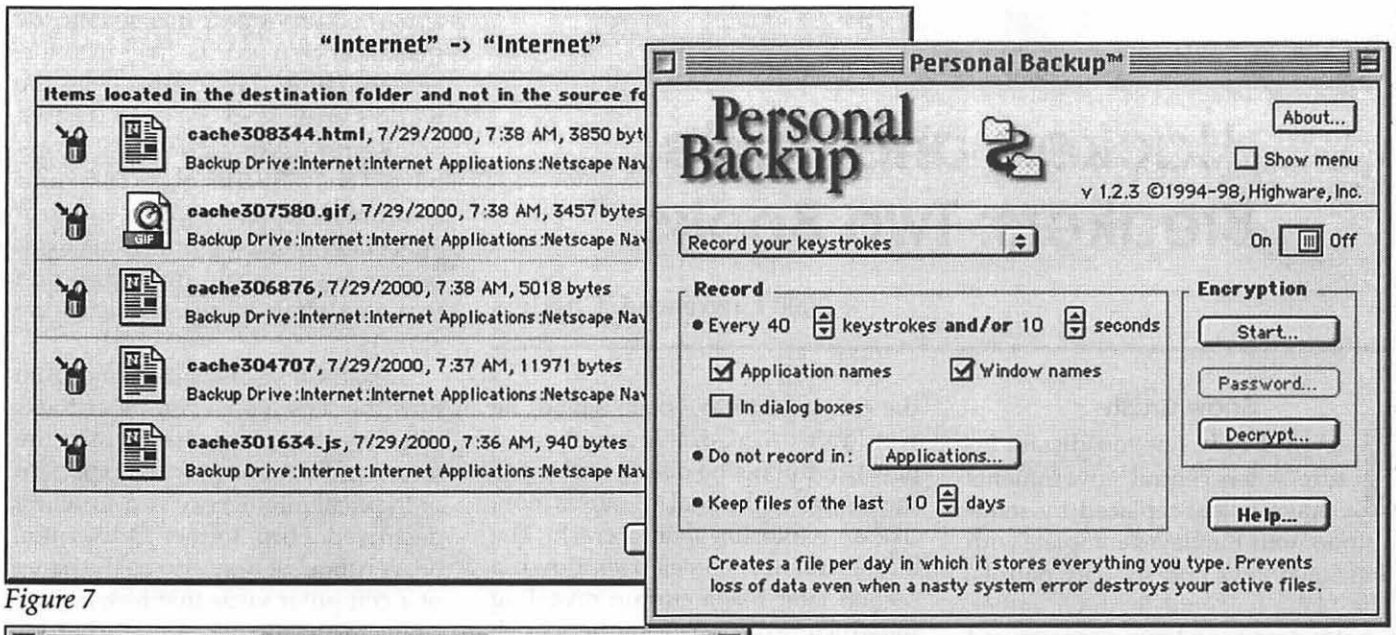


Figure 7

Figure 10

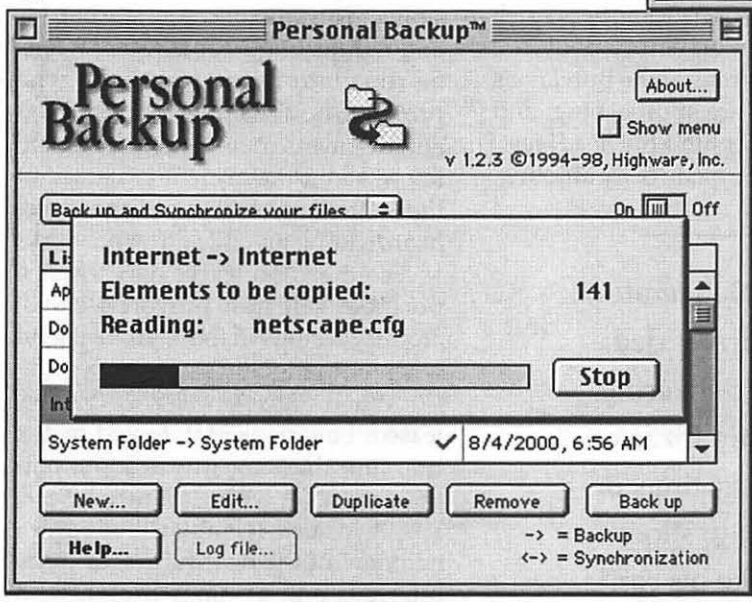


Figure 8

changed folders to the second hard drive. If I have an item set up to back up to a Zip disk, I just insert the disk and click to back up. Personal Backup will request the disk if it is not in the drive.

Because backing up is so easy, I actually do it.

Wish list?

1. Fix the bug that makes Personal Backup sometimes think my backup drive is full. (I have not read about this happening to anyone else. I also have not discovered a pattern to when it appears.)

2. Make the scripts movable. The scrollable list of items to be backed up appears in the order in which you create them. I have found no easy way to change this. If you could drag items in the list up and down, it would make backing up a group easier. The order in which you create them is not necessarily the order in which you use them most frequently. It is possible, on the other hand, to shift-click a range of adjacent items, or Command-click ones that are not adjacent, to back up more than one folder with a single click of the Back up button.

Requirements

Personal Backup is now at version 1.2.4, which is said to be OS 9 compatible. It may be downloaded from ASD Software's Web site at <http://www.asdsoft.com/>. The cost is $49. It may also be available from Macintosh resellers. With the current version, 1.2.4, the minimum recommended system is a Mac SE, System 7.0, and 4MB RAM. ■

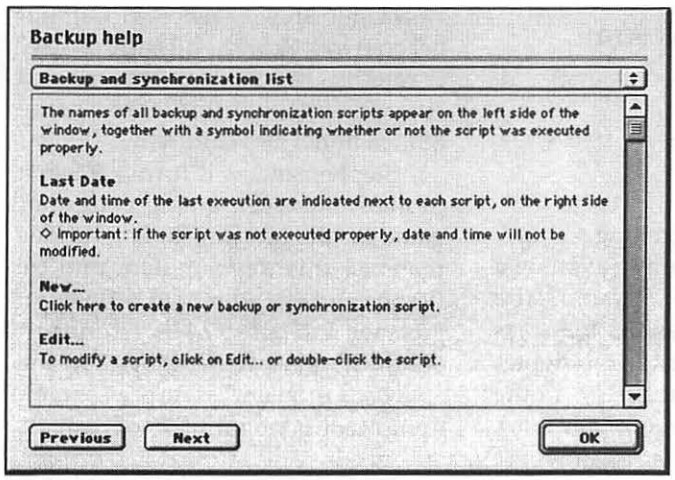


Figure 9

Hackers and Code Breakers: Two Books

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Snow Crash

IT IS THE not too distant future, when central governments have fallen, replaced by semi-autonomous Burclaves complete with their own laws and security patrols, The Mafia has gone legit. Or, rather, what it does is no longer constrained by the ineffective government, and Uncle Enzo appears on billboards advertising the message: "The Mafia: you've got a friend in The Family. Paid for by the Our Thing Foundation." Uncle Enzo, among other things, heads up the giant CosaNostra Pizza chain, which promises to deliver your pizza in 30 minutes, or else.

Hiro Protagonist, the hero and protagonist of Neal Stephenson's *Snow Crash*, works for CosaNostra Pizza #3569 in The Valley, east of Los Angeles. He is a Deliverator, an elite driver dedicated to delivering CosaNostra Pizza on time, every time, or you get to shoot him, take his car, and file a lawsuit against CosaNostra Pizza. To do his job, he has a wickedly powerful car, lightning fast reflexes, and a thorough knowledge of the layout of all local TMAWHs, the ubiquitous armored, gated communities developed by The Mews at Windsor Heights Development Corporation.

On page 33 of this 470 page novel, Hiro is having a bad day. Running late through circumstances beyond his control, he takes a shortcut through a Burclave that turns disastrous:

If it had been full of water, that wouldn't have been so bad, maybe the car would have been saved, he wouldn't owe CosaNostra Pizza a new car. But no, he does a Stuka into the far wall of the pool, it sounds more like an explosion than a crash. The airbag inflates, comes back down a second later like a curtain revealing the structure of his new life: he is stuck in a dead car in an empty pool in a TMAWH, the sirens of the Burclave's security police are approaching, and there's a pizza behind his head, resting there like the blade of a guillotine,

"He is a Deliverator, an elite driver dedicated to delivering CosaNostra Pizza on time, every time, or you get to shoot him, take his car, and file a lawsuit against CosaNostra Pizza."

with 25:17 on it.

Then things get exciting.

Hiro, when not failing at being a Deliverator, is the "Last of the freelance hackers," as his business card says, and "Greatest sword fighter in the world." Unfortunately, all the programmers who make money work as part of corporate teams, so Hiro the freelancer is so poor he lives in a storage container. His claim to be the world's greatest swordsman is based on his prowess in virtual reality combat. (His hacking skills and swordmanship are used to excellent effect later on as the punchline in an outrageous, involved, multi-page pun that also plays a critical role in the story.)

Snow Crash takes its name from how the screen on a computer looks after a particularly bad crash: the screen turns to snow, with no pattern or logic, all intelligence and structure destroyed. Hiro, former Deliverator, hears rumors it may also be the name of a computer virus that has, impossibly, crossed the silicon/brain barrier, and is infecting people. Meanwhile, he runs into his ex-girlfriend, who proves to be as competent as he is inept, discovers more than he wants to know about the ancient language of the Sumerians, teams up with a skateboard-riding juvenile girl who works as a courier, and learns how to use a portable rail gun powered by an atomic reactor. All these prove useful when Hiro literally saves the world.

When *Snow Crash* was first released, I overlooked it, fooled by the title into thinking it was some potboiler dealing with cocaine or crack. It isn't. Instead, it is a startlingly original view of the near future, at times hilarious and at times brutal, with striking characters who try very hard to act like stereotypes, but fail and become individuals. It is also strictly R rated, with "mature themes and situations" unsuitable for some adults, much less children.

Stephenson, as it turns out, first plotted *Snow Crash* as a computer game for the Macintosh. For various reasons, this never jelled, and he fleshed out the idea into a novel of great wit and density. His description of how hackers work — the "hacking away at a problem" style of programming made famous by Steve Wozniak,

not the computer vandal sort of hacking — is both engrossing and far more accurate than any other novel I've read. Highly recommended, though with caveats about the mature themes, etc.

Cryptonomicon

If *Snow Crash* is about the near future, *Cryptonomicon* is about the present, and the past. If Snow Crash is all about computer programming, language, hacking and debugging, *Cryptonomicon* is all about computer programming, language, codes and code breaking. Both of them are mini-textbooks on their respective subjects, enhanced and made far more riveting than any textbook by rich, dense stories.

Cryptonomicon is a massive novel, at 918 pages, with two parallel timelines, one just prior to and through World War II and the second in the present. The chief protagonist for the earlier portion is Lawrence Pritchard Waterhouse, the son of a West Virginia preacher with a fascination for patterns. This fascination leads to an interest in church organs, music, and eventually mathematics, where he demonstrates a rarified genius. But not much common sense or practicality: he gets drafted into the Navy. As an enlisted member of a Navy band, he has a splendid view of the Japanese attack on Pearl Harbor from the perspective of one of the targets: a US Navy battleship. The fascinating patterns of planes, intermixed with the chaos of explosions, proves almost fatal; it doesn't really occur to him that his life is in danger.

Half a century later, his grandson, Randy Waterhouse, is part of a team trying to set up a data haven in Southeast Asia. Randy is only slightly more in touch with reality than his grandfather, and is a survivor of several high-tech companies that are now either owned by someone else or died and faded away. Randy is a communications expert, skilled at making computers and telephones and networks talk to one another, but inept at talking to other human beings, particularly women.

Linking the two plots are a host of historical figures, from Alan Turing to General Douglas MacArthur, plus a vast array of historical and mythical events. The Magic and Ultra code-breaking efforts play a central role, as does the legendary gold horde buried by General Yamashita's troops just as the Philippines were liberated by American troops. In the past, Lawrence Waterhouse, absorbed in the beauty of numbers, draws on the resources of Britain and the United States to break German and Japanese messages. In the present, his grandson Randy tries to keep all governments, as well as talented snoops, from reading his own E-mail, and the E-mail of paying clients. Both find their intellectual passions distracted by other passions.

Interspersed throughout the book is a very thorough explanation of how networks work, of the theory and application of cryptography, and of other matters more obscure. At one point, in wartime London, Lawrence Waterhouse prepares to visit a weather-beaten offshore island with more than its fair share of British eccentricities, so he tracks down a reference book:

Waterhouse found a worm-eaten copy of the *Encyclopedia Qwghlmiana* in a bookshop near the British Museum a week ago and has been carrying it around in his attache case since then, imbibing a page or two at a time, like doses of strong medicine. The overriding Themes of the Encyclopedia are three, and they dominate its every paragraph as totally as the Three Sgrhs dominate the landscape of Outer Qwghlm. Two of these themes are wool and guano, though the Qwghlmians have other names for them, in their ancient, *sui generis* tongue. In fact, the same linguistic hyperspecialization occurs here that

> "...it is a startlingly original view of the near future, at times hilarious and at times brutal, with striking characters who try very hard to act like stereotypes, but fail and become individuals. It is also strictly R rated, with 'mature themes and situations' unsuitable for some adults, much less children."

supposedly does with the Eskimos and snow or Arabs and sand, and the *Enccyclopedia Qwghlmiana* never uses the English words "wool" and "guano" except to slander the inferior versions of these products that are exported by places like Scotland in a perfidious effort to confuse the naïve buyers who apparently dominate the world's commodity markets. Waterhouse had to read the encyclopedia almost cover-to-cover and use all his cryptanalytic skills to figure out, by inference, what these products actually were.

You, too, should read *Cryptonomicon* from cover to cover, though the reading should be far more pleasant. Highly recommended, with the same cautions about mature language and themes as *Snow Crash.*

Neal Stephenson, Snow Crash. Bantam, 1992. 470 pp. $6.99. ISBN 0-553-56261-1

Neal Stephenson, Cryptonomicon. Avon, 1999. 928 pp. $16.00 ISBN: 0-380-78862-4 ■

The Telex M-560 Super-Directional USB Digital Microphone:

A Review by Pat Fauquet

EARLY IN THE life of the Macintosh computer family the people at Apple began including a microphone with most Macintoshes. Children in schools loved the ones included with the LC line. Small circular disks on long cords made great items to swing and dangle in the never-ending search for things to use to drive teachers crazy. Few software programs included software for recording speech and music so most of the microphones ended up in boxes of tangled cables.

The later addition of the triangle shaped PlainTalk did little more than give home and school users another piece of computer junk to add to their mounting piles of cables, dead mice and soiled mouse pads. Although microphones were great for recording system sounds and adding voice to multimedia projects, daily use of the computer microphone was very limited. A few people began using voice recognition to control their computers. A few more began using the microphones for computer based telephones. However, the general public saw little use for their microphones and most were lost.

In recent months speech recognition got a big boost on the Macintosh platform with the release of IBM's ViaVoice software. People now had a reason to talk to their computers, and the computers even began to respond by turning the users voice into written text.

The microphones shipping with ViaVoice required an audio-in port on the computer, and the new iBooks are lacking the port. Speech recognition users became tied to their computer by a headset and cord. Some users complain of headaches from the pressure of the head bands on headsets and others disliked having to use the computer's processor to convert the analog signal of the their microphone to the digital one required by the program.

Then USB microphones entered the picture. Imagine a microphone that could sit on your desk. Imagine one that could sort out your voice from the myriad of other noises present in a home school or work environment. Imagine one that captured your voice digitally to speed voice recognition.

The Telex Super-Directional USB Digital Microphone was developed to fill those needs. The microphone is housed at the end of a tube approximately one foot long. At the far end is a c-shaped hinge attached to an oval stand that is about six inches long. Made of high-grade plastic, the user does not have to fear breaking the microphone if he accidentally knocks it around, and that is a distinct possibility. Although not easy to tip. The whole microphone is a bit light for desktop stability. I am tempted to pry off the bottom plate to add a few lead fishing weights or sand to make the base a bit more substantial.

The hinge allows the microphone tip to be adjusted to a wide variety of heights and this is important if the only free space on your desk happens to be the top of the monitor, printer or scanner. The hinge can also be used as a handle if you feel the need to lean back in your chair and hold onto the mike.

As a frequent user of IBM ViaVoice, I was looking for a microphone that did not always have to clamp to my head. I wanted a microphone that did not leave me with wires across my arms and lap.

I thought the Telex USB microphone would be a very convenient addition to the headset mike, but the reality of voice recognition software is that the user must re-train the software for each microphone used, and the dictionary of unusual words is built for each individual microphone that you use. So, if you plan to use the Telex microphone to supplement a headset, be prepared to do a lot of extra training.

Speech recognition with a Telex USB microphone, in a quiet room, is equal to that of the microphone headset supplied with ViaVoice. However, in a noisy setting it seems to have more trouble discerning which sounds were made by the dictator and which were ambient background noise. In a room with moderate background noise, the Telex USB microphone beat the performance of the headset.

Although having the microphone on the desk instead of on your head sounds like a nice feature, I had difficulty finding the optimal place to set it. The small included manual suggests having the head 12 to 24 inches from your mouth. That meant having it sit on one of the pull-out extension tables of my very old executive desk, placing it between the keyboard and the monitor or at the end of the keyboard. Those areas are pretty well taken up. My track ball belongs on the right extension, reference books and notes take up the left extension and placing the microphone in front of the keyboard blocked my view of

the monitor. Keeping it at the end of the keyboard on the left meant reaching over it or knocking it over as I grabbed papers from the printer. Keeping it on the right side was little better as that is where I keep my mouse and drawing tablet. I thought about suspending it from the ceiling, but that area contains the ceiling fan and lights. One to two feet is certainly a short distance on a computer desk! After two feet, the microphone seemed to have a great deal more difficulty picking up enough of my voice for optimal recognition. Leaning back in my chair or turning to read a passage from a book often took me out of this optimal range for recognition.

The microphone includes a six-foot cord. Once again, in theory that is a sufficient length. In practice, I like to keep my hub at the far corner of my desk, on the right side. The best place for the microphone is on the left, so I had one more cable to add to the tangle of cords and there is not really enough length to be able to comfortably route it behind the monitor, CD holders etc. to keep it from being snagged on other things in its path. In contrast, there is almost 10 feet of cord attached to the headset and the length is further offset because I do not feel the need to try to run the cable around and behind other objects on my desk.

In the end, I often end up with the microphone cradled in my lap with my legs crossed to help anchor it, or I found myself holding it as I dictated into it. Neither method was helpful for long sessions when I needed to refer to manuals and papers.

Another use I found for the mike was in the production of short QuickTime instructional videos being captured from the desktop. It is outstanding for this activity. The microphone captures the speaker's voice with the best clarity of any microphone I have used in its price category. Having the microphone on a stand prevents the annoying scratching noises that are frequently captured when holding a conventional computer microphone. It is easier to use and set up than most stand mikes in its cost family. It is excellent for capturing the voices of two people who might be interacting in an instructional video. Its only drawback is the lack of weight in the base of the stand.

Setting up the Telex USB microphone to work with the Mac is very easy. Plug in the USB cord, go to the "Sound" control panel or the control strip and choose USB audio for the sound input choice. There are no drivers to install or electrical cords to plug in. It just works.

The microphone ships in a formed plastic bubble package, made to be placed on a peg. The manufacturer's suggested retail price is $69.99. This price seems high since the first edition of ViaVoice which performs only voice recognition into a speech pad application ships with a conventional microphone headset for $79.00. The new Via Voice Enhanced Edition which allows the voice command of your computer and speech recognition into a selected list of applications and ships with a digital USB headset lists for $139.00

The included User Manual would be easy to miss as it is slipped between the two layers of card stock that are printed with advertising. The packaging indicates that it is a product for Windows 98 computers. The manual inside is written for PC users. Nothing indicates it will work with a Macintosh. A trip to Telex web site, http://www.computeraudio.telex.com mentions that the microphone will also work with the Macintosh and has a link to a downloadable . pdf version of the manual. Unfortunately, the screen prints inside the manual are poorly re-sized and are difficult to read on the screen. Printing them out on a postscript laser printer yielded equally poor results. The site also shows the Telex H-531 USB Digital Headworn Microphone which will work with the Macintosh. This microphone might be a better answer for iBook users who want a microphone for voice recognition to keep in their computer bag, However, it lacks a speaker and so the user must rely on the iBook's built in speaker. This is definitely a missing feature since voice recognition software relies on auditory messages to let you know what is going on.

I looked for a booth from Telex at the New York MacWorld in July. Unfortunately, they were not in attendance. I was also unable to find any vendors who were showing the Telex microphones. The company has been around for over 60 years and makes a many PC voice and audio solutions. This is apparently their first venture into the Macintosh marketplace. They have a few things to learn about marketing to Mac owners.

The Telex M-560 Super-Directional USB Digital Microphone is good for voice recognition. Although it beats the microphone included in IBM ViaVoice in several settings, it is not a clear winner. The product is well-made, but the base is little too lightly weighted. It is a clear winner in recording voice into QuickTime movies, but is more expensive than a product of its caliber might be expected to be priced. If you hate headsets, it is clearly a product to consider. If you need a microphone to leave at home on your desk, it fills the bill. If you are buying the microphone to do voice recognition on the road, you might be just as happy with the microphone included in either edition of ViaVoice.

Technical Specifications
Compliant with USB General and Audio Class specifications
Plug & Play - All drivers are included in Mac OS 9.0.4
Supports 8- and 16-bit formatting stream
Variable sampling rate controlled by host for 8, 11, 22 kHz
Isochronous, high-speed device
Gain range: -24dB to +30dB ■

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Capturing the Eyeballs and E-wallets of Captive Kids in School: Dot.com Invades Dot.edu(1)

by: Dr. Nancy Willard, Research Associate
Center for Advanced Technology in Education
University of Oregon, Eugene OR 97403

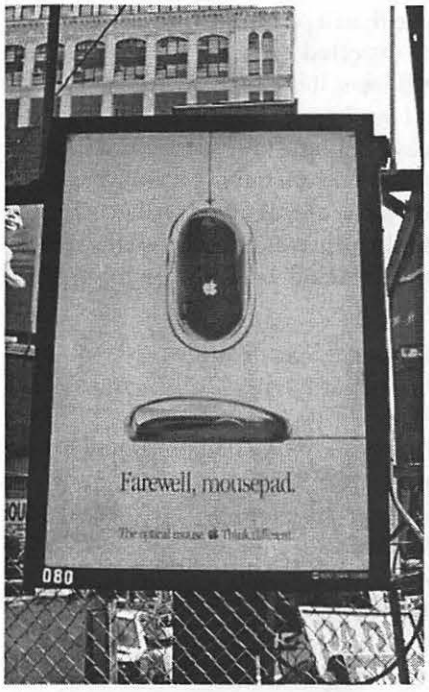
About the Center:
THE CENTER for Advanced Technology in Education (CATE) of the University of Oregon, College of Education, is dedicated to investigating and promoting effective use of technology in education, with particular attention to applications appropriate for K-12 education. CATE has ongoing relationships with public and private schools throughout Oregon, bringing years of classroom-based research in the uses of technology for teaching and learning.

"Selling or providing access to a captive audience in the classroom for commercial purposes is exploitation and a violation of public trust." -National Association of State Boards of Education

As pressure on schools budgets and demand for investments in new technologies increase, a new dot.com business model has emerged. This new model involves the offer of "free" technology resources to schools supported by an online advertising program that involves the collection of market-related personal information from students (online profiling) and targeted marketing of students with banner ads -- within the educational learning environment.

Many educators, parents, and students are unaware of the extent to which dot.com companies can collect and analyze personal information and use this analysis to present banner ads that are targeted to the individual user's demographics and interests. Hungry for the opportunity to provide Internet access and resources to students, schools are accepting these "free" offers with inadequate analysis of the company's activities and inadequate evaluation of the potential impact of students and the learning environment. Schools have an obligation to protect the welfare of their students and ensure the integrity of the learning environment. Allowing dot.com companies to engage in online profiling and targeted marketing of students is exploitation and a violation of public trust.

Educators must carefully analyze any partnerships with dot.com companies to determine whether such partnerships are truly in the best interests of their students and the school's learning environment. This document seeks to provide assistance to educators in this analysis process. The document provides a background on issues and concerns related to online profiling and targeted marketing and a framework for educator analysis of the appropriateness of pro-



Apple must pay extra for an army of billboard installers: these billboards, located at commuter parking lots, were not present the morning of Job's keynote speech, but were in place that afternoon. Those looking to scoop next year's keynote speech should make friends with billboard installers in New York City. (Photo by Lawrence I. Charters)

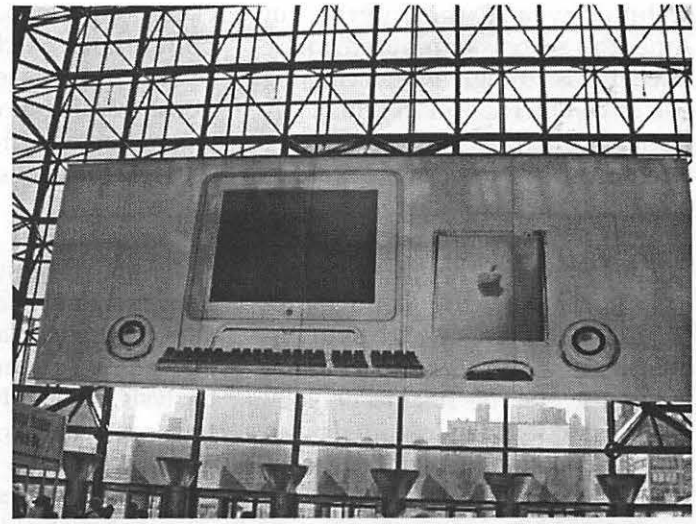
posed dot.com/dot.edu partnerships.

Will Internet in schools become the "stealth portal" to the youth market? In recent years there has been growing concern about the rise of commercialism in schools. As school budgets shrink and financial demands increase, Corporate America has found innovative approaches to get to young consumers through the place that they spend a lot of their time -- in school. Corporate strategies include: The offer of free satellite TV in exchange for 2 minutes a day of advertising for junk foods and hip youth consumer items; Cash donations in exchange for an exclusive placement of COKE machines; and Free curriculum materials provided by companies, such as environmental protection materials provided by Exxon and nutrition materials provided by Burger King.

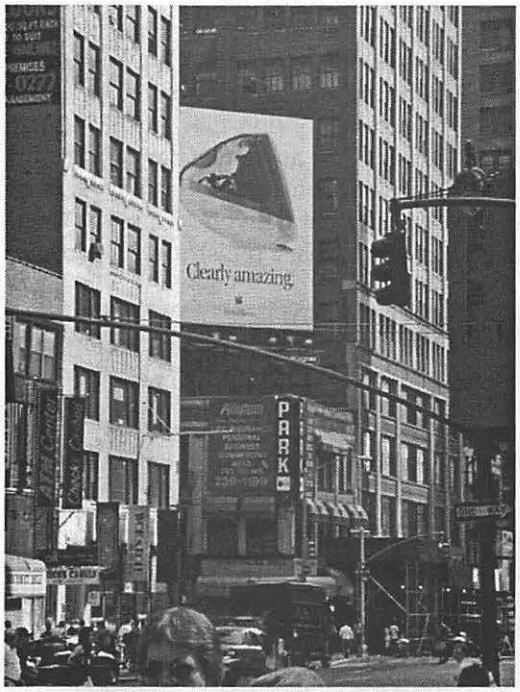
Proponents of advertising argue that corporate involvement with schools is beneficial because it allows schools to supplement dwindling resources. They argue that since ours is a consumer-driven culture, a few advertisements in school are an acceptable trade-off. Opponents counter that corporate attempts to use schools as a means to capture the youth market is unacceptable and contrary to the school's obligation to act in the best interests of its students.

In 1995, the Consumers Union published a report entitled Captive Kids: A Report on Commercial Pressures on Kids at School(2). The Consumers Union concluded, "commercialism in U.S. elementary and secondary schools poses a significant and growing threat to the integrity of education in America." One of the disturbing trends the report noted was "(p)ressure on school administrators, teachers, and students to form partnerships with businesses that turn students into a captive audience for commercial messages, often in exchange for some needed resource."

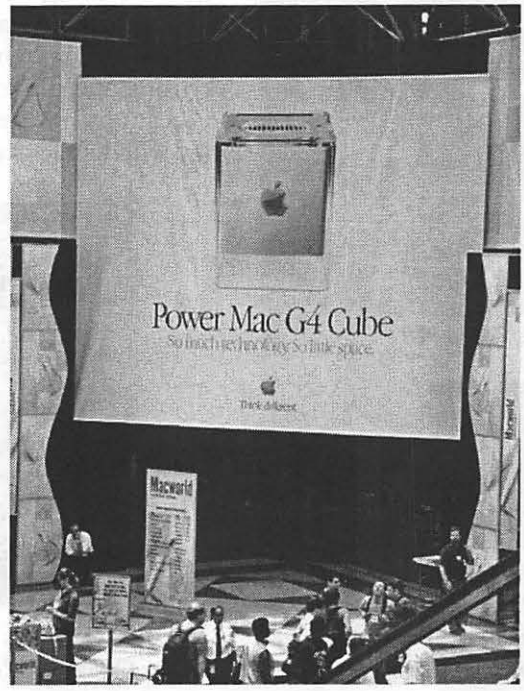
Three principal forces were identified by the Consumers Union that are converging to support the rise of com-



Covering much of the front of the Javits center, this enormous poster features the new PowerMac G4 Cube, its companion speakers, keyboard and mouse, and Apple's Cinema display. (Photo by Lawrence I. Charters)



This huge iMac billboard appeared on Seventh Avenue near Madison Square Garden. (Photo by Lawrence I. Charters)



The entrance to Apple's section of the exhibit hall featured this giant G4 Cube. It would take roughly 2,000 actual G4 Cubes to cover the same area. (Photo by Lawrence I. Charters)

mercialism in schools. These are:

- Chronic school budgetary problems
- The ever-growing presence of commercialism in all sectors of society
- The growing competition among corporations for the burgeoning "youth" market."

The recent explosion in the use of technology and the Internet in America's schools introduced a new force that is strongly influencing the rise of commercialism in schools: A dot.com business model where Internet content and services are supported primarily by banner ads.

A new dot.com business model is rapidly emerging that should cause every educator to consider the appropriate level of corporate access to students in school. This new model involves the offer of "free" technology resources to schools supported by an online advertising program that involves the collection of market-related personal information from students (on-line profiling) and targeted marketing of students with banner ads -- within the educational learning environment. The technology resources provided by such companies include: free or reduced prices for computer equipment for schools or for families; district, school, or classroom web pages; educational portals and search systems; online communications services. The educational learning environment may be an environment that the student accesses from school and/or from home.

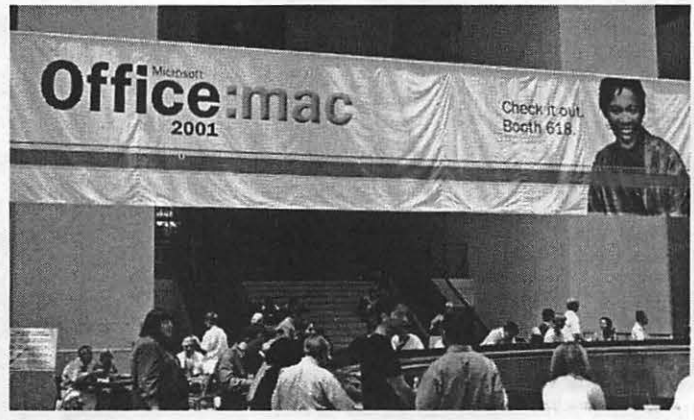
In addition to these formal dot.com/dot.edu partnerships, dot.com companies are establishing sites that presumably are providing educational materials. Upon closer analysis, the highly entertaining materials are often found to be biased, promotional, and self-serving. Such sites may also ask students to provide personally identifying information to enable the site to profile and target banner ads to the student. Some educational web sites are also relying on corporate advertising to support the development and maintenance of their site. Inappropriate advertising and placement of ads in locations on the site where they will distract students from concentrating on content are also issues of concern on these sites.

Here are some examples of companies that are providing free resources to schools in exchange for the ability to profile and target market students:

Zapme Corporation's brochure for educators states: "We'll give you a free computer lab for your classroom. Here's the catch: You have to let your students use them." There are a few more catches in the Zapme plan. Zapme develops online profiles of individual students linked with the student user names. The profiles enable the company to target their advertiser's banner ads to students with specific profiles. The Zapme Netspace has a 2X4 inch banner ad window that presents multimedia ads to students at all times they are using the computer, even when doing word processing. The ads change every 15 seconds, thus exposing students to approximately 200 ads in a 50-minute class period.

In contrast to the brochure for educators, here is how Zapme describes the benefits of its program to potential sponsors: "Zapme is the ideal brand development medium. No other online marketing vehicle offers the audience targeting and viewing confirmation capabilities of the Zapme! network. The user interface and user registration technolo-

On the way to the exhibit entrance, MacWorld visitors were confronted by a wide variety of huge signs, including several new "Think different" posters. (Photo by Lawrence I. Charters)



This sign shows off Microsoft's new corporate image for Office:mac 2001. (Photo by Lawrence I. Charters)

gies of Zapme! not only guarantee that all messages will be viewed by your specific target audience, they also enable micro targeting based on one or more criteria, including age, gender, geography, area(s) of interest and time." Zapme brochure for potential advertisers.

HiFusion is a company that has just launched its activities. HiFusion will provide free dial-up Internet access for students and parents and is inviting schools to establish HiFusion as the site of the school's Online Learning Community. HiFusion engages in online profiling of students and parents and will be presenting ads to students and parents when they are using the site. HiFusion should receive credit for providing a completely honest and readable privacy policy:

"We may directly collect the following types of Personal Information about Children: name, address, email address, parent's registration information, birthdates, sex, grade level, school name, school location, screen name permissions, parent's credit card information, computer/internet/videogame use preferences and habits, information source and entertainment preferences, household demographics, hobbies, interests, school studies, general preferences, or such other data that may help us to better tailor our Services for each Member. In addition, our servers may collect Personal Information indirectly and automatically about Children's activities while using our Services, including internet sites and web pages visited. Later in the privacy policy it states that the personal information will be used "for marketing directly to the Child."

A clash of two worlds: dot.com and dot.edu The dot.com world is an advertising-intense environment, where a significant amount of content is supported by banner ads. But other worlds exist on the Internet. The dot.edu world is a world of rich, high quality educational resources and communication activities with an extremely limited amount of banner advertising. Resources available in the dot.edu world have been created by education institutions, informal science, art, and other enrichment centers, nonprofit public interest organizations, government agencies, and enlightened corporations that recognize the importance of supporting the education of our nation's children without attempting to peddle products, services, or self-serving ideas.

Dot.com companies believe that the profiling and advertising is simply the model by which the Internet functions. They argue that online profiling and targeted marketing allows them to provide services without costs to schools and thus the benefit to students outweighs the concerns of invasion of privacy and intrusion of advertising into the learning environment.

A closer analysis of the situation reveals additional motives on the part of such companies:

"Where are all the Fortune 500 Companies heading today? Back to school. Zapme! delivers the future. Children in grades K-12 are arguably the toughest audience for marketers to reach, and quite possibly the most valuable. Now there is a way to connect with this audience at the place they spend a majority of their time. At school."(3)

Admission to MacWorld this year was free — if you registered in advance. Advance registration also saved you the hassle of standing in lines to get a badge. But thousands of procrastinators failed to register in advance, and the lines were long. (Photo by Lawrence I. Charters)

One of the more popular MacWorld exhibits was in Apple's area. This section featured new colors of iMacs, each equipped with iMovie and connected to a bank of Canon ZR10 digital video cameras. (Photo by Lawrence I. Charters)

"(W)e look for education to become the "stealth" portal to over 65 million students and their 50 million parents."(4)

What is online profiling and targeted marketing? Online profiling is the collection of information from and about an individual as he or she uses the Internet.(5) Once collected, the information provides a detailed profile of the individual's demographic characteristics, interests, needs, and purchasing habits. This profile enables advertising company computers to deliver banner ads that are targeted to the individual's specific interests. The profile may contain personally identifiable information, the individual's name and address, or may be linked with nonpersonally identifiable information, such as a screen name or an identifier (a "cookie"). Cookies are tiny bits of code that are placed on an individual's hard drive by the web site or a third party that is delivering ads to the web site. Cookies are generally set without the knowledge of the user. Cookies act as identifiers and also transmit data about the individual's actions on the Web. Additional information may be collected for the profile directly from the individual through registration, surveys, questionnaires, and purchases.

Here is an example of how profiling may work in a school environment:

XYZ school has established an online learning environment with ABC. Jordan, a student at XYZ school, must establish a user account on ABC's web site using a user name (some sites require actual names) to be able to access the learning activities required for his classes. In registering the account, Jordan is asked to provide some basic demographic information, including his age and gender. Jordan's user account forms his initial profile file on ABC's site. To expand its knowledge of Jordan, ABC's computer tracks his activi-

One company that sells "older" Macs had a unique exhibit: working computers were arranged as if they were furniture, perhaps inspired by the Pi's legendary Mac Bench series ("Introducing: Washington Apple Pi Mac Bench," Washington Apple Pi Journal, *January/February 1998; "Washington Apple Pi Mac Bench Pro: Wall of Macs,"* Washington Apple Pi Journal, *January/February 1999). A seat, formed entirely of working compact Macs (you can't see the screens in the photos, but they are all operating), featured a footrest made from a working Lisa computer. On the other side of the booth, a two-seat love seat was made from still more working compact Macs. Finally, a "fireplace" featured one fire damaged Mac and a fireplace made of compact Macs, with Mac LC "flagstones" forming a mantle. A television set played a videotape of a fireplace fire. (Photo by Lawrence I. Charters)*

ties on its site, as well as his activities on the Internet. ABC frequently posts "Tell us what you think" survey questions. Today's question, "What are your favorite after-school activities?" is followed by a list of typical teen activities. Jordan responds that his favorite activity is playing sports. This interest information is recorded in his profile. The next time Jordan uses the computer to complete his history assignment, he sees an ad for athletic shoes, which he is more inclined to click on than an ad for a bookstore and finds more interested in than his history assignment. ABC's computer records the fact that Jordan has clicked on this ad and will be able to provide the athletic shoe company with data about students who have clicked on their ad.

READ the Privacy Policy -- then ask questions In a recent Education Week article addressing the same topic as this report, a school technology director who strongly supports HiFusion, which has a well-written privacy policy, reported that "he didn't remember reading in the policy that personal information from children is used for marketing directly to them, but doesn't view it as a problem.(6) " Clearly, it is acceptable for educators to be endorsing partnerships with dot.com companies if they do not have a complete understanding of all of the ramifications of that relationship. The first place to start is reading the dot.com company's privacy policy.

Unfortunately, many of these policies are written with such "legalese" that the user would require a law degree to truly understand the provisions. Other policies use euphemistic language that does not provide clear information. For example, Zapme's privacy policy reads, "We will use this information to ensure hat our user's content and sponsorship experiences are appropriate for them."

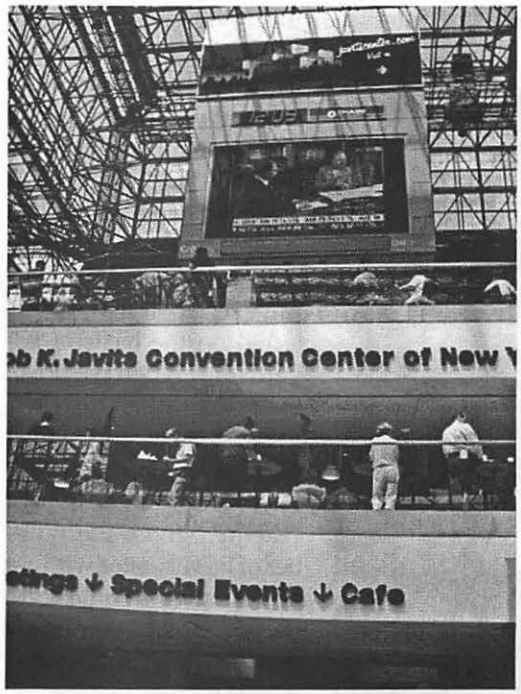
What this language actually means is, "We use this information to directly target ads to students based on our knowledge of their demographics and interests."

Not all collection of information is bad; Not all school-business partnerships are inappropriate Online profiling and targeted marketing should be distinguished from two other activities that do not present concerns: The collection of aggregated data by web sites for evaluation purposes; and The collection of personal information from students for the sole purpose of providing an educational service.

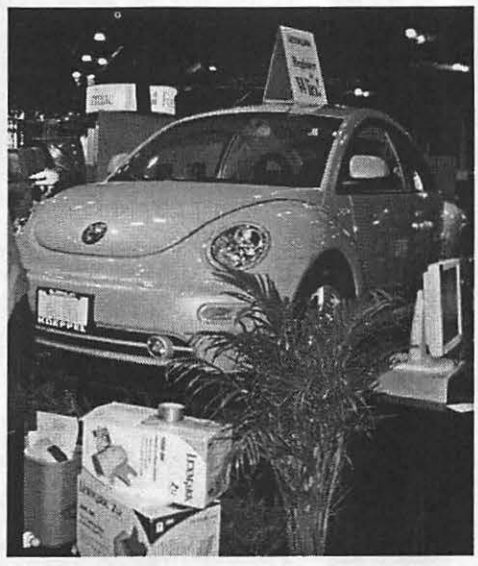
All web sites collect data about how their site is used, including quality educational sites. The data allows the web site owner to evaluate how the site is being used so that the quality of the site can be improved. Data is collected in an aggregated manner. Individual user profiles are not created and the data is not used to support marketing.

Some companies providing communication services to schools require the provision of student personal information, such as a requirement for the student's name for the purpose of establishing a web-based e-mail account. As long as the use of student information is limited to the educational service and parental consent is obtained, the provision of such information should not present concerns.

Nothing in this report should be considered criticism of enlightened companies that have taken a long-term perspective of the importance of education of our



The Jacob K. Javits Convention Center is huge; no other word can describe it. But the light, airy entrance hall and enthusiastic, eager Mac fanatics made it seem friendly and inviting. Old-timers groused that they preferred the less exotic exhibit halls used during MacWorld Boston expos. (Photo by Lawrence I. Charters)



Computer shows, for some reason, always seem to include some form of transportation. A fairly common gimmick is a semi-trailer or two packed with things to sell, but this year's MacWorld also featured drawings for cars, including this Volkswagen bug at the Lexmark booth. (Photo by Lawrence I. Charters)

nations youth and the role that technology can play in this education. Such companies are generously providing resources and support to assist schools in technology planning and implementation and in the development of high quality educational resources on the Web. Examples of this include: The AT&T Learning Network(7), which provides an excellent collection of resources for educators; MCI's Marco Polo which provides standard-based instructional content(8); the Intel-supported Students Recycling Used Technology Program(9) (STRUT) which provides refurbished computers for schools and technical training for students; and the CEO Forum on Education and Technology, an organization representing many major technology companies that provides valuable resources for planning and implementing technology in schools.(10)

How valid are the arguments in support of accepting online profiling and targeted marketing of students in exchange for free technology resources?

An analysis of statements by corporate executives of the dot.com companies approaching the dot.edu community, as well as statements by educators who have entered into dot.com/dot.edu partnerships reveals four frequently raised arguments in support of the appropriateness of these partnerships. None of these arguments are supportable.

Argument 1: We protect student privacy because we do not ask for the student's actual name. We use only user names -- pseudonyms.

■ This argument is a misleading, deceptive "red herring." Dot.com companies do not need the student's actual name to develop an online profile and use that profile to target advertisements to individual students. All they need is a persistent identifier. The student's user name serves as that persistent identifier.

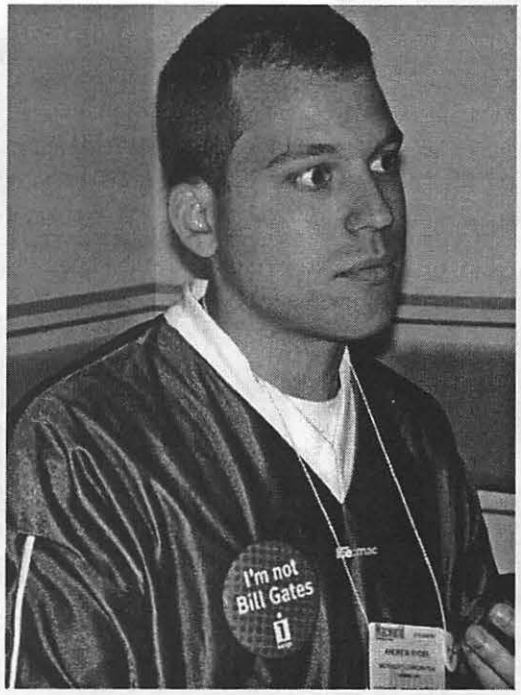
Argument 2: Internet content is supported primarily by banner advertising, therefore, students are already exposed to lots of banner ads whenever they use the Internet. The additional exposure to banner ads from the dot.com partner simply allows us to receive additional resources.

% The vast majority of high quality educational sites do not have banner ads. Look at the entries of any quality educational portal and this asserting will be clearly demonstrated. This example, provided by the Mid-continent Research for Education and Learning, demonstrates the approach taken by developers of educational portals:

"We are currently reviewing all the sites to which our sites link; the criteria for this review requires us to determine whether or not there is advertising on the site and if so, whether it is distracting. We reject sites that contain advertising we deem to be distracting. If the advertising is minimal and does not distract the user, then it is not rejected on the basis of advertising. When we finish the review of all the sites, I suspect we will revisit the sites with minimal advertising to consider whether, given the number of quality sites without advertising available to us, we need to include those sites with advertising.(11)"

■ If students are being exposed to a great deal of banner advertising in school, they are likely not using the Internet in ways that are supporting their

Thanks in large part to two chartered busses, Washington Apple Pi members were all over MacWorld. Here the Littles try to read their E-mail at the EarthLink booth. (Photo by Lawrence I. Charters)



Iomega was giving away highly-prized buttons with clever (and snotty) sayings. The most prized of all was the "I'm not Bill Gates" button, worn here by a Microsoft staffer in Microsoft's booth. (Photo by Lawrence I. Charters)

learning. A recent study evaluated sites that students accessed in school for their suitability for academic research and found that only 27% of the sites students accessed were considered to reliable sources of information.(12) The sites visited most frequently, commercial sites, were rated as having the lowest educational value.

■ Some good quality educational web sites have a limited amount of banner advertising. These sites are sensitive in the selection of only educationally-appropriate ads, not ads for consumer youth products. Further, the ads do not contain a significant amount of distracting animation and are not placed in locations on the site where they might distract students from focusing on the content. There is a need for greater funding and alternative funding mechanisms for the creation and support of good quality educational sites to enable quality sites to exist without the need to rely on banner advertising.

■ A school endorsement of a dot.com partner's web site also acts as an endorsement of the presence of banner advertising in the educational environment. Additionally, the school's endorsement serves as an implied endorsement of the products or services advertised to the children through the dot.com partner's site.

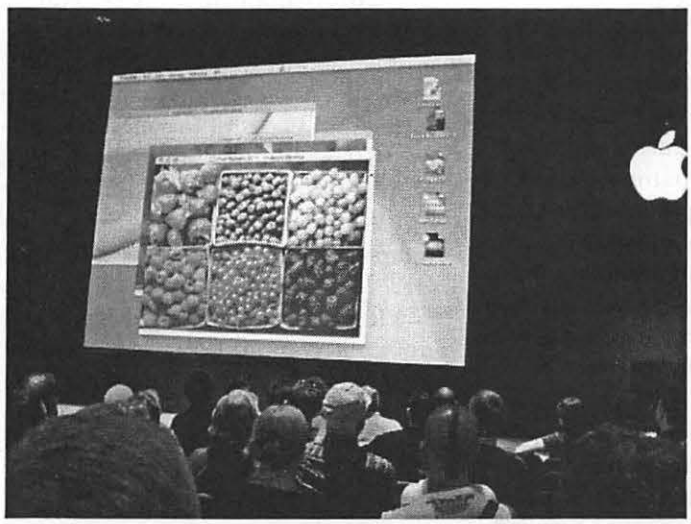
Argument 3: Banner ads are not distracting or intrusive. Students are experts at multitasking and can easily filter out the ads.

■ The sole mission in life of a banner ad is to attract attention to itself. Research in human-computer interface research verifies that animated banner ads are intrusive and distract users from the content. "Ad agencies aren't stupid . . . they know that adding motion and flashing to a web page is a sure-fire way to attract attention. And it's true -- adding animation is a powerful way to catch a reader's eye. But beware that this can also work against you. Many users complain that animation is too distracting, making it difficult to concentrate on the content of the page."(13)

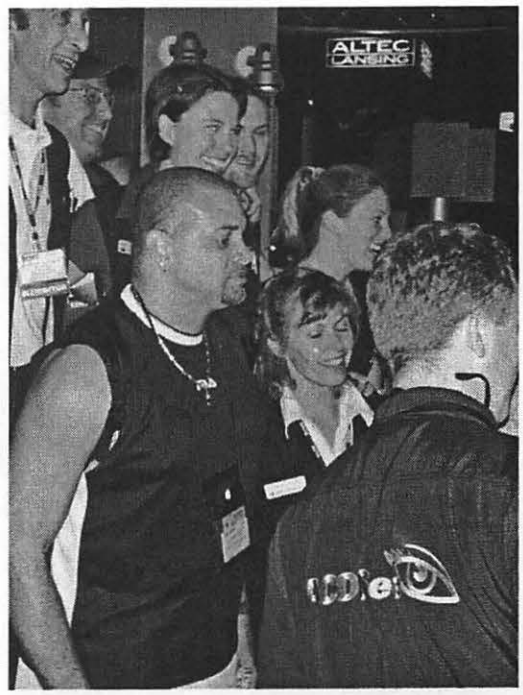
■ It is more than a little disingenuous for companies whose business model is based on advertising income to claim that the ads are not effective, especially when they are making the exact opposite claim to their sponsors.

■ The purpose of doing online profiling is to enable the company to target ads for products or services that are of interest to the user, thus raising the distraction potential of the ad.

■ Schools should not be establishing study environments that force children to expend mental energy to filter out the distractions of banner



While there have been several public demonstrations of Mac OS X, Apple was far more aggressive in showing the forthcoming operating system to the public at this year's MacWorld. Presentations on Mac OS X were held several times a day in Apple's booth, and all the demos were packed. (Photo by Lawrence I. Charters)



Sinbad, the stand-up comic and actor without a last name, is also a big-time Macintosh fan. He enthusiastically toured the booths, looking at the latest goodies, and proved charmingly tolerant of those who wanted to have their pictures taken with him. By the end of the week, he was probably blind from all the flashbulbs. (Photo by Lawrence I. Charters)

ads when the students should be concentrating on the content of what they are studying.

■ A market report on Zapme stated: "Based on our observations and discussions with several schools, the ads are not intrusive. Moreover, we must not forget that today's teenagers are expert at multitasking -- often listening to music, watching TV and doing their homework at the same time."(14)

■ Not many educators would recommend this kind of a study environment!

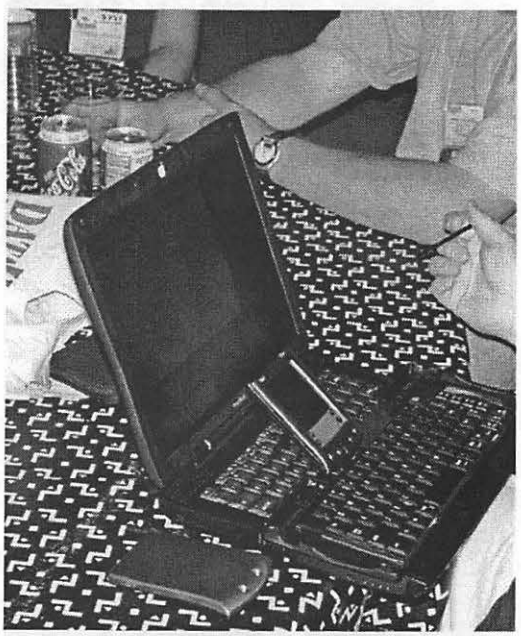
Argument 4: The dot.com partner is providing access to a safe, filtered environment so our students are more protected in their use of the Internet.

■ An environment that supports the collection of personal private information from children and then uses that information to manipulate children for consumer purposes is not a safe environment. Students are not protected from an invasion of their privacy and corporation manipulation for consumer purposes.

Argument 5: It is OK because we have parental consent.

■ But only by coercion. The "price" that students and their parents are being expected to pay for involvement in or use of the school's technology learning environment is the invasion of their personal privacy and the distraction and manipulation of advertising.

■ And generally without full disclosure. Too frequently, school administrators approve dot.com/dot.edu partnerships without a full and complete understanding of the level of corporate access they are providing to their students. Parents trust school administrators to act in the best interests of their children. Many parents will approve their child's participation based solely on the endorsement of the dot.com company by the school. When administrators enter into partnerships with dot.com companies without a full and complete understanding of the facts and without providing full and complete information to parents, they are failing in their fiduciary duty to protect their students.



What kind of person goes to MacWorld? This individual has a Palm V, complete with keyboard, resting on his PowerBook G3. When told this looked quite funny, he started to rationalize this setup, but gave it up quickly and admitted he is an "übergeek." (Photo by Lawrence I. Charters)

Who *really* wins in the online profiling and targeted marketing game? Dot.com companies argue that it is a wonderful benefit for them to develop individualized market profiles containing a vast array of personal information so they can do a better job of providing individuals with advertisements for products and services that they are likely to be interested in.(15) However, there is widespread and growing concern about current online profiling practices. The principal concerns are that much of the collection is without the individual's knowledge or consent and the use and dissemination of the information is beyond the individual's control.

A recent Business Week/Harris Poll on online privacy found that 89% of consumers are not comfortable having their browsing habits and shopping patterns merged into a profile that is linked to their real name and identity.(16) Sixty-three percent are not comfortable having their online movements tracked even if the data is not linked with their name.

It is unlikely that adult concerns about privacy are going to diminish. Many adults are still unaware that such profiling is occurring. Only 40% of those surveyed in the BW/Harris Poll had even heard of cookies and only 75% of those knew what they were. Further, concerns about privacy reflected in annual BW/Harris Polls have been growing, not diminishing, in recent years.

Unfortunately, the BW/Harris Poll did not ask how comfortable parents are about having the interests and browsing habits of their children collected and used for targeted marketing to their children. But the response would not be hard to predict.

Why are dot.com companies so interested in kids? And why is this not OK?

It is clearly in the interests of the dot-com companies to raise a new generation of online consumers who do not have any "old fashioned" beliefs about the need for personal privacy. Clearly, the future of e-commerce is in school today.

The Washington Post recently reported, "With the number of children in America larger than at the peak of the baby boom, and their purchasing power growing faster than economists can measure it, a vast service industry of market researchers, public

relations firms, newsletters, and ad agencies has spring up to lead corporate America to young hearts, minds and piggy banks."(17) A popular trade publication, Selling to Kids, noted that because children are "the generation that spends the most time glued to a computer monitor, online marketing is going to be more important for this group than any previous.(18)

" The National Institute on Media and the Family recently reported:

With children spending or influencing $500 billion worth of purchases, marketing techniques have been turned upside-down. In the past, the most effective way to sell children's products was through Mom and Dad. Not the opposite is true: children are the focal-point for intense advertising pressure seeking to influence billions of dollars in family spending. Advertisers are aware that children influence the purchase of not just kid's products, but everything in the household from cars to toothpaste.I

With children's increasing access to new communication technologies being paired with the fast pace and busy schedules of today's families, parents are less able to filter out the messages from the advertising world."

Advertising agencies are utilizing the services of child psychologists and anthropologists to enable companies to better understand children's behavior when using the Internet. Advertisers have found that the Internet is a perfect vehicle for advertising to children. "There is nothing else that exists like it for advertisers to build relationships with kids."(19)

Recently, a group of psychologists called upon the American Psychological Association to address concerns about "the sale of psychological expertise to advertisers to manipulate children for commercial gain."(20) The letter noted, "The use of psychological insight to bypass parents and influence the behavior and desires of children is a crisis for the profession of psychology."

The Center for Media Education, a Washington DC watchgroup has been tracking the activities of the new children's digital media culture. Their assessment is; "With their engaging, interactive properties, the new digital media are likely to have a more profound impact on how children grow and learn, what they value, and who they become, than any medium that has come before."(21)

(Conclusion of first half. Final half next journal.)

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washington Apple pi general meetings

9-11 a.m.

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

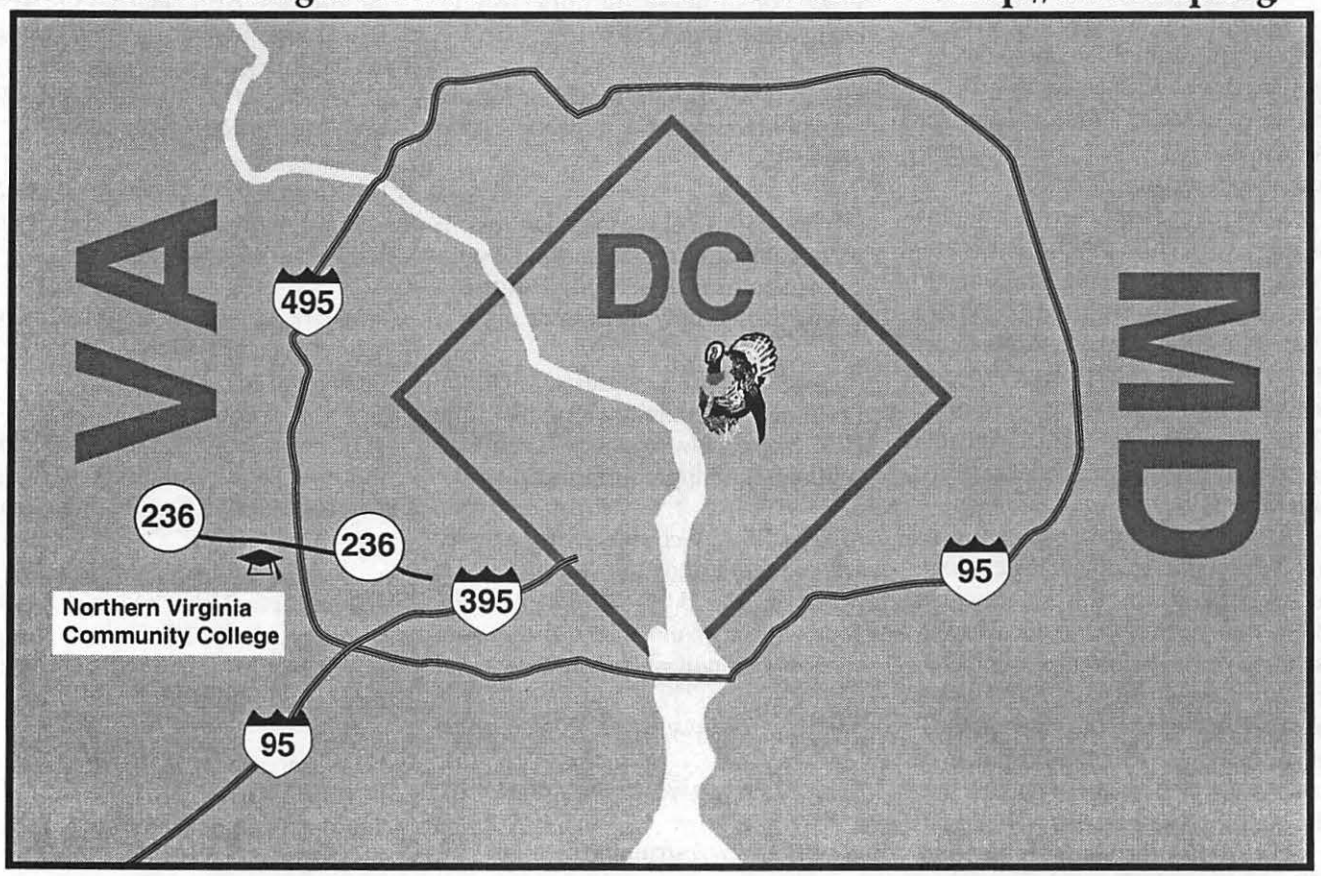
Getting to NoVa:
take Exit 6 West
onto VA 236
(Little River Turnpike)

September
UMAX
Sept. 23, 2000

October
Apple
Note: one week early
Oct. 21, 2000

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/



DoubleClick

Old Commodore brings memories of first computers

By Derek Rowan and Dave Ottalini

QUESTION: I have recently acquired, through the family estate, an unopened Commodore Plus 4, serial number CA1052600. The instruction manual says it was copyrighted in 1984. I have read that this machine may hold some special interest for computerphiles. If not, could you describe its practical uses in the modern era? Thanks - Buz

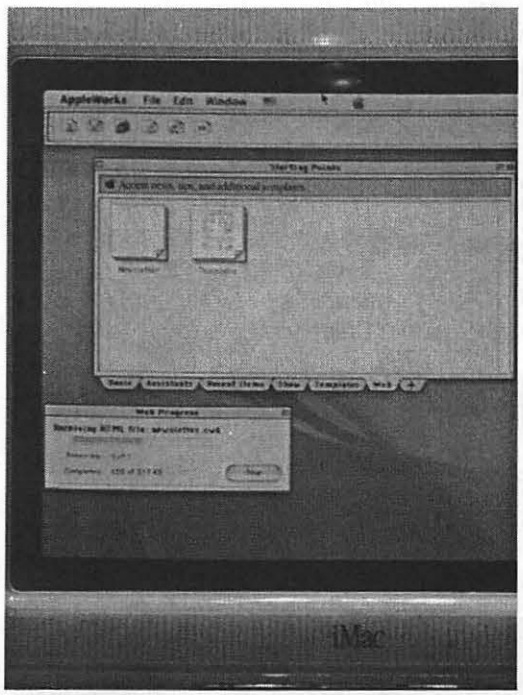
Dave: I could be flip and say it would make a great doorstop. But for you, Buz, I'd suggest you might try selling it on eBay or some other auction Web site. If it's brand new, Commodore enthusiasts may take an interest in it.

If you have the time and inclination, though, you could try surfing the 'Net to find out a little bit more about Commodore and the part it played in home computer history. The Commodore in its various forms - including the Plus, the VIC 20, the C-64 and later the amazing Amiga - all helped shape the computer industry in the 1980s and pushed the envelope on a number of fronts - in innovation and price. Commodore gave millions of Americans their first experience with computers.

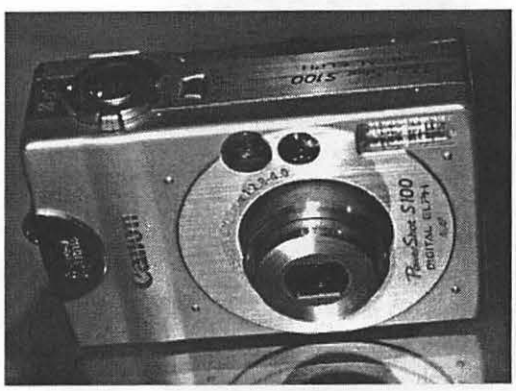
There are a number of places on the Internet that offer histories of Commodore, as well as sites that list vendors that still support the machines and sell software, peripherals and parts. There are still user groups out there as well - the last time I checked in the back of Computer Shopper, I believe I saw one in the Washington area.

For a good historical rundown, try www.oldsoftware.com/istory.html. For support, try www.amiga.org, www.aniston-park.de/ocos or www.jbrain.com/icug - the Virtual Commodore Users Group.

So to really answer your question, you have in your hands a part of



Apple's booth showed AppleWorks 6 running under Mac OS X. Note the Apple logo in the center of the menu bar at the top of the screen. (Photo by Lawrence I. Charters)



Canon's remarkable Digital ELPH camera, with an all-metal case, has a zoom lens that retracts behind a metal shutter. (Photo by Lawrence I. Charters)

home computer history that might just lead you into some learning directions of which you never dreamed.

The Amiga is a remarkable machine that shares the same CPU as the Macintosh - and can do some amazing things. In fact, the "Video Toaster" multimedia program is still used on many fronts - from schools to professional broadcast stations.

Derek, did you ever work with a Commodore or an Amiga?

Derek: Actually, Dave, it's funny you mention this. I used to be very knowledgeable about the Commodore series of computers. In fact, at one point in 1984, I owned a VIC-20, C64, C128 and an Amiga.

The VIC-20 was the second computer that I owned and it had some great features. Its built-in BASIC language was very nice. The 64 was a large step up, offering a 40-column display and 64 KB (not MB) of RAM. I even had mine outfitted with the cool ahead-of-its-time Commodore 5-inch intelligent floppy disk drives. The Amiga was very, very cool. You see, I used these computers back when I had my own programming company. I did assembly language programs for a variety of customers, including a multimedia one on the Amiga.

Apple is obviously fond of the Canon ZR10 digital camera; their booth had dozens of them. This one is capturing an image of the photographer capturing the ZR10's image. (Photo by Lawrence I. Charters)

What can you do with these computers now? Well, the 64 is limited in many ways. First, you cannot run any software that is not specifically written for it. The only way to find this software is through user groups, as Dave mentioned, or by purchasing it online on various Web sites.

A big benefit of having a Commodore 64 is the opportunity to develop an interesting hobby. The BASIC interpreter built into the 64 is very nice. It is easy to use and learn. If you wanted to learn about programming, then this is an ideal time to start.

You will need some documentation to assist you. Do a search in Altavista (www.altavista.com) for "Commodore 64," and you'll be amazed at what's still out there. I found a little display that replaces my Windows 95 start-up logo with a Commodore 64 start-up screen. Since the Commodore 64 was my first computer used to generate income for me, I thought it would be a fitting touch. Here are a couple of Web addresses to get you started on your journey:

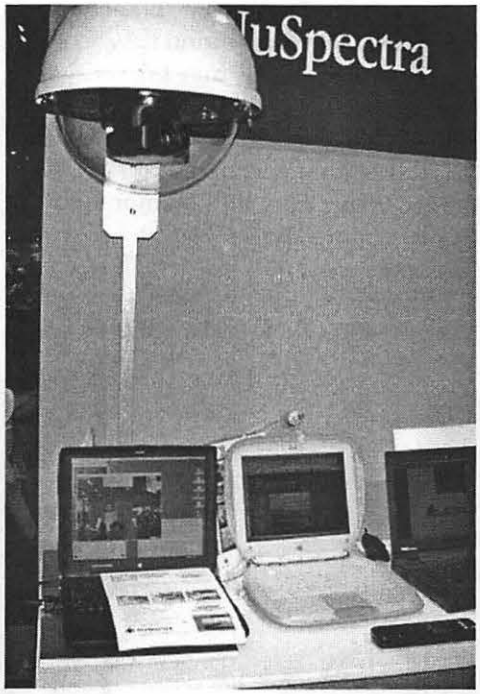
Yahoo's Commodore 64 Category at http:/dir.yahoo.com/omputersandInternet/ardware/ystems/ommodore/ommodore64.

Yahoo's Commodore 64 User Groups Category at http:/dir.yahoo.com/omputersandInternet/ardware/ystems/ommodore/serGroups.

Yahoo's Chat area features a couple of Commodore bulletin board systems - http:/dir.yahoo.com/omputersandInternet/nternet/hatsandForums/ulletinBoardsB BS

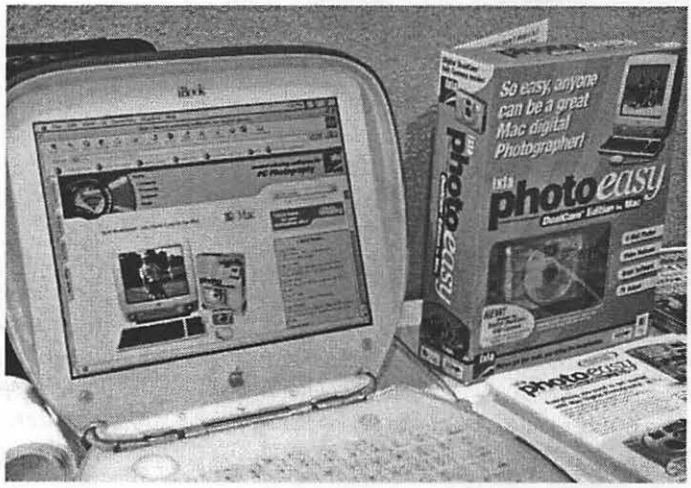
The Commodore 64 Web Ring at www.ncf.carleton.ca/#tag090.

Question: Help! I've got a Zip



NuSpectra's remotely controlled cameras elevate Web cameras to a whole new level. (Photo by Lawrence I. Charters)

The ixla Photoeasy is a complete USB digital camera kit for $149. The vendor claims it can also double as a Webcam. (Photo by Lawrence I. Charters)



drive 100 MB SCSI External purchased in December 1996. When I hook it up to my Macintosh Performa 578 running System 7.5.3, the green power light comes on, and the orange data light blinks, whether or not there's a disk in the drive. The computer recognizes the drive in Apple HD SC Setup, but I cannot mount a disk, not even Zip Tools.

When I do put a disk in the drive, I cannot eject it (except manually). I've tested the SCSI cable on other drives, tried the drive on other computers running different software, but nothing I try seems to enable the drive to mount a disk.

My Zip drive, I am fairly certain, is broken. It is no longer under any warranty, and I don't know whether it would be easier to have it fixed or to replace it with something different.

I've been in touch with Iomega, the maker of the drive, but it is not very helpful. When I asked for a list of local repair shops, I was told I had to get a return merchandise authorization number from the service center out west, and I'd much rather have the job done locally, without the hassle of mailing the drive to Utah for testing.

I get the impression that Iomega only fixes drives with defects or that are under warranty. I doubt it would be economically feasible to send it there and would like to explore other options.

I would appreciate knowing whether it can be fixed before I send it to the other side of the country for a repair that might not be economically feasible. Thanks in advance. - Rita

Dave: Rita, I love the Zips and use them at home and work. But when they break, they are not worth repairing.

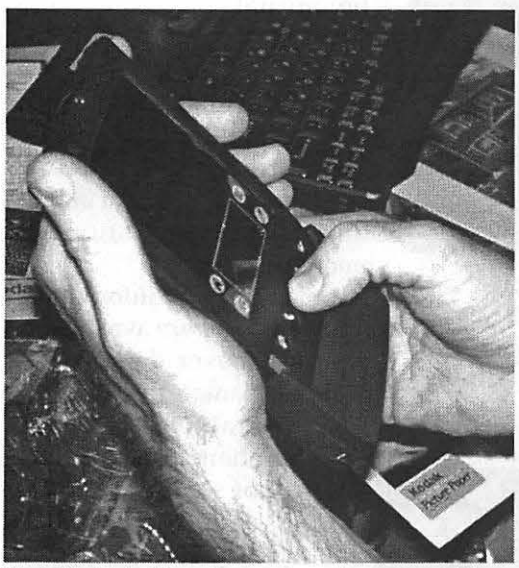
Some machines suffered a problem called "The Click of Death" because when you inserted the disk, it made a horrible clicking noise. I've experienced it, and it ain't fun. Iomega had to repair those.

But it sounds like your unit has gone to that big Zipper in the sky. Besides, at the pricepoint for Zips these days, you are honestly better off throwing it away and getting a new one. In fact, I would recommend a newer 250 MB drive since it can read the older 100 MB Zips as well as use the newer 250 MB disks. It also has an on-off switch in the front.

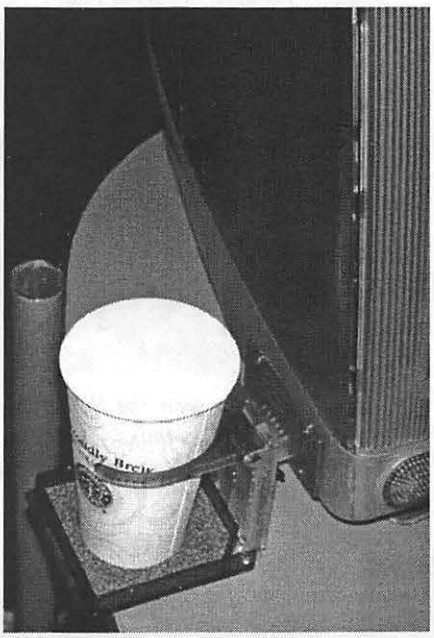
Derek, my experience has been that Zips are pretty hardy and most work pretty well. But when one is defective, it's best to move on. Any thoughts for Rita?

Derek: I agree, Dave. It's tough to take, Rita, but much of computer technology is disposable. Make a clock out of your old one and buy a new 250 Zip. They are quite handy.

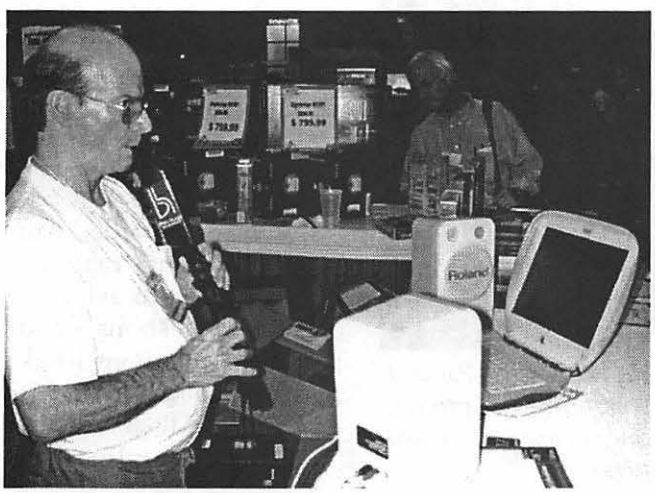
We use Zip drives at my company, too. Many of our clients will



Kodak's PalmPix allows almost anyone with a Palm to turn their pocket computer into a digital camera. The camera is the shown here attached to the bottom of a Palm III. (Photo by Lawrence I. Charters)



MacWorld always offers some unusual innovations, such as this spill-proof cupholder that attaches to the side of an iMac. Starbucks coffee not included. (Photo by Lawrence I. Charters)



Guitar Center had their usual booth packed with music and sound software and hardware. One of the exhibitors used this MIDI-based clarinet to transcribe music directly into the iBook on the counter. (Photo by Lawrence I. Charters)

send us a Zip or a CD they've made with tons of stuff on it. They also make excellent back-ups because they can hold a fair amount of information. You can use them to store an entire project with no problem.

Since you have a Mac, Rita, connecting a new external Zip drive will be a breeze.

Dave Ottalini is on the board of directors of Washington Apple Pi (www.wap.org), the Apple/ac user group based in Rockville, Md. He is employed as a senior producer for CNN Newsource, the affiliate service of Cable News Network.

Derek Rowan is president of HLP Associates Inc. (www.hlp.net), a full-service computer, network and Internet firm serving businesses, headquartered in Falls Church, Va., and with offices in Washington, Baltimore and New York City.

For questions about home computer hardware, software or operation (no question is too simple or geeky), Dave and Derek can be reached by e-mail 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, they cannot promise individual responses.

You've no doubt seen the Power Mac G4 commercial that features tanks. This iMac is ready for a tank commercial, too. (Photo by Lawrence I. Charters)

DOUBLE CLICK

Rescuing data after drive crash

Scandisk errors

By DEREK ROWAN and DAVE OTTALINI Special to The Journal

QUESTION: First, I would like to say thanks for the information that you provide in The Journal. It is really straight talk for everyone. I have a background in PCs, but can really get stumped sometimes.

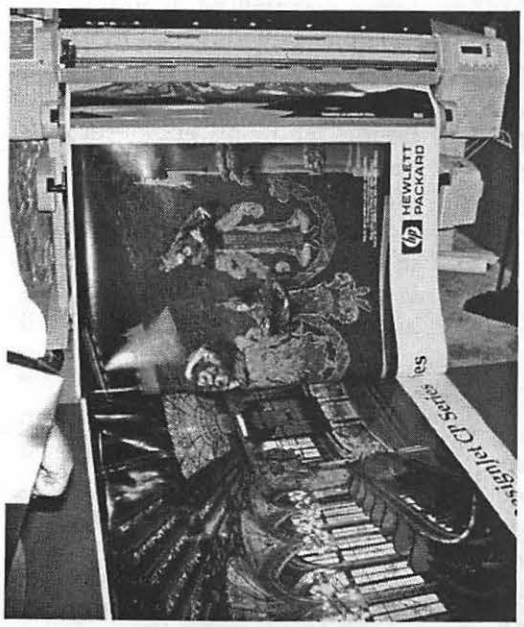
I'm looking for information on current software available to help me recover data from a crashed or damaged hard drive.

Several weeks ago, you mentioned the availability of some software to assist in this type of recovery. Of course, I didn't save the information. If you could provide this information, I would appreciate it very much.

Your evaluations on software and hardware are quite interesting and assist many individuals in upgrading and purchasing new equipment. Thanks again. - Pat

Dave: Thanks, Pat! Without our readers, we'd have to ask ourselves questions - and Derek's questions are always soooo boring. ...

Now, there are any number of options for



A black and white photo can't begin to help you appreciate the incredible quality of Hewlett-Packard's large-scale DesignJet inkjet printers. So check out the color version, posted on the Pi's Web site. (Photo by Lawrence I. Charters)

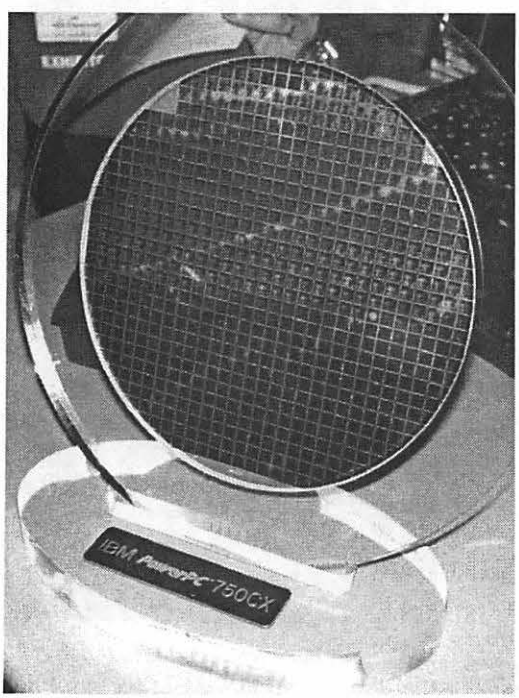
It may look funny, but the Hewlett-Packard OfficeJet G85 combines an inkjet printer, scanner and fax machine in one unit. (Photo by Lawrence I. Charters)

you, depending on how much money and time you want to spend. As Derek and I have both said many, many times - your best protection against a crash is to back up.

Nowadays, you have many options on this front: You can simply copy files over to a Zip or other similar removable drive, or use a back-up utility program ("Retrospect" on the Mac is one of them) that will compress and save the contents of your hard drive.

You can even make good use of those free online services that give you 10 or 20 MB of drive space for free - a good use is for back-ups of important files.

I've also started using a rewritable CD drive to do back-ups. "Retrospect" and other programs can even do back-ups to rewritable media if you have a burner that can do that.



IBM had, of course, one of the most impressive displays at MacWorld: this Plexiglass disc filled with a wafer of PowerPC chips. The PowerPC 750, by the way, is the "real" name for what Apple calls the PowerPC G3. (Photo by Lawrence I. Charters)

If your drive crashes and you can't recover the files any other way, you may have to send the drive out to a company that can recover files for you - but at a price. Check out the back of Computer Shopper or other PC or Mac magazines - there are a number out there. Many are listed on the Internet too, if you do a search.

I took a quick look on the Internet and found some articles that provide additional guidance:

www.idg.net/rdprotection67625.html lists file recovery programs like "Save Butt 1.2."

www.lc-tech.com/98exp.html details a program called "Recover98Express" that will do what you're looking for.

Of course, "Norton Utilities" has a feature that allows you to recover deleted files.

Another one - at www.rognerud.com/ile-recover/- called "File Recover 2000" claims to offer similar capabilities.

Derek, I know you'll have some good suggestions for Pat as well, so take it away. ...

Derek: "Crashed" hard drives come in a variety of flavors.

In the old days, a hard drive "crash" meant the read/rite head, which is just a hair above the surface of the disk, actually slammed into the disk surface. This resulted in data loss, as the head itself scooped up slivers of the disk and gouged the surface. Recovery from this could be accomplished, except where the actual physical damage was done.

Today, a "crash" means anything from lock-ups to blue screens to physical problems.

The programs you list, Dave, work on lots of drive errors, but to recover data from a disk that is failed or has physical damage, don't waste your time. Head straight for the professionals. Call OnTrack Data Recovery. If you have a true hardware problem, expect to pay more than $1,000 to have your data recovered. If you have a software problem caused by a virus, corrupted file system, etc., you may be able to use the company's remote software wizard through the Internet.

These guys are the best. They can also recover tapes, optical disks and more. We've used them for several of our clients and even ourselves, when we destroyed our file server's hard drive once. Check out www.ontrack.com.

Question: Read your comments about ScanDisk [April 17 and May 15]. However, the site http:/support.microsoft.com yielded nothing. Typing "scandisk" didn't yield anything. Previously when I tried to defrag, after the procedure was about 60 percent through, a message came on saying there was an error. Going to "scandisk," a message came back: "Scandisk was unable to finish correcting this error because the top level folder on this drive is full. Quit ScanDisk, delete some folders from that folder and then restart ScanDisk" I have more than 3 GB free space on my disk and I'm using Windows 98. Any help would be gratefully accepted. - MOC

Dave: OK, so I'm not a Windows guy, but a research question poses challenges so I surfed over to support.microsoft.com. There I selected Windows 98 as the Microsoft product of choice and typed in "ScanDisk." Some 102 choices later, there were a few clues that might help you. One suggests that you make sure you are running the latest version of ScanDisk:

"You run a previously released version of ScanDisk with OEM Service Release 2 (OSR2) or Windows 98. For example, this could occur if you run ScanDisk from an Emergency Boot Disk created using an earlier version of Windows 95."

π

You can check for the latest version of ScanDisk at http:/windowsupdate.microsoft.com.

Another possibility: Check to make sure your top level folder name is less than 66 characters long. ScanDisk does not like folders with names longer than that, apparently.

Finally, there are some suggestions for files to delete if your computer hangs while going through the defragmentation process:

Click Start, point to Settings and then click Folder Options.

Click the View tab, click Show All Files, Click Apply and then click OK.

Delete the Applog folder from C:Windows, and then run the Disk Cleanup Tool.

The comments then say that "after you have removed the Applog folder and the temporary files in the steps above, run ScanDisk and then run the Disk Defragmenter again."

Derek, do any of these suggestions make sense to you?

Derek: Hey, Dave. Don't lie. I know you are a closet Windows geek. You're probably wearing a "Bill Gates is so misunderstood" T-shirt, aren't you? You did real good, Dave.

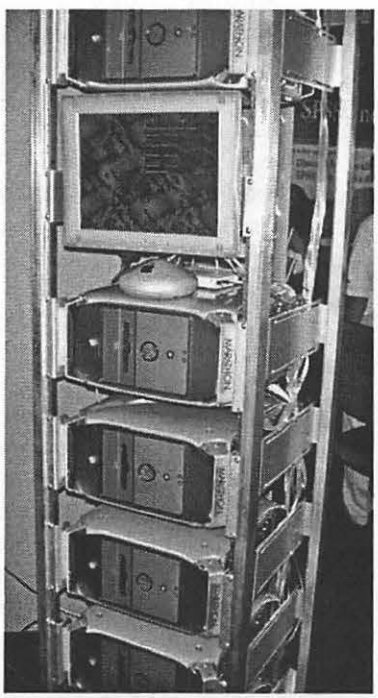
Unfortunately, you've now proven how easy it is to find some technical answers to problems by using some of the resources on the Internet - especially the manufacturer's own Web sites and knowledge bases. Come to think of it, I hope no one reads this week's article because: A) people will say "Hey Derek! What's with Dave showing you up? Isn't he the 'Mac Guy?' Not only does he not even own a Windows PC, he looked up the problem and figured it out BETTER than you could have done! You must feel terrible! Hahahahaha!" or B) people won't say anything! My office phone will stop ringing because people with computer problems are just going to figure them out on their own, or worse yet, call Dave! On the other hand, maybe I'll get a referral fee... ■

DoubleClick
Best bets for backing up

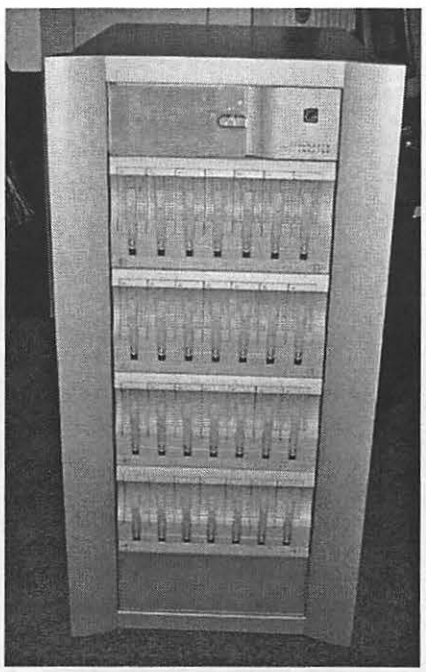
By Derek Rowan and Dave Ottalini

QUESTION: After years of sporadically copying a few files here or there for safekeeping, I want to finally institute a regular plan for backing up the important data on my hard drive. But, I find that determining which files to back up is deceptively difficult.

I have a 100 MB Zip drive as well as a CD-RW drive, both of which come with programs that allow the user to pick any combination of files, folders and drives to be backed up on another disk. The programs remember the combinations you choose and use them for each successive back-up. (What could be easier?) The problem is that important data is scattered in many different files, some of which are very hard to identify.



Marathon sells metal brackets that replace the plastic handles on G3 and G4 towers, allowing them to be mounted in standard LAN racks. This particular stack of five G4 Macs, complete with a liquid crystal display, attracted lots of attention from networking personnel. (Photo by Lawrence I. Charters)



If it didn't have the most blinky lights at the show, it was at least in the running: the MicroNet Genesis is a RAID storage unit of enormous capacity and flexibility. If you need 1,700 billion bytes of error-correcting storage, and you have a fat checking account, this will do nicely. (Photo by Lawrence I. Charters)

It is easy, of course, to find the files that you consciously save, like spreadsheets, word documents or graphics files. But, many programs, like the address book, Internet connection set-up and desktop display preferences, interact with you only through dialog boxes and save the information who knows where.

The logically simple solution is to back up the entire hard drive, but that seems painfully time-consuming. Why bother backing up the operating system and all your programs when, presumably, you already have them on disks? The key, then, seems to be to identify all the data that is specific to your computer alone, find its file location and designate it for back-up. Is this possible? Is this practical? What is your strategy, step by step, to choose data for back-up? How do you find where information is stored? Please provide a general checklist of files that people might not otherwise think to back up (like the Internet "Favorites" and dial-up settings, operating system preferences or program option settings).

This would help all your readers to conscientiously safeguard their data. Many thanks - Alan

Derek: Alan, you have a great question! Did you know that you are really in the minority when it comes to backing up? Not only do most individuals not back up their home computer, but most businesses don't back up their important business systems, either!

The funny thing is, all businesses and individuals will tell you how important it is, but no one wants to do it. At HLP, we find that many of our clients won't spend the extra money on a good tape back-up system. Or, they won't spend the money to back up each workstation in addition to the server. Or, worse yet, they never even change tapes or verify that the tapes work! They only complain when there's a problem.

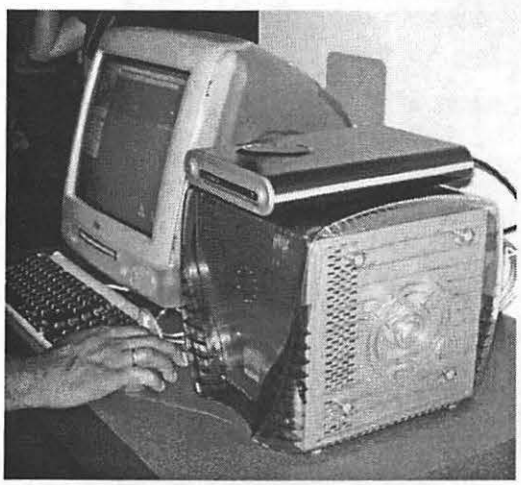
The good news is that there really aren't many failures of the equipment. We have found that human error causes most equipment failures. In our office, we have 10 file servers. (Most of them are Internet Web servers for our clients' Web sites.) We have a single computer dedicated to backing up all of them and our workstations. This is a regular PC that has three 24-gigabyte tape drives in it and backs up everything every day. If you are looking for a true back-up solution, I highly recommend a good-quality fast tape drive and "Stac Replica" software. This is the way to go, in my opinion.

Remember that there are lots of ways to back up your hard drive and other data. You need some sort of back-up media and you need some software to do it. Everyone owns a floppy drive (well, almost everyone - you iMac users may be an exception to this). You can just copy some data on a floppy. This is great, unless you really want to secure all of your stuff. Then you need something with a bit more capacity.

Commonly, you have Zip and Jazz drives, CD-Rs and CD-RWs. These devices are great, and I especially highly recommend CD-Rs and CD-RWs to everyone. The only problem with them is that they are limited in capacity compared to your hard drive. With hard drive sizes ranging up to 40GB now, it is becoming harder to easily back up your stuff.

We also know that the bigger your hard drive becomes, the more stuff you are going to store on it. What I mean is, you will fill up your hard drive no matter what size it is!

Why do I recommend a tape drive? Lots of reasons. But rather than bore you, I'll hit the highlights. First, they are unattended. They will automatically start, copy, verify and in some cases even eject the



The MicroNet SANcube offers up to 270 billion bytes of storage in an attractive box that can be hooked up, via FireWire, to four Macs. The unit sitting on top is a separate tape backup unit. (Photo by Lawrence I. Charters)

Mounted on its stand, the OnStream Echo30 is a 30 gigabyte ADR tape drive that connects to a Macintosh via FireWire. (Photo by Lawrence I. Charters)

tape for you, letting you know they've finished. Next, they copy it all.

All the files (even ones you left open, depending on the back-up software you choose) on your computer and maybe all the computers in your house or office, are copied onto a cartridge smaller than a cassette. Third, they offer great "disaster recovery." In the event of a total system crash, where your entire hard drive is wiped out, with a single back-up tape and good software (again, I like "Stac Replica" - www.stac.com), you boot up with a special floppy disk, insert the tape and come back to a fully functional computer, complete with everything just the way it was when it was last backed up. Really.

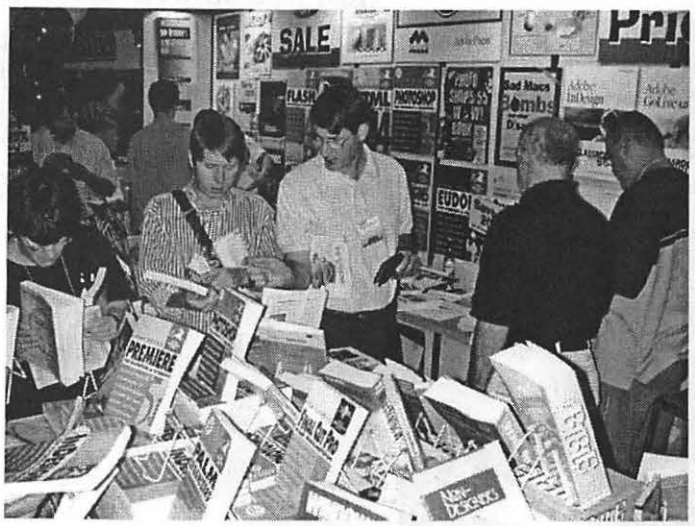
OK. Is it worth the cost? Maybe. Only you can decide how much your data is worth. If you can't go the tape back-up route, I'd consider a couple of other options. First, remember you don't have to back up everything everyday. All back-up software and even the DOS copy command allow you to copy only files that have changed since the last time they were backed up! These are called "incremental" back-ups. If you go into My Computer (on a Windows PC) and right-click on your C: drive, click Properties, then Tools, you can select Backup. This wizard will tell you if you haven't backed up before and give you the option of performing a full back-up. This is perfect for the first time. Next you can go in and do just incremental back-ups of things that have changed.

The only problem with this arrangement is that restoring files will require you to use all of the back-up disks since the last full back-up.

Alan, you pointed out that you really don't need to back up your programs and Windows, since you have the original copies of those. That's not a bad idea, in the event of a system problem. Because some problems are caused by file corruption, you could just reinstall all your programs and then restore your data and have a nice, fresh system.

So to answer Alan's direct question - which files should I choose to back up? - that's a hard one. You definitely want to back up your actual data files. The place you store your "Word," "Excel" and other program filesis often the My Documents directory. But if you are like me, you have these everywhere. Frankly, I can't give you an answer that is totally correct for everyone. You just need to spend some time with your programs to see where you have stored stuff. I've seen people store Microsoft "Word" documents in their C:Windows directory. Not the best place, for sure.

Don't forget your Internet bookmarks and favorite sites! These could be a pain to recover! Actually, while I'm thinking about it, there are some other items that can be difficult - notably, your Internet cookies and passwords. Cookies are stored in different places, based on your browser and the version you use. Usually in "Netscape" they are stored in a file called cookies.txt, while in "Internet Explorer," they are stored in the



As Robin Williams (a Peachpit author) mentions in her introduction to the latest Little Mac Book, the Mac is no longer quite so little, nor quite so simple. Peachpit's booth was always packed with people checking out the latest books on hardware and software. (Photo by Lawrence I. Charters)

RoboLab offers students an opportunity to learn about electricity and programming with a variety of Lego-based kits that can be controlled by a Macintosh. (Photo by Lawrence I. Charters)

Temporary Internet Files directory under C:Windows.

I would recommend you copy all of these. Why? Many of these passwords are used to customize a site for you, and some are used to let the server know who you are so you don't have to log in again.

Which brings me back to passwords. If you are like me, there are several sites you visit that require a password and you have no idea what they are anymore. You've saved them with that Save Password setting of your browser. They could be stored in three different places: With "Internet Explorer," the Auto Complete feature is stored in the "Internet Explorer" directory. The regular password dialog box is stored in files that end in .PWL in your C:Windows directory. (This includes the password to your dial-up connection, as well.) Sites that use a cookie for authentication are stored in your cookie files. Argh! Dave, do you have any other strategies?

Dave: Whew! I learn something from you in every column, Derek! As a home user, I try to keep things simple where back-ups are concerned. My solution is to keep all my personal files on Zip disks and do full back-ups of my hard drive on CD-R disks. I've found this works for me. The Zip disks are inexpensive, hold a lot of stuff and are easily transferable. I've found the CD-RW drive (a Yamaha SCSI drive) a bit flaky - it has to be coddled a bit more than I'd like - but it does back-ups like a champ. CD-R disks are also so cheap, you can afford to make back-ups and just hold onto them. CD rewriteables are a bit more expensive but can be erased and rewritten.

Remember, though, that if you do back-ups on CD-R disks, the data is there forever - so if you decide to throw older disks away, cut them up first if the information is sensitive. I've used an older Mac at work as a server and done back-ups with a streaming tape drive. "Retrospect" is a great Mac (and Windows) back-up program. The newest versions can use just about any media you choose, including USB and Firewire drives. Check it out at www.dantz.com. Windows users can even try their version free for 30 days.

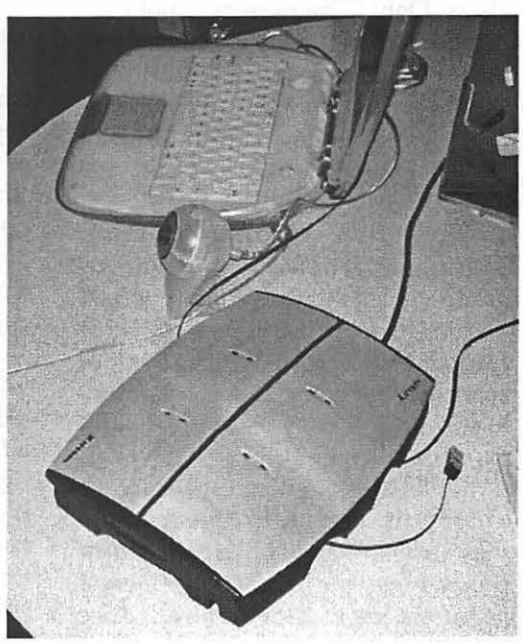
One other solution that comes to mind, Derek, is to use the Internet. There are a number of sites that will give you 20 MB or more for free and more for a reduced price. You can simply use that disk space for back-ups. One that I found - iBackup at www.ibackup.org - offers 200 MB of free space. Another possibility is at www.storagepoint.com. Check carefully, however, to make sure these sites are secure enough for your needs.

But the bottom line, folks, is that you should take the time to back up your most critical data and keep a copy off-site - a safe deposit box is one good place if the information is really important to you. Remember that programs can be reinstalled, but the cost of losing your personal data is too costly to calculate - and that includes the hair transplants you might need! Dave Ottalini is on the board of directors of Washington Apple Pi (www.wap.org), the Apple/ac user group based in Rockville, Md. He is employed as a senior producer for CNN Newsource, the affiliate service of Cable News Network. Derek Rowan is president of HLP Associates Inc. (www.hlp.net), a full-service computer, network and Internet firm serving businesses, headquartered in Falls Church, Va., and with offices in Washington, Baltimore and New York City.

For questions about home computer hardware, software or operation (no question is too simple or geeky), Dave and Derek can be reached by e-mail 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, they cannot promise individual responses. ■

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.

Derek Rowan is president of HLP Associates Inc. (www.hlp.net), a full-service computer network and Internet firm serving businesses headquarter in Falls Church, VA, and with offices in Washington, Baltimore and New York City.



NetStation, a 10/100 Mbps Ethernet hub with built-in, self-coiling Ethernet cables, allows almost anyone to set up a small network with little to no advanced preparation. (Photo by Lawrence I. Charters)

Oh,Woe is me. I have a beige G3 and it has no USB. No U... S... B...

by Abe Norfleet

DON'T GET ME wrong, I love my beige G3. But, alas, it has no USB. See, I also love my digital camera. Freedom from film, baby! I love snappin' pics. What I don't love? I don't love waiting 20 minutes while the pictures download. I don't love the flaky downloading utility that requires an arcane ritual (Disconnect printer > Connect camera > Photoshop> Twain acquire > quick turn on the camera, cross fingers while the camera buzzes and clicks. Doh! "The camera is not connected properly or is not turned on" > Click OK > Repeat > Lather > Rinse.) And I admit, I read the magazines... I experience... techno lust... USB card readers... $129 for SCSI... $40 for USB... drool... moan.

So after reading Barbara Passman's article about USB upgrades in last month's ***Mactropolis***, I decided to go for it and get a PCI USB* card and a SmartMedia* card reader so I too could enjoy 20 second downloads and a rosy future of USB expandability.

I like MicroCenter, especially for a hardware upgrade like this, because they are nearby and I like their return policy. I may pay a few dollars less if I scour the internet for the lowest price possible, but the peace of mind and no hassle returns are worth it. The truth of it is, I'm an impulse shopper and really went over there to go to PetSmart for some cat food. I thought, oh look, there's MicroCenter. I'll just go in and look around. (Note: After completing this article I did a search of completed items on Ebay, and MicroCenter's sale price on the SanDisk Smart Media card reader was only a few dollars more than the lowest recent price, and a few dollars cheaper than average.)

The beige G3 is a little trickier to open than the newer blue and white G3s or the charcoal colored G4s, but easier than the 8500s or 9500s. The case is the same as the 7200 and 7500 series, and getting it open is a piece of cake. There are two semi-hidden tabs on the front of the case, just grip, depress the tabs, and slide the cover about an inch and a half straight towards you. Then lift the cover straight up. Then pick up all the jangly metal pieces you knocked loose and spend ten minutes getting them back in position.

Once the cover is off there are a few plastic tabs to disengage and a plastic frame piece that tilts out to the left. The other side tilts out to the right, neatly moving the power supply, CD, and floppy drives out of the way of the motherboard. A little plastic foot drops down to support this rather heavy section, and if you open it right at the edge of your desk like I did you are in for a nasty moment when the whole thing almost falls off. A flimsy plastic arm on the inside of the case locks the tilt out section in place; I've seen more than one of these arms broken or bent in the middle. It's better to release it before shutting the case.

A static wrist strap is a good idea at this point. I bought one at Radio Shack that has a wire 24 inches long with an alligator clip at the end. It's horrible. It's like being a far running dog living on a short leash. But it still beats static-frying my computer's brains out.

I had two PCI slots open. Of course, if you don't have an empty slot you have some tough choices to make. Inserting a PCI card is nerve wracking. It takes a little bit of force to get it in, but too much force will break expensive stuff. How much is too much? I don't know, and finding out means a horrible cracking noise and the sight of money hemorrhaging from your computer. Not pretty.

I put thumbs on the top of the card, lined up over the front and back of the pin area. Most cards are longer than the pin area, so you want to choke in a little until you are pressing directly above the pins and not adding any lever-ish forces to the mix. Most instructions say not to rock or tilt the card, but I do wiggle it a little if it is being stubborn, which this one was. It was so stubborn I gave up on my first choice of slots, and it went into the second slot with half the effort. If a card is being particularly ornery and you have another PCI card you can pull out, try swapping them. The card that's been previously installed will go in a tight slot easier, and the slot it came out of will be a little looser.

The card was in and screwed down but the adventure wasn't over. I closed up, rebooted... and got the dreaded question mark. Now I must admit, it isn't my computer. It's my girlfriend's, so I better not break it. With rising panic I re-open it and,.. I remember bumping that little connector. I push it back into position, close up, re-boot, cross my fingers and pray,

and happy mac! I plug in the SanDisk SmartMedia reader, and run the installer disc for the USB card. It tells me to restart, silly installer, but I quit instead to run the install disc for the SanDisk device. Sure enough it also wants a re-start. OK, NOW I will.

The first couple of cards I read were very exciting. I popped the card in, the little orange light blinked, and a particularly ugly icon appeared on my desktop just like any other hard drive, only uglier and permanently titled 'untitled'. Copying the pictures is drag-and-drop simple, and very fast. What used to take more than 20 minutes now takes less than 15 seconds. One problem I noticed right away is the files are always named the same thing; with the download utility it prompted me to name the first image and they would all get named that name plus a number. I will need to figure out some script or utility for renaming 30 files at a time...

I got my first error trying to drag 36 images directly from the card onto a Photoshop alias on my desktop. Photoshop was closed, and in the time it took to open the card reader became confused and returned a System error, requiring a restart. The next card I inserted after the restart gave me a "This disk is unreadable... Do you want to initialize it?" error message. Checking the card in the camera confirms it does indeed have pictures on it, so I tried a different card... and get a creepy freeze. I was able to force quit the finder and regain mouse and click, but it froze again upon clicking restart. Insert big sigh, force restart with the three finger salute. After rebooting, the first card I insert shows up normally, but before the relief settles in, it freezes when I drag the images to another folder. Bah! Another restart, and at this point I've had several creepy freezes, force-quit the finder, and done some keyboard restarts, so I run Tech Tool Pro to check for directory damage. It finds several files (jpeg files from the card reader, btw*) with errors it says "are usually not serious but should be repaired." I magnanimously give TechTool permission to repair the damaged files, since it just seems so eager and I don't want to crush its spirit. Afterwards, the previously unreadable card shows up fine. Files drag and drop fine. Several cards in a row work without freezing. Thank you TechTool!

So. I had a few setbacks, and had that bad feeling more than once, but everything worked out OK in the end. In retrospect, I should have backed up important recent work before I installed the USB card, but I didn't. I do make pretty regular backups, so I wouldn't have lost too much, but still... As a matter of fact, I'm going to go do my backups right now. ■

From the July 2000 *MACtropolis*, newsletter of The Rest of Us Chicago Macintosh User Group.

*** GLOSSARY ***

PCI - Personal Computer Interface, for inserting add-on cards that extend your computer's functionality. It is the most common type of 'slot' found inside computers today. NuBus and PDS were functional equivalents in older Macs, and the next new thing is AGP.

USB - Universal Serial Bus.This is the multi-talented replacement for ADB, Apple Desktop Bus, which was how older Macs communicated with their keyboards, mice, tablets, and game controllers, and for the Serial ports, which took care of modem and printer chores. USB can move quite a bit of data over the bus, meaning a whole new world of scanners. printers, audio input, modems, and even ZIP drives and CD writers. It is still much slower than SCSI.

SmartMedia - Matchbook cover sized plastic wafers that hold 4, 8, 16. or 32 MB of data.They come in two styles, 5 volt and 3.3 volt. 3.3 is the standard now, the 5 volt cards came with older cameras and are no longer used, and aren't compatible with most card readers.There are a few other types of minimedia being used nowadays; CompactFlash comes in capacities up to 96 MB, Sony has a new Memory-Stick technology and the new Click! drive uses a miniature 40MB removable hard disk Different cameras, handheld computers, MP3 players, and card readers all have various compatibilities. Some card readers can read several types of media, the one I bought can only read SmartMedia. That's what my camera takes, and I didn't feel like paying more for compatibility I may or may not need in the future.

btw - by the way in Chat-speak Other handy phrases include imho (in my humble opinion), LOL (Laugh Out Loud), otoh (on the other hand), and ttyl (talk to you later). A comprehensive list is on line at www.netlingo.com/emailsh.cfm. A sister list of emoticons is at www.netlingo.com/smiley.cfm. Have fun :).

π

Newton... Huh?

by Steven J. Mcintosh

FOR MANY computer users, the name Newton doesn't really bring anything to mind. This was interestingly evident at the May Monthly Meeting when one of the prizes for that meeting was an Apple Newton. You could hear quite a few people asking what it was. I couldn't understand how they had missed it! Where had all of these people been?! Well, I really can't say anything too harsh about it since it was probably the best product to never gain any recognition or promotion.

The Apple Newton started way back. Back to when "others" ran Apple. The Newton was Apple's entry into the PDA market. Its initial impact was like that of a cannonball in a pool—the splash was enormous! Then, as the water calmed down, the only thing you could see was a little dot on the bottom.

Apple dropped the Newton in 1988 after declining sales and the rise of the Palm platform. Since then, Newton users have stuck to their platform and software continues to be written. I guess you have to understand that when all is said and done, the Newton was a few years ahead of its time and about 2x too big.

The Newton is a PDA (Personal Digital Assistant) in the true sense of the word. Unlike a lot of the palm-size units out today, the Newton can really assist. Today, you can pretty much call anything with a address book and a calendar a PDA and get away with it. So, I am going to ramble on a little bit about my Newton and must note that from this point on I am going to speak generally about the Newton in the last of its incarnations—The Newton 2100. Previous models contain most of the functionality discussed here.

The Newton started with a pretty simple design and a big advantage—HWR (Handwriting Recognition). This feature was implemented in true Apple form. It was robust and pretty intelligent. The last version of the software was, in my mind, as close as you could get to topnotch. There are a lot of people who have always criticized the HWR on the Newton, but I have to note that if you look closely at their handwriting, you will understand why.

I did have to make a couple of changes to my standard handwriting, but I have to admit that I am a designer and it is engrained in my nature to do things a little different. After I made these changes I could write very efficiently and naturally with the Newton and have very few errors. I have tried the Palm OS with Graffiti, and despite the fact that I like the system, I could hardly make a good comment about my use. As efficiently as they tried to make their recognition, I can still write a paragraph in the time it takes to scratch out a few words on a Palm.

The screen on my Newton is huge compared to a Palm (about twice the size, but that should be expected considering the size of the overall unit). Apple's vision of a PDA was something that could deal with real information. It is hard to display too much real information on the screens in current PDAs. It is also backlit which makes the Newton easy to read in any environment.

The screen on the Newton is also HWR everywhere. So, if I need to insert a word into a message, I tap my stylus between the two words and immediately start writing the word where it needs to go. The Palm has a very specific area for you to write in.

My Newton has two Type I PCMIA cards. You may be thinking, what on earth could I plug into that—it's only a PDA?! Well, how about a GPS System, an Ethernet card, a cellular phone modem card, a standard phone modem card, and memory expansion cards. Do I have anything plugged into them? Well, no. I am definitely not a Power Newton User.

What else is in this little bundle of joy? Well, a real speaker that does quite a good job. A microphone, which to my knowledge wasn't implemented but was rumored to be for future dictation and possible voice recognition. An Infrared Port which was great for sending information and files from one Newton to another. It also served quite well as a "printer cable." I tested this on a HP printer that had a little IR port on it and sure enough, out came my notes. And definitely not least is the stylus. A nice weighted stylus that doesn't look like one of the plastic pointy things that you used on childhood scratch pads (you know, the ones where you lift up the film).

It is actually quite amazing to think of where the Newton would be today if development had continued. Considering all of the available PC cards (USB, FireWire, AirPort Cards) small full-color displays, the price of memory... But many people believe that Apple hasn't had their last taste of the PDA market as rumors about their development of an Apple branded PDA continue to pop up. I am waiting to see if the rumors are true since I can only imagine the heights that Apple will bring the PDA platform to. ■

From the July 2000 *MACtropolis*, newsletter of The Rest of Us Chicago Macintosh User Group.

New classes

See what is available for you by checking the Tutorial section starting on page 52.

Garage Sale

coming up on December 9th.

Take advantage of the great buys on Mac equipment available all under one roof.

Classifieds

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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Help Wanted

—Senior Software Engineer: V-ONE Corporation is looking for a Senior Software Engineer for Mac Client. Please refer to our website at www.v-one.com, or e-mail HR at paige@v-one.com

—Bethesda Computers & Networks is looking for a person knowledgeable on the Macintosh for a Sales and Software Support Position. General knowledge of the Macintosh hardware is preferred but will train a qualified applicant in this area. Please contact Ejaz at <bcnt@erols.com> or 301-652-5108.

Mac Consultants and Techs Wanted

—Join our team of dedicated and professional Mac lovers as we serve the technology needs of businesses throughout metropolitan Washington, DC. Send us an e-mail describing yourself and what you WANT to do every day. Then tell us about your professional qualifications, specifically your experience helping people with technology and troubleshooting Macs in a networked environment. Send your resume to <macjobs@uptimeweb.com>. Visit our website at www.uptimeweb.com to learn more about Uptime Computer Services, Inc.

Help Needed

—Volunteers Needed: Recording for the Blind and Dyslexic of Metro Washington is looking for volunteers who can read technical books (currently working on data structures in c++ for example). We are located in Chevy Chase at the Friendship Heights Metro, 5225 Wisconsin Ave. NW (at Jennifer Street- across from Mazza Gallery). We need computer literate folks willing to volunteer for 2 hours a week, to help read textbooks onto tape. The tapes are used by students borrowers. Interested folks can come by on Wednesday evening, January 20th, between 6-8pm for an open house orientation. Else, they can call Laurel after 3pm at 202-244-8990 and get more info. Evening sessions start at 5:30 and 7pm, Monday-Thursday. Thanks again for your help and best wishes for a successful and enjoyable 1999. ■

Washington Apple Pi, Ltd. 12022 Parklawn Drive, Rockville, MD 20852

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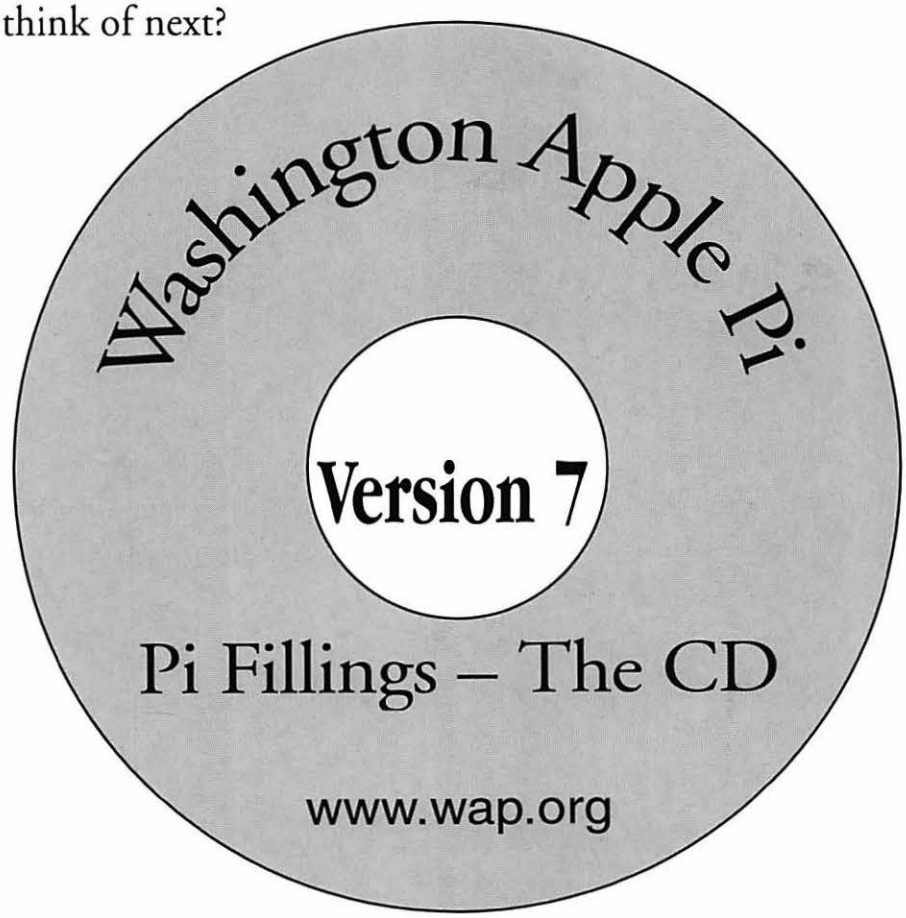
** Access to the TCS is contingent on WAP having a current home telephone number for the member.

Pi Fillings - The CD: Version 7

Version 7 leaves you with no excuses for not putting those hot summer days to work for your PowerMac. We built this CD to put the pleasure back into updating the applications and utilities in your faithful indoor servant. Treat your Mac and yourself to the latest Netscape Communicator or iCab releases. Make life easier by replacing your old StuffIt Expander and Drop StuffIt programs with the newest versions; that way, you will be able to open so many more of those mysterious downloads people send you. Just in time for your summer enjoyment, Version 7 includes a whole section of on-line applications to make your summer cruising far less arduous. And if those pesky grandkids are coming for their obligatory visit, install some of the summer games we have included to entertain the whole family. All that on one little CD—what will the Pi think of next?



How to get it: *Pi Fillings—the CD, version 7 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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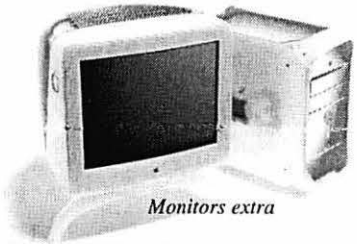

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