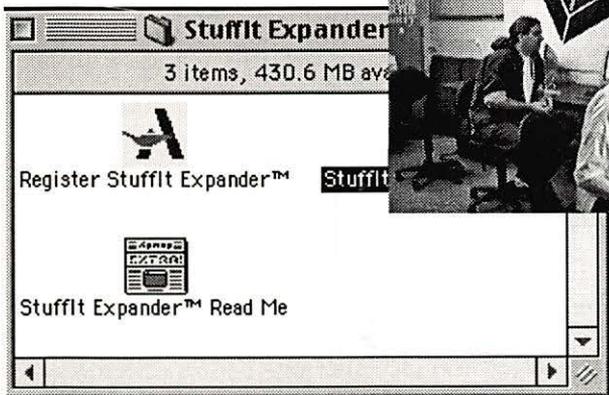
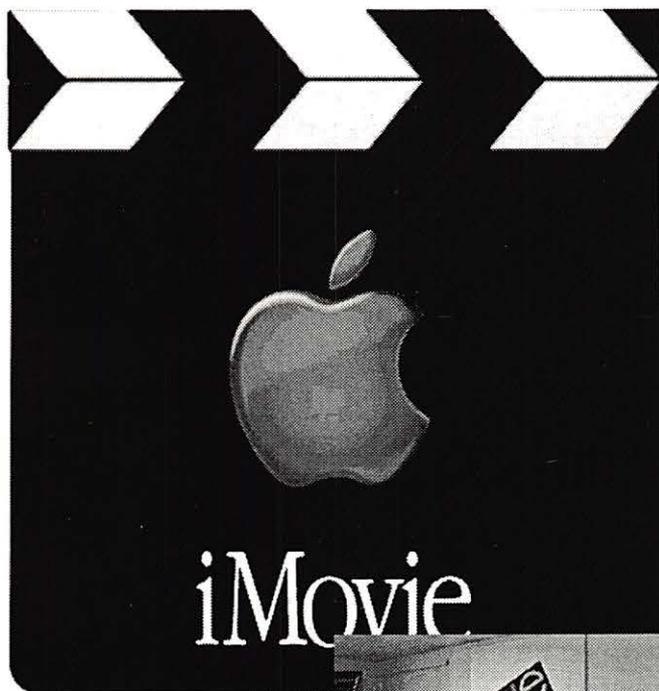
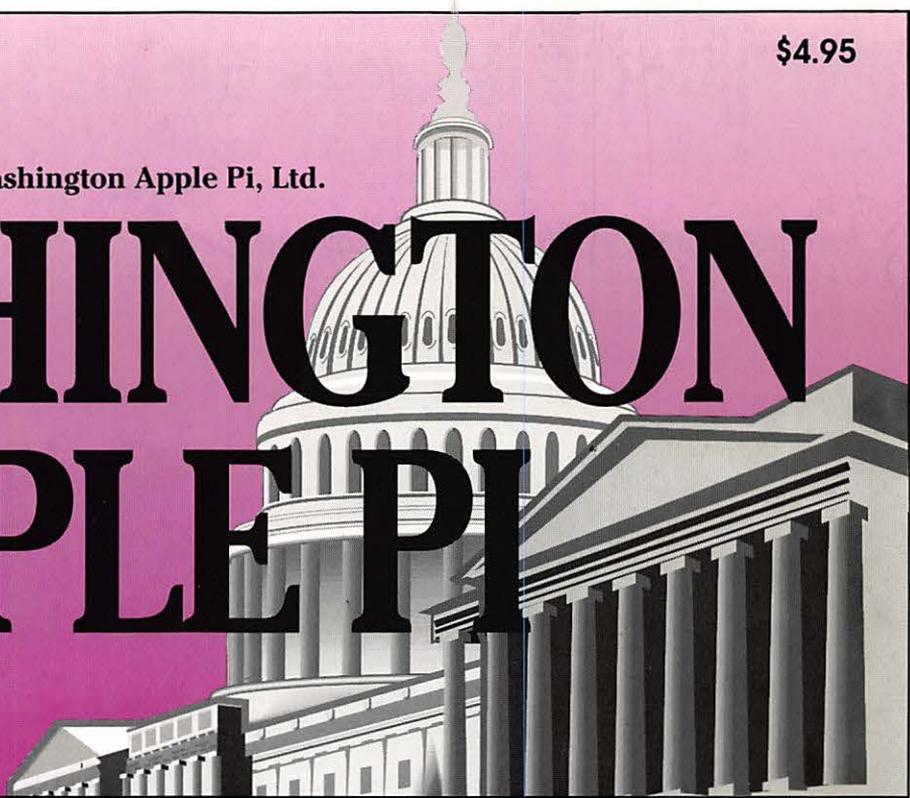


The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 22, Number 4



New Tutorials, including Final Cut Pro

Apathy & Arrogance —5

iMacs Come to the Pi—18

Redmond on the Potomac 3—21

Privacy Wars—26

MS Internet Explorer 5.0, Outlook Express 5.02 —29

iMovie Sans the iMac—32

Easy Miracles: Movies from Still Pictures—35

Melody Assistant—71

Don't Discard That Rotten Apple—Make It an Internet Server, II—67

Bethesda Computers & Networks, Inc.

A Tradition of Sales, Service & Support – 16 years experience, 24 Hour Turn Around

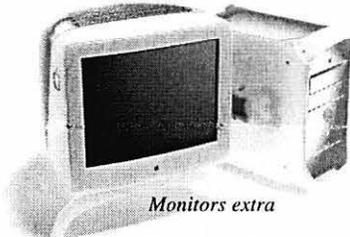
301-652-5108

iMac **\$1,199**

333 Mhz, 32 MB RAM
56K Modem, 6GB HD

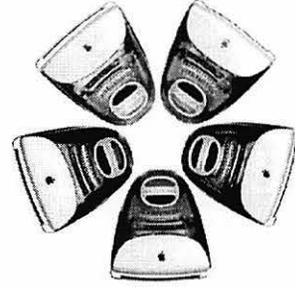
HP LJ 4000N printer **\$1,399**

17 Pages per minute, JetDirect card
(Ethernet card), 1200dpi, 8 MB RAM



Monitors extra

4350 East West Highway, Suite 101
Bethesda, MD 20814
Email: bcnt@sysnet.net
Weekdays 10 am – 6 pm, Sat. 11 am – 4pm



PowerMac G3 **\$1,599**

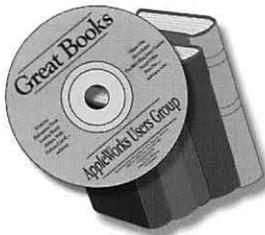
PowerMac G3 300 Mhz, 64 MB RAM
6GB HD, 24X CD-ROM

PowerMac G3 **\$2,499**

PowerMac G3 350 Mhz, 128 MB RAM,
Zip Drive, 12GB HD, 24X CD-ROM

Apple Authorized VAR Dealer and Service Center
We service Tektronix, HP, PC's, Mac clones
Data Recovery and Service Contract Services

World's Greatest Books!



Now you can own 100 of the world's greatest books for only \$39.95! Here are the most significant writings of Shakespeare, Mark Twain, Emily Brontë, Arthur Conan Doyle, Jack London,

Jules Verne and dozens more, all on one CD. What a collection of delightful stories!

All books are in AppleWorks, Acrobat, and text files that you can read on your screen, print or search electronically to find that elusive quotation for your writing. Perfect for libraries, schools and a great gift for friends and family. Macintosh and Windows compatible. (Add \$2 U.S. s/h.)

90+ Updaters for OS 9!



OS 9 adds dozens of features to the Macintosh, but you must update many software applications and extensions to ensure compatibility with OS 9.

AWUG's Updater.2CD includes more than 90 required OS 9 updaters, the developers' directions for installing the updaters, Acrobat Reader 4.0 to help you read the .pdf files that accompany the updaters, and more. If you upgrade to OS 9, you will want this CD! Only \$14.95 (plus \$2 U.S. s/h).

Order from: AppleWorks Users Group, Box 701010, Plymouth, MI 48170; (888) 781-AWUG; Fax: (734) 454-1965; email: orders@awug.org

– Satisfaction guaranteed or your money back. –

Turbo Math Maniacs™

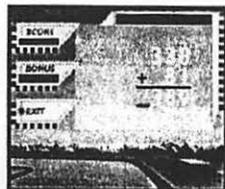


New

Set a New Pace for Learning Math

Give children a green light to learn math! Multiple lessons and levels challenge students as they practice problems with up to three digits in addition, subtraction, multiplication and division. Correct answers earn points for a motorcycle race. Teachers and parents can set lesson criteria and monitor student progress with enhanced assessment features. **\$19.95***

Mac CD • Ages 7-Up



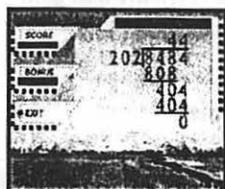
Lessons

More than 50 lessons in addition, subtraction, multiplication and division!



Characters

Students can choose to be any one of eight racing characters.



Levels

Set lesson criteria according to time or the number of correct answers.



Work Sheets

Print work sheets, detailed student progress, certificates and more!

Time, Money and Math

Clock Shop

Time will fly as kids have fun learning about analog and digital time. Multiple lessons and skill levels teach clock math and vocabulary. Tracks progress and prints work sheets.



\$14.95*

Ages 5-12 • Mac/Win CD

Coin Critters

Coin Critters lets children practice coin identification, purchasing and counting back change. Tracks progress and prints work sheets and reports!



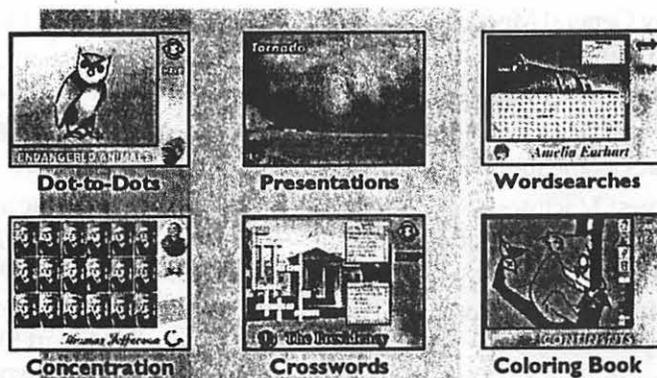
\$14.95*

Ages 5-12 • Mac/Win CD

ACTIVITY TREE™

Educational Software Activities

Target specific educational topics such as health, holidays, the environment, government, geography and more. Each Activity Tree program brims with activities such as crossword and wordsearch puzzles, where vocabulary words and definitions are spoken for increased comprehension. The programs also feature matching games, picture jumbles, dot-to-dots and coloring book pages that enrich the learning experience. Narrated, eye-catching presentations reinforce vocabulary and subject recognition in each program.



Dot-to-dots, coloring book pages, crossword and wordsearch puzzles in Activity Tree programs can be printed for classroom use.

Mac/Win 95 CD • Ages 5-10 • Only \$9.95* Each!

Dinosaurs
Solar System
Tornadoes
Cats
Dogs
Primates
Thomas Jefferson
Abraham Lincoln

George Washington
Endangered Animals
Pollution
Recycling
Continents
Oceans
Rivers
Fitness

Martin Luther King, Jr.
Rosa Parks
George Washington Carver
Marie Curie
Amelia Earhart
Eleanor Roosevelt
Congress
Supreme Court

The Presidency
Food Groups
Tooth Care
Presidents' Day
Thanksgiving
Valentine's Day

\$9.95* Each

*Special, limited-time prices for Apple Pi members! Call Nordic Software at 800-306-6502!

Offer expires November 2000

Table of Contents

Volume 22

July / August 2000

Number 4

Club News

WAP Hotline	47, 50
WAP Calendar	48, 49
Index to Advertisers	8
TCS Help Sheet	51
Tutorials	52
Tutorial Form	59
Classified Advertisements	95
WAP Membership Form	96

→ I Am Not A Geek. Honest	78
by Lawrence I. Charters	
→ <i>The Geek Handbook: A Review</i>	79
by Kathleen G. Charters	
Letter of Thanks to WAP	88
Pi Fillings—the CD, version 7	90

SIGs and Slices

Graphic Arts SIG April & May Meetings	15
---	----

General Interest

Apathy & Arrogance	5
by Lorin Evans	
Cartoon, C. Stancil	7
BOD April Meeting Notes	8
BOD May Meeting Notes	9
April General Meeting Notes	10
by Steven Kiepe	
May General Meeting Notes	12
by Steven Kiepe	
Garage Sale photos start & run throughout	13
iMacs Come to the Pi	18
Largest Macintosh Specialty Store in the East: MacUpgrades Opens Gaithersburg Store	19
Redmond on the Potomac, Part 3 ..	21
by Lorin Evans	
Recently Cataloged Books for the WAP Library	23
by Brian Mason	
Privacy Wars	26
book review by John Ludwigson	
Best of the TCS	40
compiled & edited by John O. Ludwigson	
Click City	45
→ <i>The Geek Handbook: A Review and History</i>	77
by Lawrence I. Charters	

Macintosh

Microsoft Internet Explorer 5, Outlook Express Version 5.02	29
by Al Lubarsky	
Free QuickTime Movie Software iMovie Sans the iMac	32
by Dennis R. Dimick	
Easy Miracles: Movies from Still Pictures	35
by Lawrence I. Charters	
Lessons Learned in Recovering a Hard Drive	64
by Bob Whitesel	
Don't Discard That Rotten Apple—Make It an Internet Server, Part II ..	59
by Richard S. Sternberg	
Melody Assistant	71
by Brian G. Mason	
Setting Up Stuffit Expander	81
by Pat Fauquet	
I bought an iMac and plugged it in, now what? (part 4)	84
by Terry Lawrence	
I bought an iMac and plugged it in, now what? (part 5)	85
by Terry Lawrence	

Icon Guide



Macintosh



General Interest



Apple II, IIe, & IIGS



Apple III (SARA)

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

September / October July 20
November / December Sept. 20

Ad space reservations

September / October July 20
November / December Sept. 20

Camera-ready ad copy

September / October July 25
November / December Sept. 25

Editorial Staff

Managing Editor

Kathryn Murray 804 / 580-2366
KAM129@aol.com

Associate Editor

Bonnie Ashbaugh 301 / 946-8955
bonniea@tcs.wap.org

Review Editor/Macintosh Editor

Lawrence Charters 410 / 730-4658
lcharters@tcs.wap.org

Apple II Editor

Seth Mize 410 / 766-1154

Art Editor

Blake Lange 301 / 942-9180
blake.lange@tcs.wap.org

Calendar Editor

Bill Wydro 301 / 299-5267
wwydro@aol.com

The Journal of Washington Apple Pi, Ltd. is an independent publication not affiliated or otherwise associated with or sponsored or sanctioned by Apple Computer, Inc. The opinions, statements, positions and views stated herein are those of the author(s) or publisher and are not intended to be the opinions, statements, positions or views of Apple Computer, Inc.

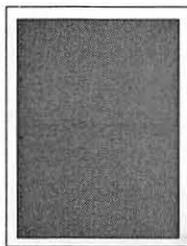
Washington Apple Pi

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

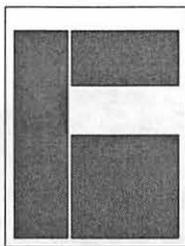
The page layout program used was PageMaker 6.5 the word processing program was Microsoft Word 5.1; the principal typeface is Palatino (10/12) for the articles; and Avant Garde Demi for headlines, subheads, and emphasis. Charlemagne Bold for drop caps.

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.

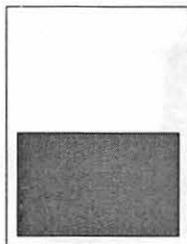
Advertising in the Journal (available sizes)



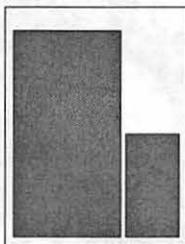
Full Page
7.5" x 10.0"



Third Page
(vert.)
2.5" x 9.5"
Sixth Page
(hor.)
5.0" x 2.5"
Third Page
(hor.)
5.0" x 4.75"



Half Page
7.5" x 4.75"



Two-thirds
Page (vert.)
5" x 9.5"
Sixth Page
(vert.)
2.5" x 4.75"

No. of times ad runs	1	2-3	4-5	6+
Full Page	\$450	\$383	\$338	\$270
Covers	\$550	\$468	\$413	\$330
Two-thirds Page	\$360	\$306	\$270	\$216
Half Page	\$300	\$255	\$225	\$180
Third Page	\$225	\$191	\$169	\$135
Sixth Page	\$125	\$106	\$93	\$75

Special guaranteed positions incur a 10% surcharge

Ad Deadlines

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

Copy may be received as traditional mechanicals, rc-paper, velox prints, or film negatives. Negatives will incur an additional \$15.00 strip-in charge.

Office Staff

Office Manager Beth Medlin

SIG Chairs

Annapolis Slice

President Jeff Straight (410) 634-0868
email: jstra@annapolis.net

Vice President Lloyd Olson 410-544-1087

Secretary Ron Johnson (410) 315-8764

Treasurer Clarence Goldberg (410) 263-5189

AAS Membership InfoLine (410) 647-5605

Library Lester Morcef (410) 987-0685

Publicity Kay Cave (410) 266-9752

Nwsltr. Lorraine & Jim Warner (301) 262-3420

AOL SIG John Barnes (301) 652-0667

JDBarnes@aol.com

Apple IIGS

Lorin Evans

lorin.evans@tcs.wap.org

Art SIG

Joe Morey

(703) 281-5385

Columbia Slice

President Bob Pagelson (410) 992-9503

Vice President Tom Cook (410) 995-0352

email: tom.cook@tcs.wap.org

Secretary Tim Childers (410) 997-0066

Treasurer Carl Souba (410) 418-4161

Membership Jacquelyn Hall (301) 854-2932

Publicity Henry Yee (410) 964-3706

Disk Librarian, Apple Bill Campbell (410) 997-9317

Disk Librarian, Mac Tim Childers (410) 997-9317

Database SIG

volunteer needed

Delmarva Slice

President: Shelly Wetzel sawetzel@ssu.edu

Secretary: Geraldine Rossi gnrossi@ssu.edu

Treasurer: Dean Peterson dapeterson@ssu.edu

DisabledSIG Jay Thal (202) 244-3649

jay.thal@tcs.wap.org

Excel SIG

Dick Byrd

(703) 978-3440

byrd@mnsinc.com

Frederick Slice

President Bob Esposito (301) 831-1187

V.P. Richard O'Connor (301) 662-7198

Sec./Treas J. Russell Robinson (301) 739-6030

Nwsltr. Ed. Mary F. Poffenburger (301) 845-6944

Asst. Nwsltr. Ed. Dick Pelc (301) 662-2428

Apple Librarian Ken Carter (301) 834-6516

GameSIG Mike Dickman (703) 525-2410

Genealogy SIG

Volunteer needed

Graphic Arts SIG

Blake Lange

(301) 942-9180

blake.lange@tcs.wap.org

HyperTalk

volunteer needed

Mac Programmers

volunteer needed

Music SIG

Ed Moser

(301) 924-1573

Newton SIG

volunteer needed

NOVA Educators SIG

Pat Fauquet

(703) 550-7423

email: fauquet@erols.com

QuickTime SIG

Stuart Bonwit

(301) 598-2510

email: sbonwit@tcs.wap.org

Retired SIG

Chuck James

(301) 530-6471

chazza@bellatlantic.net

StockSIG

Morris Pelham

morris.pelham@tcs.wap.org

Three SIG

David Ottalini

(301) 681-6136

dave.ottalini@tcs.wap.org

Officers and Board of Directors

President	Lorin Evans	lorin.evans@tcs.wap.org
VP, Volunteer Services	James Kelly	
VP, Publicity	David G. Ottalini	dave.ottalini@tcs.wap.org
VP, Programs	Steve Kiepe	
Secretary	Brian Mason	brian.mason@tcs.wap.org
Treasurer	Dave Weikert	dweikert@tcs.wap.org

Directors	Kenneth Clare	
	Kristen Dunn-Thomason	
	Don Essick	don.essick@tcs.wap.org
	Pat Fauquet	fauquet@erols.com
	David Harris	david.harris@tcs.wap.org
	Needham Langston	
	Dale Smith	dales@tcs.wap.org
	Richard Sternberg	

Library Volunteers

Apple II Head Librarian		Volunteer Needed
Apple IIGS Librarian		Volunteer Needed
Apple II Librarian		Volunteer Needed
Apple III Librarian	David Ottalini	(301) 681-6136 dave.ottalini@tcs.wap.org
Macintosh Librarian	David Weikert	(301) 963-0063
Mac Library	Ben Frank	
	William Jones	Fred Rodgers
	Tony Salerno	Joe Swick
Head Reading Lib.	Brian Mason	b.mason@tcs.wap.org
Dealer Relations Comm.		Volunteer needed
Legal Counsel	Richard Wohltman	
Membership		Volunteer needed
SlGs & Slices Coord.	David Harris	david.harris@tcs.wap.org
Journal Store Distribution		Volunteer Needed
Tutorial Coordinator	Pat Fauquet	fauquet@erols.com
Telecom SysOp	Lou Dunham	lou.dunham@tcs.wap.org

Washington Apple Pi, Ltd.

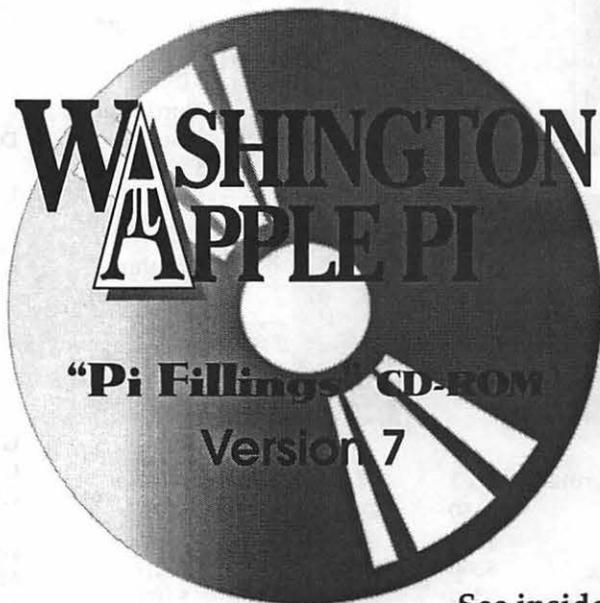
12022 Parklawn Drive, Rockville, MD 20852
 Business Office: (301) 984-0300
 TCS: 2400 bps (301) 984-4066
 14,400 bps (301) 984-4070
 Web address: www.wap.org
 e-mail address: office@wap.org

Office hours: Mon., Wed., Fri. 10 am-6pm
 Tues. 7-9 pm—Clinic Night Only—
 Not Regular Office Hours

When weather is bad, call to check if office is open.

Look through the Tutorial section to many new offerings.

Also, see page 90 for the contents of the new Pi Fillings CD—version 7.



See inside back cover for more details

Apathy and Arrogance

I HAVE a couple of stories to offer. One is about the election that impaneled a new group of directors to run this place for our next fiscal year. I have a frustration I would like to share with you concerning what transpired.

The second is about Redmond on the Potomac — the ongoing saga of the struggle between the Department of Justice and Microsoft Corporation. For those of you addicted to this stuff, Part III is found on page 21. There you will learn what Judge Thomas Penfield Jackson concluded is remediation for his Findings of Fact, and a road map to help you keep track of the combination of appeals and countermoves that eventually will lead to a “resolution.” As always, you will find different source material to keep you more knowledgeable than the usual fare found in your local paper. Here I offer a couple of sidebars on the case.

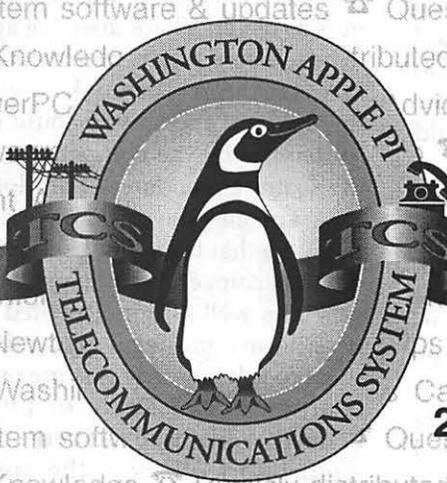
For 66 Cents

... you were told you could vote twice. Ah, the honest types you are; none did so. My efforts to get out a sizable vote were sort of successful. Double the number of ballots were received this year over last. But 231 is not exactly a number about which to get giddy. It is slightly outside my understanding of social group dynamics to know why some of you could not be bothered to spend 33 cents to at least confirm that you are alive. You did not have to vote. Just return the envelope with something in it. Admittedly, the challenge to name the young lady on America’s new golden dollar proved too difficult for all; no one could name her.* So, maybe the answer is: difficult questions are out.

I entertain a fantasy that there is something I can say, or the Pi can do, which would increase the number of respondents to our annual try at participatory democracy. I have yet to

find the formula. The great thinkers in this place have toyed with the idea of an annual survey coupled with the election ballot as a way to increase the number of returns. We would separate the ballots and surveys upon arrival and, as an incentive, give a prize to someone whose survey is drawn from each batch of, say, 50 envelopes. Another option: our webmaster is looking to find a way to run the election from the web.

If you voted, thank you. As for the rest, you are in luck or stuck. If you will indulge me for a moment. Whether or not you voted, and I have no way of knowing what you decided to do, please send me a note with suggestions for raising the interest level when we next do this. You can find me at <lorin.evans@wap.org>. If you did not vote, it is OK to tell me why you didn’t. Give me a clue as to what we could do to make each of you a touch more inclined to participate. Dash off some dastardly demarche to your elected leadership. Other than heaving Fearless Leader, who is challenging Methuselah for some title, I am curious what could be done to make it more enticing for you to vote. Look at it this way, if 33 cents got us 231 ballots, just think how many we can get for nada.



Washington Apple Pi's
"24-hour General Meeting"

Tele-Communications System

2400 bps and public access: (301) 984-4066
9600+ bps: (301) 984-4070, (202) 543-5170

Call (301) 984-0300 for registration, passwords
14+ lines, supporting 300 to 19,200 bps modems

More Microsoft Saga

I have not a clue as to how you feel about the antitrust case now entering the appeal phase where it will be heard by two different set of jurists. Typically I hear Microsoft extolled as the engine that is driving the American economy or the Justice Department as Attila entering the town square. I am more interested in the intellectual divide that separates these two antagonists. I am intrigued at how they have spent endless hours talking past each other. How is it that egos can become so out of balance.

It may be hard to picture this, but I am proffered as a computer person at career day programs for several regional high schools. The schools round up a standard smattering of mainstream careers: medical, legal, technical, and .com people to give students a sense of what such a career means today, where we see such a profession going tomorrow, etceteras.

To get my disappointments out of the way, I have yet to understand why there are no trade crafts represented at these things: plumbers, carpenters, auto mechanics, or computer doctors. Yea, I know the answer I get from school administrators; I consider those answers capital "L" lame. Can you picture some .com working on the family Avanti or repairing the plumbing? My other disappointment is that once the formal session is over and the students are free to mingle with their guests, I inevitably get only two types of questions: Intel vs Mac 'gotchas' and 'my Mac is broken.'

However, when the formal session is on, the kids ask us how hard we work, salary questions, and assorted what kinds of schooling do they need to become one of us. My opening pitch is that each student get a 'decent' liberal arts education and upon that foundation build towards some specialization. I ask that they read a book or two that is not required by some teacher. If you want

the details of what I say, let's try it some other time; if you want to know why I believe what I say, look no further than the folks from Redmond, Washington.

Death By Arrogance

"The idea that somebody would say that breakup is a reasonable thing comes as quite a surprise . . ." said the Chairman of the Board. I am not comforted to report that I suspect Mr. Gates really believes he did nothing wrong. How can it be that neither a reading of the transcript nor the Finding of Facts made a dent in his beliefs?

I am puzzled by the poor prep of his witnesses by his lawyers. Both sides had access to the same material uncovered during discovery; so, how can it be that Microsoft witnesses had their testimony undone by their own e-mail? The video depositions, 'adjusted' video demonstrations of the Windows OS, and offering the court a crippled copy of their OS reflected a complete disdain for the judicial proceeding. "Credibility, . ." said Judge Jackson in an interview, "is very important." I would add preparation to his list.

One of the best lines to come from an industry analyst, Rob Enderle with the Giga Information Group <www.gigaweb.com>. He is quoted as saying that Microsoft went in to court with a parking ticket and came out with a death sentence. How could that happen?

Rob is referring to a 1995 consent decree Microsoft negotiated with the Justice Department (the speeding ticket). As part of the agreement, Microsoft agreed to stop charging personal computer companies a fee if they chose not to install a Microsoft operating system in their computers. Gates and company essentially thumbed their nose at the agreement they signed. Someone in the legal department of Microsoft should have told Mr. Gates that it is not nice to do that to Uncle Sam—someone to whom he

"Mr. Gates and company could surely have used some outside counsel as they proceeded in this case. They are long on byte smarts and woefully short of community smarts. They seem unable to temper their competitive exuberance with some sense of a business ethic that can accept competition."

would listen. From here, the impression is that there was no such person. That was the opening the Justice Department used to revisit the Microsoft case resulting in the breakup order (death sentence).

I would offer that it was that attitude emanating from the top of the company that emboldened subordinates to conclude it was to be business as usual. There does not appear to be someone out there who had both access to the decisionmakers and influence over them, who could counsel tempering the competitive drive Mr. Gates engendered. I am looking for someone who could have helped them see that there can be a different way to achieve the same goals using practices well within accepted business norms and legal constraints. I want to ask where was some outside counsel; a Sam Dash, or Edward Bennett Williams, or Robert Strauss. And, I sort of know the answer: Redmond defined their interests as the public interest and nobody was willing to call Gates on it as that reasoning hardened. Well, somebody

skipped on that 'decent' education I talked about today.

Mr. Gates and company could surely have used some outside counsel as they proceeded in this case. They are long on byte smarts and woefully short of community smarts. They seem unable to temper their competitive exuberance with some sense of a business ethic that can accept competition. One example: Microsoft was doing quite well overcoming the lead Netscape had in the browser market; giving software away, even a work-in-progress, is a no brainer. Netscape was no model of good customer relations either. They were alienating consumers quite nicely without help from Redmond. Microsoft could afford to give its browser away because it was earning cash from its other products. Netscape had few other cash generators. It relied on its flagship products Navigator and Communicator to bring in royalties from commercial accounts. It was not necessary for Microsoft to go much beyond giving their software away to shift the momentum its way. There was something in the corporate ethos, the reasoning processes at Redmond, that made it acceptable for them to cross over a line that separates competition from bullying. The impression I have from reading the transcripts is that they recognized no line.

The attorney general for the state of Maine is James Tierney. He sums the story up this way: "I'm not sure that Microsoft, even today, understands the law. Bill Gates just doesn't get it." And what about the employees of Microsoft? I would like to know how all that human intellectual property, very mobile and desirable intellectual property, is dealing with this. Now you know why I want the .com wannabees I talk to today to have a larger sense of themselves and their society than their current role model seem to possess.

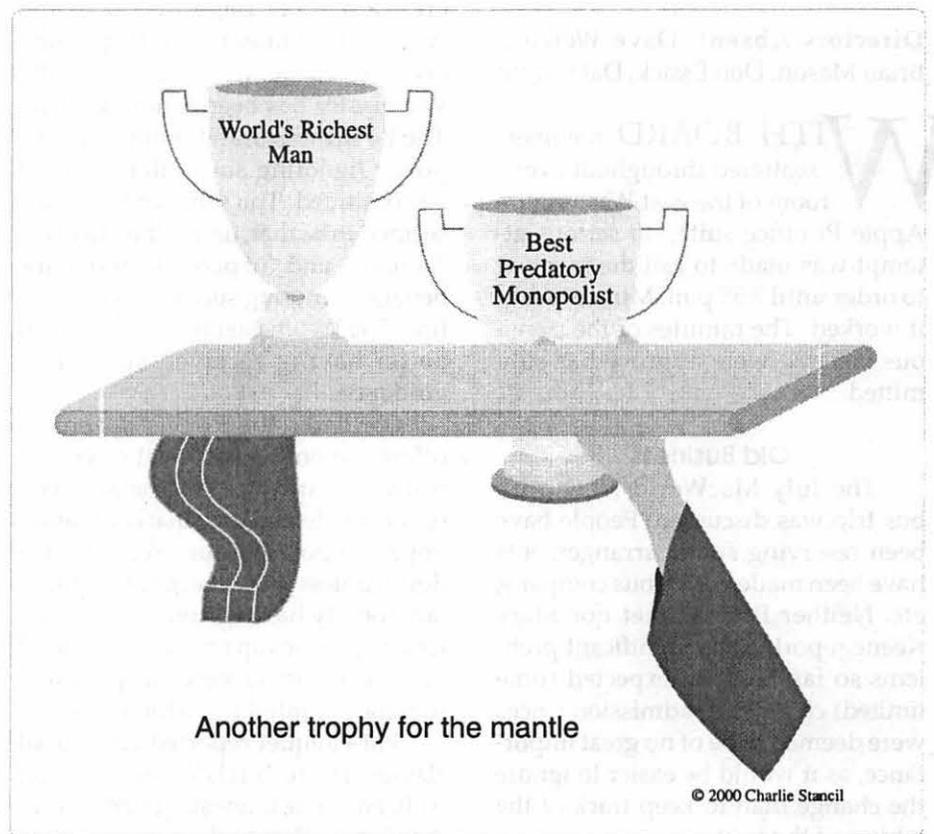
Is Self-Destruction Possible?

There is another facet of this case that bothers me. How can the court ask Microsoft to propose it own deconstruction? So I asked a smart head how our legal system handles such incongruities. Not well, it turns out. Here is a case where the accused truly believes that nothing untoward was done by them, yet the "system" finds them guilty. That makes it hard for Microsoft to offer a plan to dismantle itself, when all through the trial they sounded so much like Abraham Lincoln. Now what? To stand up for what they still claim to believe makes them arrogant; to provide a plan for devolution makes them look like hypocrites. If Microsoft truly believes its own rhetoric, how is this conundrum resolved? Well, . . .

There is an interesting Amici Curiae brief submitted to the court by Robert Litan (Brookings Institution), Roger Noll (Stanford), William

Nordhaus (Yale) and Frederic Scherer (Harvard). Each is a professional economist with an interest in industrial reorganizations brought about by government intervention. It is a great read on how to think through alternative strategies to remedy the Finding of Facts by Judge Jackson. <<http://www.econ.yale.edu/~nordhaus/homepage/Amicus%20brief%20port.htm>>. Were something to happen such that Judge Jackson holds hearings concurrently with the numerous appeal options available to both Justice and Microsoft, this Amici could be the catalyst from which an 'enlightened' breakup could evolve. I am not offering that this makes Microsoft happy; but, it does address that conundrum. Don't go away. ■

** Her name is Sacagawea. She is the Shoshone woman who was the guide for Lewis and Clark.*



Washington Apple Pi

Board of Directors Notes April 12, 2000 Meeting Draft Minutes

[Note: the Board had not approved the minutes of this meeting as of this writing due to an error on the part of the secretary, who has been sacked. 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: Lawrence Charters, John Barnes, Lorin Evans, Steve Kiepe, David Harris, Dave Ottalini, Mary Keene, Pat Fauquet, Lou Dunham

Directors Absent: Dave Weikert, Brian Mason, Don Essick, Dale Smith

WITH BOARD members scattered throughout every room of the vast Washington Apple Pi office suite, no serious attempt was made to call the meeting to order until 7:55 p.m. Miraculously, it worked. The minutes of the previous meeting were approved as submitted.

Old Business

The July MacWorld New York bus trip was discussed. People have been reserving spots, arrangements have been made with a bus company, etc. Neither Pat Fauquet nor Mary Keene reported any significant problems so far. Some unexpected (time limited) changes in admission prices were deemed to be of no great importance, as it would be easier to ignore the change than to keep track of the whims of the host.

John Barnes reported that the election is well underway. Candidates have been nominated, contacted, and their nomination acceptances or rejections been noted. Those candidates who wished to include candidate statements have submitted them, and they will be in the May/June issue of the Journal, along with the ballot.

New Business

A group claiming it represents The Times of New Delhi contacted the Pi Webmaster and offered their services for "cloning" our site to "increase market penetration in the Asian subcontinent." The Pi gets several of these a week, and the Webmaster has been ignoring them. The Board was asked if this informal policy (ignoring such offers) should be continued. The sense of the Board seemed to be that, unless the offer was "serious" and "of potential economic benefit," ignoring such offers was just fine. The Webmaster felt ever so much better having received such clear guidance.

Similarly, the Pi gets dozens of offers a month for special offers for software, hardware, Internet services, seminars, demos, etc., that companies hope we post on our Web site. We don't, unless they pay money and, so far, nobody has. Should a special offers page be set up on the Pi Web site? The Board had no objection, provided someone wanted to do the work.

Pat Fauquet reported on tutorial classes. The tutorial classes are doing well, but some interesting trends have developed. Personal computers have

"Similarly, the Pi gets dozens of offers a month for special offers for software, hardware, Internet services, seminars, demos, etc., that companies hope we post on our Web site. We don't, unless they pay money and, so far, nobody has. Should a special offers page be set up on the Pi Web site?"

gone beyond the affluent technophiles down into the ranks of the near-poverty-stricken technophiles and are now entering the homes of confirmed technophobes. Pat is working on a new series of Introduction to Macintosh classes that will be aimed at teaching very, very basic skills. This problem has been compounded somewhat by the trend toward electronic documentation; it is hard for beginners to read the introductory documentation if they can't

Index to Advertisers

Bethesda Computers	C2
ClarisWorks UG	C2
Euro Print Educational CDs	63
MacUpgrades	C4
Nordic Software	1
TCS	5
Pi Fillings—The CD (#7)	C3
WAP General Meeting	66
WAP Officers	17

figure out how to operate the computer.

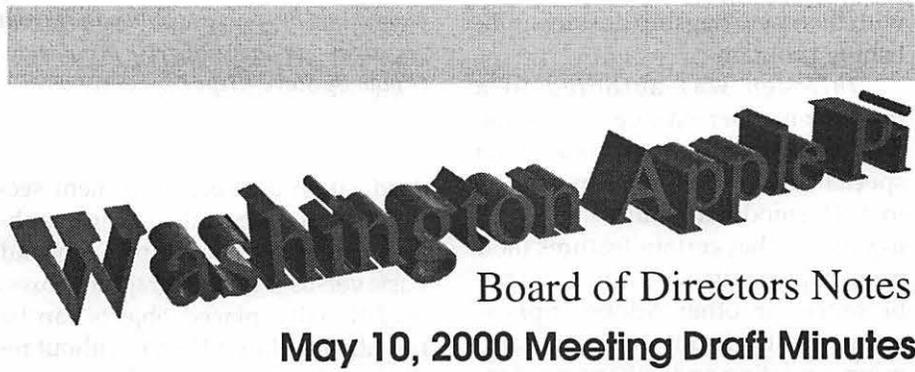
John Barnes brought up again the idea of an electronic news bulletin. This could be either in the form of a newsletter, or just meeting announcements, but in either case would require a mailing list server. Several Board members thought it silly to be discussing such a trivial issue, and moved to buy a copy. The motion passed.

Pat Fauquet, Mary Keene and Lorin Evans conducted a three-sided

discussion about the "new Pi user." Continuing a thread brought up in the Tutorial discussion, new members are often intimidated by the (to them) high technical level of most Journal articles, and are particularly intimidated by some of the questions (and answers) during the Question and Answer session at the start of General Meetings. Lawrence Charters mentioned that, many years ago in San Diego, there was a "Novice SIG [Special Interest Group]" that met in the lobby at the start of SDMUG general

meetings. The Novice SIG gave beginners a chance to ask their questions surrounded by other novices, which they found very comforting. Pat Fauquet, John Barnes and Mary Keene said they would set up a Novice SIG at the next General Meeting, and see how it went.

At 9:34, the meeting was adjourned without ceremony or decorum, as usual. ■



Washington Apple Pi
Board of Directors Notes
May 10, 2000 Meeting Draft Minutes

[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: Dale Smith, Lorin Evans, Lawrence Charters, Mary Keene, Dave Ottalini, David Harris, John Barnes, Lou Dunham, Brian Mason, Don Essick [or possibly Dan Esxxx], Pat Fauquet

Directors Absent: Dave Weikert, Steve Kiepe

Members Present: Robert Klothe

THE MEETING was called to order at 7:31. And again at 7:32. President Lorin Evans asked that

he be credited with trying to be prompt. The minutes of the previous meeting were not distributed, discussed or approved. The secretary was sacked.

Old Business

There was a brief discussion of the election, in progress. John Barnes reported that the Journals, with ballots, are in the hands of the voters, and quite a few ballots have been received.

As authorized at the previous meeting a mailing list server with a really clever name has been purchased and installed. Special Interest Groups, committee chairs, project chairs and others with a need for mailing lists will now be able to conduct E-mail based discussions and Spam the unwary. Protocols for adding people to the mailing lists have not been formed, but it is fairly easy to set up Web pages allowing people to

sign up for selected mailing lists (such as CD-ROM announcements, meeting announcements, etc.)

New Business

Pi Fillings Version 7 is in prepress. Some last-minute goodies are being added to the mix, and freshly-pressed (minted? etched?) copies should be available for the June Garage Sale. As usual, the office already has a large number of preorders.

Brian Mason, in his role as head reading librarian, discussed the Pi library. He noted changes in borrowing habits over the last 20 years or so, and asked the Board to approve several operational changes. The Board consensus was that, in his capacity as head librarian, Brian was free to institute whatever changes he wanted, as long as they didn't require new funding. Brian also mentioned that the library catalog would be added to the Pi Web site as a searchable database, as soon as the Webmaster stops goofing off and does the necessary work.

Lorin Evans asked that the Board approve a transfer of funds from the education fund to the credit card account, in order to cover the purchase of new equipment for the Tutorial Room. The Board gave its unanimous approval.

The meeting was adjourned at 8:30 p.m. ■

April General Meeting Notes

By Steven Kiepe, Vice Presidents for Macintosh Programs



Standing behind a boxed copy of Adobe's flagship project, *InDesign 1.5*, David Hemly outlines the differences between *InDesign* and *PageMaker*. A quick summary might be: they are both page layout packages, but have little else in common. (Photo by Steve Kiepe)

THE APRIL GENERAL meeting brought a long-awaited visit from Adobe, developers of some of the most capable graphic and desktop publishing programs available for any computing platform. Mr. David Hemly, Adobe Standards Manager for Publishing and Dynamic Media was on hand to demonstrate some of Adobe's latest works including the new version of their desktop publishing application for the future, Adobe *InDesign*, revision 1.5.

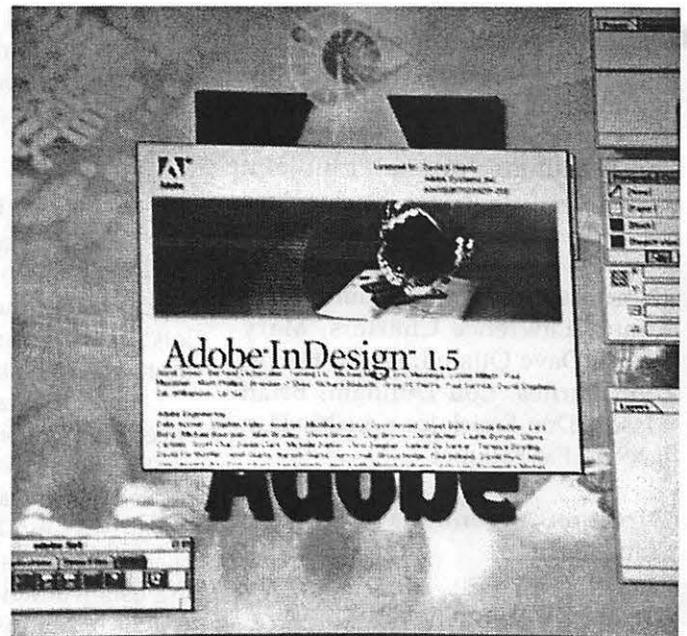
Do you find yourself continually upgrading your software with an almost weekly procession of bug fixes and feature refinement, often at the almost routine price of \$30 to \$150 a shot? With each new upgrade, do you often find changes to core application features so significant that you must re-learn how to use the program (remember the keystroke changes between *Photoshop* versions 3 and 4)? Additionally, many application revisions institute new bugs at the same time they are eliminating old ones. To steal an analogy from Mr. Hemly, it is similar to the block stacking game, *Genga*. Old programs keep piling on features, each additional layer weakening the underpinnings below it. Old source code, not optimized to handle the new features becomes increasingly fragile until finally it collapses. A case in point is the current state of Corel's *WordPerfect* application, a well-respected word processor whose source code has reached terminal capability. A complete rewrite of the entire *WordPerfect* source code would

be required to produce a new revision. Adobe has been paying attention and is stepping in another direction with their new flagship desktop publishing program.

InDesign was authored in a modular manner – a core application (less than two megabytes in size) with specialized sub-programs appended to it. The modular nature of this coding means that certain features (and more importantly, software code) can be reused in other Adobe applications, greatly facilitating programming, updating and enhancing standardization. Although a radical deviation from the coding found in Adobe's former desktop publishing flagship, *InDesign* is not a replacement for *PageMaker* (which will be released with at least one more update) although it can open both *PageMaker* and *Quark* files.

InDesign has great new features not common to *PageMaker* or the competition, *Quark*. An eyedropper tool picks up text attributes for quick stan-

dardization between document sections. Importing and placing graphics is much easier, a simple copy and paste versus the use of graphics boxes. Additionally, placed objects can be modified within *InDesign* without re-opening the creating application.



After a year's wait and three tries, Adobe's stylized red logo finally appeared on the screen at Northern Virginia Community College, overlaid with the splash screen to *InDesign 1.5*. When seen ten feet high, it is quite impressive. (Photo by Steven Kiepe)



David Hemly, Adobe Standards Manager for Publishing and Dynamic Media, conducted an outstanding, very approachable demonstration. He answered every question asked, freely admitted the strengths and weaknesses of past Adobe products, and gave everyone the impression he genuinely believed he worked for the greatest software company in the world. (Photo by Steven Kiepe)

For precision work, *InDesign* allows a zoom of up to 4000% but speed is not lost as only the area of the screen being worked on is enlarged which has the additional benefit of minimizing memory requirements. Not only is precision viewing enhanced, so are the overall visual attributes of a finished document. Multi-line text composing (justification) is the standard, allowing the application to determine the best structure of text across several as opposed to a single line. New also is optical margin alignment, which enhances visibility of hyphens

and other punctuation at the end of a line. A "visual" kerning option allows overlap of some text boundaries (empty space) to enhance readability. For those always concerned about fitting text to a given space, vertical justification is also new to the program.

Other new and highly desired features in this application are reminiscent of capabilities inherent in other Adobe products such as *Illustrator* and *Photoshop*. *InDesign* allows text to be placed along a path within the application. It also allows adjustment of *Photoshop* clipping paths, again without opening the original graphic program. Text can be placed, skewed or otherwise distorted within *InDesign* but still be edited later as the text itself and its assign attributes are associated versus permanently assigned.

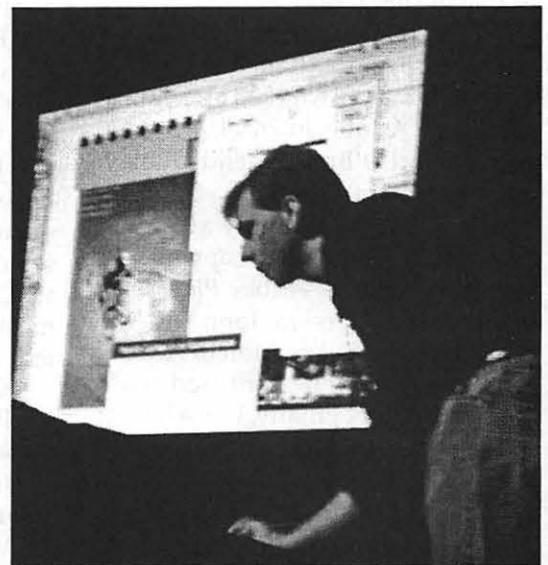
InDesign is still a work in progress as there are a few areas yet to be completed. Bookmarks, table of contents, index and table generation are all expected in a future revision. Numerous features currently found in *FrameMaker* will migrate to *InDesign* in the future.

Moving off in a different direction, David provided an update on some of Adobe's other programs. Adobe *LiveMotion* is a soon to be released program that can create and style layered objects for other applications, web pages and the like. It makes outstanding buttons which can be reused across many applications and documents. For a limited time, a fully functional beta version is available free on Adobe's web site. David also demonstrated Adobe *Acrobat* and highlighted some of its capabilities beyond generating PDF files. *Acrobat* also can pull down entire Internet web sites and capture them as a PDF file for later viewing, to as many levels as desired.

" Mr. David Hemly, Adobe Standards Manager for Publishing and Dynamic Media was on hand to demonstrate some of Adobe's latest works including the new version of their desktop publishing application for the future, Adobe *InDesign*, revision 1.5."

After a very full session, our time was exhausted. The April meeting was definitely the one to attend, at least in terms of freebies. Adobe graciously donated thousands of dollars worth of the finest software on the market today. Needless to say, there were many happy winners.

We started the drawing with the customary T-shirts but without Tom Witte to throw them to the crowd, it



David Hemly guides *InDesign* through some complex operations, with the screen of his PowerBook blasted up to drive-in size behind him. (Photo by Steve Kiepe)

just did not feel right. Anyhow, Sandra Mason and Jamie MacDonald both took home a new shirt. Harley Nygren and Allen Kent received copies of *Creating Cool HTML 4* books, courtesy of IDG Books. Thomas Downing and Tom Bouchard received Adobe label notebooks (the paper kind, not the computer!). Aladdin had forwarded copies of *DragStrip* and *MacTicker*, passed to Richard Goodwin and Curt Marshall, respectively.

The really big prizes were close behind. Don Wong won a copy of Adobe's *ImageStyler*, the first graphics creation and production program designed specifically for producing spectacular web graphics. Bill Geiger picked up a copy of Adobe *GoLive*, a high end web site creation program. Scott McKnight took home a copy of Adobe's *Photoshop LE*, the powerful, consumer level graphics program. A host of budding graphic artists then lined up for a serious illustration tool, Adobe *Illustrator 8.0*. The lucky winners were Steve Fink, Dennis Dimick, and Marshall Henderson.

The great software prizes were still long from exhausted by this point. Four lucky winners took home copies of Adobe *Photoshop 5*; Jim Ritz, Robert O'Brien, Glenda Finley and Needham Langston. Georgia Sadler went one better by avoiding having to upgrade her copy as she won a full copy of Adobe *Photoshop 5.5*, the latest version. John DiBella picked up the full version of Adobe *Acrobat 4* (not to be confused with *Acrobat Reader*). Finally, the last two grand prize winners (whew!) joined the throng of happy WAP members. Pat Fauquet and Joe Timm both picked up copies of Adobe *InDesign v1.5*, the latest release. What a magnificent haul of software! The only thing missing was that I didn't win anything (again!). Oh well, there's always next month. See you then. ■

May General Meeting Notes

By Steven Kiepe, Vice Presidents
for Macintosh Programs

OUR MAY general meeting started on an off note with bleak weather contributing to a very low turnout. Thanks to a very informative presentation by experts from FileMaker, one of Apple's application division spin-offs, it was well worth the trip for those willing to endure the wet weather.

As always, Lawrence Charter's expertise during the preliminary question and answer session continued to amaze. I'm convinced that he has a few shills planted in the crowd because no one could possess his seemingly encyclopedic mastery of virtually every Macintosh model and application ever created.

FileMaker's Northeast District Manager, Mr. Robert Dudley, was next to take the stage. He provided a short overview of FileMaker's corporate history including its exceptional history of profitability, with 30 consecutive quarters in the black. Since separating from Apple's Claris division, FileMaker has been one of the most successful software developers in the industry.

Carl Pittenger, System Engineer for FileMaker, followed with specifics on the latest *FileMaker Pro* revision, version 5. After determining that about half of the attendees had used *FileMaker Pro* in one version or another, he proceeded to outline the myriad changes that make today's *FileMaker* an easy to use yet powerful application..

The *FileMaker Pro* family is a relational database system offered in four



Carl Pittenger, System Engineer for FileMaker, brandishes one of the leading tools of the computer revolution: a bottle of Coke. Carl woke up well before sunrise and drove from north of Philadelphia to Northern Virginia for the Pi's famously cruel 9 a.m. Saturday General Meeting. (Photo by Lawrence I. Charters)

versions. *FileMaker Pro* is a single user database application for business or home use, with some small workgroup enhancements. *FileMaker Pro Server* is an application designed to serve a larger group of concurrent users connected to an office local area network or even across the Internet. *FileMaker Pro Unlimited* supports large workgroups and wide area networks including Internet hosting. Finally,



Spurning the Pi's brand-new iMac DV in favor of his own brand-new 500 MHz PowerBook G3, Carl demonstrated the award-winning ease of use and power of FileMaker Pro. At the same time, he also answered a brutally long series of questions ranging from "Why use FileMaker instead of Excel for lists?" to "I'm happy with FileMaker 3.0. Why do I want 5.0?" This highly interactive presentation revealed dozens of FileMaker features that even veteran users had managed to overlook, or failed to fully appreciate. (Photo by Lawrence I. Charters)

FileMaker Pro Developer is designed to facilitate creation of custom database applications for business use.

Carl pointed out that many computer users fall back on using Microsoft's *Excel* spreadsheet application to keep basic lists of names, numbers and other text and numeric data. Although this may be a simple means of collecting data in a single location, it does not lend itself well to manipulation, construction of custom forms or visualization of data. *FileMaker Pro* gets by all of these limitations as it is designed specifically for the storage and manipulation of data and creation of custom reports. And lest those

of us who have already built *Excel* spreadsheets to hold our data fear conversion to a dedicated database application will be difficult, rest easy. *FileMaker Pro* directly imports *Excel* spreadsheets and even has a table view option that looks similar to *Excel*.

FileMaker Pro version 5 has a powerful group of "assistants," similar to Microsoft's "wizards," which can lead a novice user through creation of very impressive reports from tabular data. The layout of reports is under complete control of the user and data fields displayed can include any combination of text, derived numeric values and images. More impressive is the ease with which forms for the input of data can be generated. Popup lists (for example, listing states, customer names, products and the like) can be pulled from an easily generated and shareable value table. For example, highly customizable data entry forms built for specialized use by accounting, marketing and engineering departments could share a common set of data fields such as the names and locations of corporate offices, product descriptions, item numbers or similar data.



Robert Dudley, Northeast District Manager for FileMaker, Inc., provides an introduction to the FileMaker Pro demonstration at the May meeting, mentioning among other things the 30 straight quarters of profitability that the company has put together. The mysterious device in his hand has nothing to do with his demo; it is the transmitter for the wireless microphone he was using. Feel free, however, to tell Windows users that it is a telepathic input device for Macs. (Photo by Steven Kiepe)

Garage sale photos start here and follow throughout the journal.

In the beginning, cartloads of "stuff" entered the gymnasium. Some of the vendors were quite sophisticated, with shrink-wrapped pallettes already mounted on carts, ready to roll off their vans directly into the computer show. (Photo by Lawrence I. Charters)



"FileMaker Pro version 5 has a powerful group of "assistants," similar to Microsoft's "wizards," which can lead a novice user through creation of very impressive reports from tabular data."

One of FileMaker Pro's strengths is the ease with which its relational capabilities can be utilized. With this feature, data can be extracted from separate databases that share only a single common field. FileMaker Pro also has the ability to synchronize data from imported files which greatly facilitates keeping a database current.

Carl fielded all questions thrown up from the floor and seemed to pick up more than a few FileMaker Pro converts and upgraders. One response that generated much interest concerned solutions to a corrupted database. Carl noted that FileMaker technical support will attempt to recover lost data at no charge. The barrage of questions continued well after the general meeting was over but our time was up and the much anticipated prize drawing still remained.

An impressive batch of prizes was in store for the attendees. As always, there were a few T-shirts to start the drawing off, with Scott McKnight and Bob Schadler picking up garments. George Quist generously donated numerous copies of Adobe *Illustrator 8*, *Classroom in a Book* for distribution at our drawing, at the June garage sale, and for placement in the group library. I'm sure last month's winners of Adobe's *Illustrator 8* were crossing their fingers hoping to get a

copy of this outstanding tutorial. Elaine Schadler, Bob Uyeda, Marty Ditmeyer, Robert Birdsong, Bob Jarecke, David Phillips and Peter Colm all walked away winners.

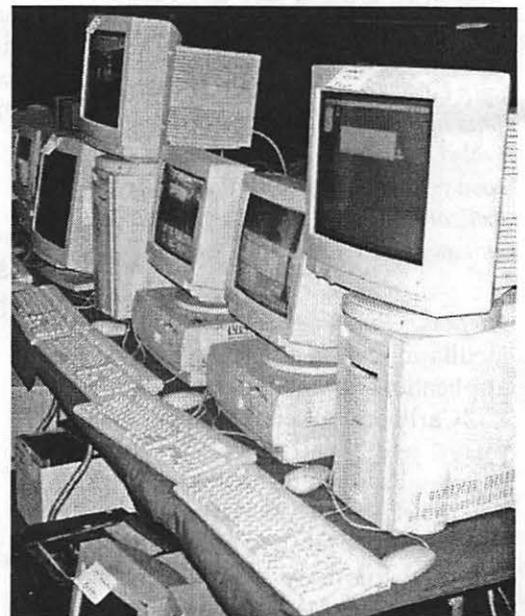
Robert and Carl came to the presentation bearing gifts including copies of FileMaker Pro in standard, Server and Unlimited versions. Pat Fauquet literally bounded to the stage to pick up her prize of FileMaker Pro Unlimited. John McDonnell indicated that he will put FileMaker Pro Server to good use and Anson Geiger took home a copy of FileMaker Pro.

This will be my last column as WAP's VP for programs. I've enjoyed the year's association with the extraordinarily talented individuals who run and/or contribute to WAP's success as the largest Apple user group in the world. Unfortunately, the travel requirements of my current job preclude my continuing in this position (in fact, I'm in a plane at 36,000 feet en route to Hawaii as I write this - darn the bad luck!). I hope you've enjoyed the presentations we've scheduled over the last year. My final request is for you to tell your group's leadership what kind of developers you'd like to see at the general meetings. Please help the group be responsive to your needs.

With that in mind, here's an outline of our near term schedule. June 3rd will bring the next WAP "garage sale," probably over by the time you read this. The developer/vendor most commonly recognized as the premiere storage expert for Apple systems, LaCie, will make an appearance on July 22nd, fresh off a presentation at MacWorld. 3dfx, developers of some of the hottest video graphic cards in the industry, are tentatively sched-

"After determining that about half of the attendees had used FileMaker Pro in one version or another..."

uled to attend as well. For all of you budding (and/or dormant) Cecil B. DeMille wannabe's, August 25th brings the next Quicktime Festival to the NOVA auditorium. Get working on those video's now. We're hoping to have a representative from UMAX pay us a visit September 23rd. Their consumer through professional scanning products are some of industry's best values. Finally, we're on track for Apple to make a return visit Oct 21st, hopefully bringing an updated word or two on release plans for Mac OS X. Please make plans to attend our general meetings and don't forget to bring your friends. ■



While there are always lots of Macs up and running at MacWorld, the Pi's Garage Sale usually has a higher density of machines up and running. (Photo by Lawrence I. Charters)

Graphic Arts SIG Reports, April & May 2000 Meetings

by Blake Lange

VIRGINIA SHEARD did a great job planning the program of the May meeting of the Graphic Arts SIG. She made all of the arrangements for bringing Macromedia creator of Dreamweaver, Fireworks, Director, and more. Macromedia is a company we have been looking forward to have come to our group for a long time. In addition, Virginia brought refreshments and snacks that we enjoyed before the meeting, after, and during intermission. Kudos to Virginia.

Macromedia outdid themselves. Their representative Marc Bech is quite the dynamic presenter. His official title is Sr. Technical Evangelist which he well deserves. His presentation was lively and when questions came up his answers were quick, to the point, and full of pride in the products. He had flown in from Austin for our meeting and flew back immediately. We all really appreciate Macromedia accepting our invitation to make a presentation to our group.

The setup for the presentation was a little different from normal. Marc brought his own projector which he hooked up to his G3 laptop. He had been in communication with Sonny Tohan in advance of the meeting and Sonny had set up the room so that the light coming from his floor to ceiling windows was mostly blocked. We could all see quite well.

We had a full house. Every seat was taken and people were spilling out of the seminar room into the display room. We even had a few first

time guests. A good number of those in attendance were professional graphic artists with demanding requirements which was made clear by their questions. They were intimately familiar with the shortcomings and strengths of Macromedia's competitors in the web authoring software market and were looking to see how Macromedia was addressing their concerns.

My impression was that they were very pleased with what they saw. Dreamweaver is a dream of a program. For me the beauty is in the code. Compared to the esoteric code being created by other web page design environments the code of Dreamweaver is a thing of beauty. It is understandable, written in standard html. Why is this important?

"We had a full house. Every seat was taken and people were spilling out of the seminar room into the display room. We even had a few first time guests. A good number of those in attendance were professional graphic artists with demanding requirements which was made clear by their questions."

Well, if you want to be understood by someone, doesn't it make sense to talk in a language they understand? It just seems like the right thing to do. But beyond that, since the code is easy to read it is also is easy to edit and tweak. But you don't know html you say.

For those learning html Dreamweaver has a very cool feature. You can see the code in one window as you work in a WYSIWYG (What You See Is What You Get) window. So as you move images around or create





tables or change colors or type, the code changes right before your eyes. It is a great learning tool because if you want to know you can see what code does what. Beautiful.

But that was not all about the code. It cleans up code created by other applications like Microsoft Word—it is amazing! I could go on and on talking about the demonstration itself but they have a web site at macromedia.com that shows off their products quite effectively. If you are

in the market for their products I recommend you check them out. You can even download fully functional demo programs that expire after a month or two.

Macromedia generously shipped us many items to be given out at the meeting. There were a few demo CD's, T-shirts, and a coupon for a free software package of one's choice, all of which were raffled off at the meeting.

Our April meeting had been a

round table discussion on scanning and output. Although it was a good meeting please excuse me for not reporting on it in detail here.

Attending the April meeting were Blake Lange, Sonny Tohan, Russell Kirsch, Diana Buell, Virginia Sheard, Stuart Bonwit, Robert Allen, Cherie Worth, Carol Sky, Ray Duke, Sy Deitchman, Karen Howe, and Richard Sanderson.

Attending the May meeting were Blake Lange, Helen Dilley Barsalou, Sonny Tohan, Russell Kirsch, Diana Buell, Virginia Sheard, Stuart Bonwit, John W. Laughlin, Ann Lesnik, Bob Russell, Cherie Worth, Mary Keene, Ann Aiken, Sy Deitchman, Kathryn A. Perrin, Ritz Balick, Bobbi Simmons, Paul Jajan, Rich Schmidt, Ned Spencer, Esta Gladstone, Glenda Adams, Michael Oliwa, Richard Sanderson, Rebecca Roberts, Alissa Aiken, Kyle E. Carothers, T. Bond, Mary Herber, Henry Sakowski, Susann Wiggins, Melissa Nolin, Dave Freeman, and Sylvan Kamm.

Schedule

The schedule for the Graphic Arts SIG over the next several months is Saturdays July 8, August 12, and September 9. Each meeting will be from 10:00am to Noon. The rule of thumb, in case you want to figure out when there will be a meeting, is that the meetings are scheduled the second Saturday of each month except when the Washington Apple Pi has a major activity scheduled for that day. This year that means every month except December when the Computer Show and Sale will be held.

Directions

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



[The fine print: Pending certification by the Washington Apple Pi 1999-2000 Board of Directors at the June 2000 Board of Directors Meeting...]

Congratulations!

Please congratulate the winners of the May 2000 Washington Apple Pi election for the 2000-2001 Board of Directors. And thanks as well to all candidates, and to all Pi members who returned their ballots. Special thanks to John Barnes (chair), Alden Bestul, Steve Fink and Paul Chernoff for their help in administering the election.

Officers:

President: Lorin Evans

Vice President, Volunteer Services: James Kelly

Vice President, Publicity: Dave Ottalini

Vice President, Programs: Steve Kiepe

Secretary: Brian Mason

Treasurer: Dave Weikert

Directors at Large:

Kenneth Clare

Kristen Dunn-Thomason

Don Essick

Pat Fauquet

David Harris

Needham Langston

Dale Smith

Richard Sternberg

iMacs Come to the Pi

ONCE UPON a time, Washington Apple Pi taught computer tutorials by asking members to bring in their computers, and then the members learned how to use them by using their own keyboards, monitors and mice. This was often a bit complicated, especially if the computer in question had many different parts, or was large and heavy. Some students spent more time puzzling over how to assemble and disassemble their machines than in the planned subject matter. (And some discovered they preferred assembling and disassembling computers to actually using them.)

Several years ago, the Pi decided to aggressively expand the tutorial program, and purchased a flock of Power Mac 7200/75 machines. No longer were students required to carry in their own equipment. No longer were instructors forced to use shadow puppets to show what something would look like, if there were real equipment in place to use.

But eventually the beloved Power Mac 7200s began to look, well, slow. More and more students, beginners and veterans, had much better equipment, and were surprised to find themselves learning new computer

skills on machines much slower than their own. While the skills might be the same, the users were spoiled.

So Washington Apple Pi thought about different ways to solve this crisis in perception. We could (a) ask users to take depressants. Their metabolisms would slow down, and the tutorial machines would seem faster. We could (b) resort to shadow puppets once again. Mac users are famously imaginative, and might not mind. We could (c) spend way too much money on somewhat dubious upgrades of CPU accelerators, memory, network cards and other bits of duct tape and bailing wire. Or we could (d) take advantage of dramatic price drops in hardware to purchase some dramatically faster equipment.

Some pushed for the depressant solution. The cost of pharmaceuticals would be borne by students, with zero financial contribution by the Pi. Since many students think courses run "too fast," anyway, this solution allows the students to self-adjust their perception of reality to suit their individual needs: those who are racing ahead can mellow out, those who are struggling to keep up can take comfort in the leisurely speed of a Power Mac 7200.

Hardly anyone pushed hard for the shadow puppet option. While the French are masters of mime and puppetry, Americans are better at MIME (Multipurpose Internet Mail Extensions) and puffery, particularly in election years.

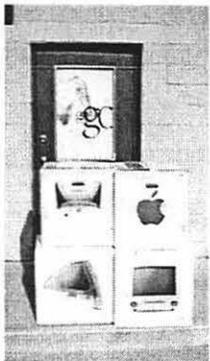
Serious thought was given to upgrading the 7200s. These are, after all, solid, stable second-generation Power Macs, with built-in Ethernet and very flexible PCI-based video. But on re-



Would you believe...Jon Thomason and Mary Keene struggle to master basic mouse skills? Read the text to find out what they were really doing. (Photo probably by Pat Fauquet, taken with Pat's camera.)



Pat Fauquet, Pi Tutorial Coordinator, rests in the Pi "chat room" with the empty iMac boxes. (Not sure who took this photo, but it probably wasn't Pat, though it was Pat's camera.)



A stack of iMacs sit at the curb outside the Pi offices in Rockville, MD. (Photo by Lawrence I. Charters using Pat Fauquet's camera.)

flection, there was little that could be added to them that would bring them within striking range of even the least powerful Macintosh now sold. Most Pi tutorial students had better equipment, and had trouble adjusting to the 7200s. And, quite honestly, the 7200s struggled to handle complex programs such as Adobe Photoshop and Adobe InDesign.

So just before the Pi Board of Directors met for their April 2000 meet-

ing, four iMacs appeared on the Pi's "loading dock." Under normal circumstances, some Board members arrive early and have some kind of take-out dinner before a Board meeting, but the arrival of the iMacs seriously disrupted routine. Hauling the iMacs in (there were more volunteers than computers), admiring them, adjusting the tutorial room to accommodate them, unboxing them and setting them up distracted several Board members and volunteers.

Idle speculation was also popular. "How many iMacs can you get in a Volkswagen/ Chevy Suburban/ Hummer/ Volvo/ shopping cart?" "Which is more powerful, a Cray-1 or a Ford Escort with an iMac?" "We only got two colors. How long before we collect the whole set?" "Do you realize these four computers may well be more powerful than all the Apples owned by all our members in our first ten years?"

It was a fruitful day. ■

weekend included specials and prize drawings. During the grand opening week, demonstrations of Final Cut Pro and digital video, Epson color printers, Umax scanners, Quantum Snap Servers, Hewlett Packard DesignJets, and similar treats took place every day. Jeff Hansen, Apple's Senior Director of Channel Sales and Distribution and Andrew Sedgewick, Apple's NE Region Marketing Manager, attended the reception, along with other local dignitaries including Lorin Evans, President of Washington Apple Pi, and Beth Medlin, the Pi's Office Manager.

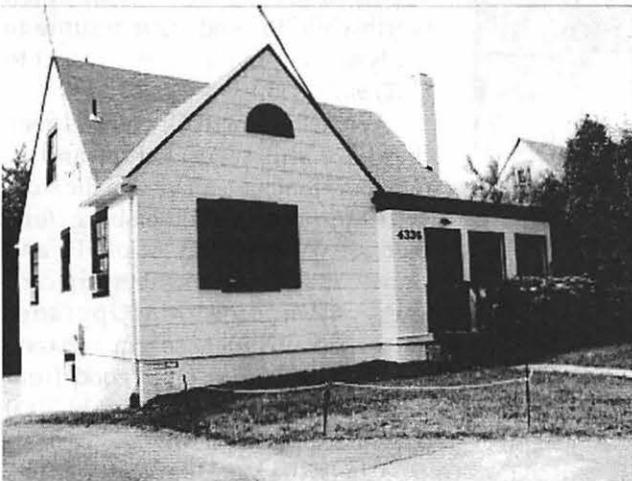
The new MacUpgrades store, at 283 Muddy Branch Road, Gaithersburg, Maryland, offers many of the same products stocked at the Bethesda location, plus some new wonders, such as the large Hewlett Packard 3800C photo-realistic printer capable of printing on 54 inch by 150 foot rolls. Along with a large assortment of the practical and essential, the new store also offers a selection of digital cameras and camcorders and entertainment software.

MacUpgrades entire service and parts departments moved from Bethesda to Gaithersburg and are

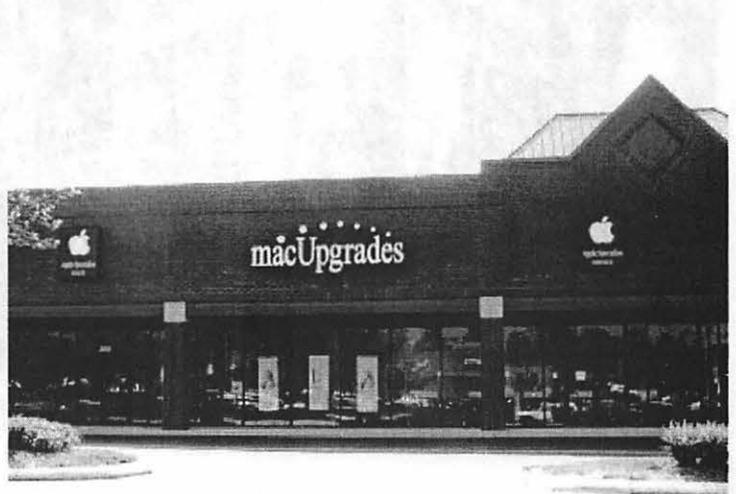
Largest Macintosh Specialty Store in the East: MacUpgrades Opens Gaithersburg Store

AFTER YEARS of planning and preparation, the largest Macintosh specialty store on the East Coast of the U.S. opened on May 13, 2000. MacUpgrades, a Bethesda, MD, institution for more than a decade,

opened their second location in the Festival Plaza Shopping Center in Gaithersburg, starting with a late evening reception on Friday, May 12. Grand Opening festivities on the



A present-day photo of MacUpgrades' original location in 1989, a house at 4334 Montgomery Avenue. In 1991, the Bethesda store moved to its present location at 6931-A Arlington Road.



MacUpgrades' newest location in the Festival at Muddy Branch shopping center in Gaithersburg



During the reception prior to the Grand Opening, guests enjoy a little 3D gaming on a PowerMac G4.



The spacious new showroom allows for easy "test drives" of the latest hardware. The HP 3800C printer — perfect for printing your own billboards, or blimps — is shown on the right.

now able to offer repairs in an average of less than three days. Customers who find the Bethesda location

more convenient can still check in their computers for repair in Bethesda, and pick them up in

"The new MacUpgrades store, at 283 Muddy Branch Road, Gaithersburg, Maryland, offers many of the same products stocked at the Bethesda location, plus some new wonders..."

Bethesda as well.

Even with a staff of just short of thirty, MacUpgrades currently lacks adequate sales personnel to staff both stores on the weekend and evenings, so some compromise on hours will occur until staffing levels improve. The Bethesda location is now open Monday through Thursday from 10:00 a.m. to 6:00 p.m., and on Fridays the store closes at 5:00 p.m. The Gaithersburg store has the same hours, but is also open on Saturday from 11:00 a.m. to 4:00 p.m. In the future, both stores will expand hours to be open at least one evening per week and possibly Saturdays in Bethesda. (And speaking of staffing shortages, if you are a Mac enthusiast and think you know the Mac and desire a full or part-time position, you may find it worthwhile to send your resume to ready@macupgrades.com or fax it to (301) 907-9335.)

While the Grand Opening is over, there are still several thousand Pi members that haven't visited the store yet. Come into the Gaithersburg store, mention Washington Apple Pi and show your current membership card and get a free MacUpgrades mousepad, no purchase required (one per member). This offer good from August 1 through September 30, 2000 or while supplies last.

Check the MacUpgrades web site (<http://macupgrades.com>) for specials, hours, maps, email addresses, personnel, and links to other Macintosh-centric sites. ■

Redmond On The Potomac: Part III

End Game

JUDGE Jackson issued his remedial decision on June 7th. It is in two parts: a Memorandum and Order, which in clear and unambiguous language explains why he felt it imperative to move forward in this case without additional hearings. The text is not long and is an easy read. It follows starting in the third column.

The second order is called Final Judgment. It is the legal ruling, the remedial action in which Judge Jackson detailing how Microsoft is to be dismantled. The Court opted for the Department of Justice proposal for a division into two parts:

- an operating systems company which would get the Windows operating system and related items;
- an applications company to produce applications (Word, Excel, etc.) and market both those applications and the side businesses of Microsoft such as its on-line offerings (MSM, Slate, etc.);
- in addition, the order contains the restrictions on future business practices and other structural details.

Microsoft is to submit its proposal for a divestiture by October 7, 2000 and, once the plan is approved, implement it within one year. This was deferred by Judge Jackson to give Microsoft the opportunity to appeal.

Additional Readings

I have two that I would like to recommend to you. Each is in the form of an *amici curiae* (friend of the court brief). While each looks to offer its sponsor's views on how to effect the

changes called for in the Finding of Facts, each approaches the task very differently.

The first amici is a joint offering to the Court by the Computer and Communications Industry Association and Software and Information Industry Association <<http://econ.law.harvard.edu/msdoj/amicus5-19-00.htm>>. An impolitic summation would be "Stick it to them." If you have been waiting for someone to write that the "Love" Virus and other such mayhem are all 'their' fault, and would not exist but for them and their dastardly practices, you want to start with this brief. These folks have not forgotten that Mr. Gates walked out and took some of his friends and money with him, when these associations first filed an amici brief in this story.

The second, which I referred to earlier is the brief cited by the Judge at the end of his Memorandum and Order which follows. This amici was submitted by Robert Litan (Brookings Institution), Roger Noll (Stanford), William Nordhaus (Yale) and Frederic Scherer (Harvard). Each is a professional economist with an interest in industrial reorganizations brought about by government intervention. It is a great read on how to think through alternative strategies to remedy the Finding of Facts by Judge Jackson. <<http://www.econ.yale.edu/~nordhaus/homepage/Amicus%20brief%20port.htm>>.

My impolitic take on it is this: finally some academicians get a chance to help the Court 'do it right' when it

divests a corporate monster of its components.

Each is worth reading. If nothing else, you get a sense of the work Judge Thomas Penfield Jackson had to put into this case.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA
Civil Action No. 98-1232 (TPJ)
Civil Action No. 98-1233 (TPJ)

MEMORANDUM AND ORDER**

These cases are before the Court for disposition of the sole matter presently remaining for decision by the trial court, namely, entry of appropriate relief for the violations of the Sherman Act, Sections 1 and 2, and various state laws committed by the defendant Microsoft Corporation as found by Court in accordance with its Findings of Fact and Conclusions of Law. Final judgment will be entered contemporaneously herewith. No further proceedings will be required.

The Court has been presented by plaintiffs with a proposed form of final judgment that would mandate both conduct modification and structural reorganization by the defendant when fully implemented. Microsoft has responded with a motion for summary rejection of structural reorganization and a request for months of additional time to oppose the relief sought in all other respects. Microsoft claims, in effect, to have been surprised by the "draconian" and "unprecedented" remedy the plaintiffs recommend. What it proposes is yet another round of discovery, to be followed by a second trial—in essence an ex post and de facto bifurcation of the case already considered and rejected by the Court. Microsoft's profession of surprise is not credible. (1)

From the inception of this case Microsoft knew, from well-established Supreme Court precedents dating from the beginning of the last century, that a mandated divestiture was a possibility, if not a probability, in the

event of an adverse result at trial. At the conclusion of the trial the Court's Findings of Fact gave clear warning to Microsoft that the result would likely be adverse, yet the Court delayed entry of its Conclusions of Law for five months, and enlisted the services of a distinguished mediator, to assist Microsoft and the plaintiffs in reaching agreement on a remedy of some description that Microsoft knew was inevitable.

Even assuming that Microsoft negotiated in utmost good faith in the course of mediation, it had to have in contemplation the prospect that, were mediation to fail, the prevailing plaintiffs would propose to the Court a remedy most to their liking and least likely to be acceptable to Microsoft. Its failure to anticipate and to prepare to meet such an eventuality gives no reason to afford it an opportunity to do so now.

These cases have been before the Court, and have occupied much of its attention, for the past two years, not counting the antecedent proceedings. Following a full trial Microsoft has been found guilty of antitrust violations, notwithstanding its protests to this day that it has committed none. The Court is convinced for several reasons that a final - and appealable - judgment should be entered quickly. It has also reluctantly come to the conclusion, for the same reasons, that a structural remedy has become imperative: Microsoft as it is presently organized and led is unwilling to accept the notion that it broke the law or accede to an order amending its conduct.

First, despite the Court's Findings of Fact and Conclusions of Law, Microsoft does not yet concede that any of its business practices violated the Sherman Act. Microsoft officials have recently been quoted publicly to the effect that the company has "done nothing wrong" and that it will be vindicated on appeal. The Court is well aware that there is a substantial body of public opinion, some of it ra-

tional, that holds to a similar view. It is time to put that assertion to the test. If true, then an appellate tribunal should be given early opportunity to confirm it as promptly as possible, and to abort any remedial measures before they have become irreversible as a practical matter.

Second, there is credible evidence in the record to suggest that Microsoft, convinced of its innocence, continues to do business as it has in the past, and may yet do to other markets what it has already done in the PC operating system and browser markets. Microsoft has shown no disposition to voluntarily alter its business protocol in any significant respect. Indeed, it has announced its intention to appeal even the imposition of the modest conduct remedies it has itself proposed as an alternative to the non-structural remedies sought by the plaintiffs.

Third, Microsoft has proved untrustworthy in the past. In earlier proceedings in which a preliminary injunction was entered, Microsoft's purported compliance with that injunction while it was on appeal was illusory and its explanation disingenuous. If it responds in similar fashion to an injunctive remedy in this case, the earlier the need for enforcement measures becomes apparent the more effective they are likely to be.

Finally, the Court believes that extended proceedings on the form a remedy should take are unlikely to give any significantly greater assurance that it will be able to identify what might be generally regarded as an optimum remedy. As has been the case with regard to Microsoft's culpability, opinion as to an appropriate remedy is sharply divided. There is little chance that those divergent opinions will be reconciled by anything short of actual experience. The declarations (and the "offers of proof") from numerous potential witnesses now before the Court provide some insight as to how its various provisions might operate, but for the most part they are merely the predictions

of purportedly knowledgeable people as to effects which may or may not ensue if the proposed final judgment is entered.

In its experience the Court has found testimonial predictions of future events generally less reliable even than testimony as to historical fact, and cross-examination to be of little use in enhancing or detracting from their accuracy. In addition to its substantive objections, the proposed final judgment is also criticized by Microsoft as being vague and ambiguous. Plaintiffs respond that, to the extent it may be lacking in detail, it is purposely so to allow Microsoft itself to propose such detail as will be least disruptive of its business, failing which plaintiffs will ask the Court to supply it as the need appears.

Plaintiffs won the case, and for that reason alone have some entitlement to a remedy of their choice. Moreover, plaintiffs' proposed final judgment is the collective work product of senior antitrust law enforcement officials of the United States Department of Justice and the Attorneys General of 19 states, in conjunction with multiple consultants. (2) These officials are by reason of office obliged and expected to consider - and to act in - the public interest; Microsoft is not.

The proposed final judgment is represented to the Court as incorporating provisions employed successfully in the past, and it appears to the Court to address all the principal objectives of relief in such cases, namely, to terminate the unlawful conduct, to prevent its repetition in the future, and to revive competition in the relevant markets. Microsoft's alternative decree is plainly inadequate in all three respects.

The final judgment proposed by plaintiffs is perhaps more radical than might have resulted had mediation been successful and terminated in a consent decree. It is less so than that advocated by four disinterested amici curiae. It is designed, moreover, to

take force in stages, so that the effects can be gauged while the appeal progresses and before it has been fully implemented. And, of course, the Court will retain jurisdiction following appeal, and can modify the judgment as necessary in accordance with instructions from an appellate court or to accommodate conditions changed with the passage of time.

It is, therefore, this 7th day of June, 2000,

ORDERED, that the motion of defendant Microsoft Corporation for summary rejection of the plaintiffs' proposed structural reorganization is denied; and it is

FURTHER ORDERED, that defendant Microsoft Corporation's "position" as to future proceedings on the issue of remedy is rejected; and it is

FURTHER ORDERED, that plaintiffs' proposed final judgment, as revised in accordance with the proceedings of May 24, 2000 and Microsoft's comments thereon, be entered as a Final Judgment herein.

Thomas Penfield Jackson
U.S. District Judge

Endnotes:

1. *Despite their surprise, compounded no doubt by the Court's refusal on May 24th to allow discovery and take testimony on the issue, Microsoft's attorneys were promptly able to tender a 35-page "Offer of Proof," summarizing in detail the testimony 16 witnesses would give to explain why plaintiffs' proposed remedy, in its entirety, is a bad idea. Within a week they added seven more.*

2. *Two states dissented from the imposition of structural remedies but fully supported the remainder of the relief proposed. The absence of total unanimity merely confirms the collaborative character of the process by which the proposed final judgment was formulated.*

**This document and the Final Judgment are at <<http://usvms.gpo.gov/>>

Please see page 95 for the projected timeline to follow on the case.

Recently Cataloged Books for the WAP Library

by Brian G. Mason,
WAP Head Reading Librarian

IT HAS BEEN quite awhile since the *Journal* has published any information about the books available in the WAP Reading Library. I thought I might briefly describe some of the books that have been cataloged and placed on the shelves over the past few months.

Applications

We can start off with several books which deal with specific applications. These are generally put out by the software company as companions to the software. For the Mac, WordPerfect has been one of the most popular word processors. Two books recently cataloged for the collection are:

WordPerfect for Macintosh Reference, Version 2.1, 1992, 630 pg.
WordPerfect for Macintosh Workbook, 1992, 186 pg.

Another word processor that has been popular on the Mac is WriteNow. The user's manual for both version 2.2, written by Caroline Rose, and for version 3.0, written by Royal Farros, were added to the collection:

WriteNow for Macintosh, Version 2.2, 1990, 198 pg.
WriteNow for Macintosh, Version 3.0, 1992, 331 pg.

MS Word has been around almost since the beginning of the Macintosh (1984). As part of their Instant Reference series, Sybex published an Instant Reference for MS Word.

Microsoft Word for the Macintosh, Instant Reference, 1991, 140 pg.

A word processor that was popular on the Apple II was PIE Writer. PIE Writer: Word Processing System, 1982, 157 pg.

If you want to spell-check a document on the Apple II, you might want to use Spell Wizard by Datasoft. The loose-leaf manual has been added to the library's collection:

Spell Wizard: For the Apple II Series Computers by Ingrid Holcomb, 1984, 15 pg.

There have not been many spreadsheet programs available for the Macintosh. One of the early ones was MultiPlan by Microsoft. Two books on MultiPlan that were added to the collection were:

Microsoft Multiplan: Electronic Worksheet for Apple Macintosh, 1984, 156 pg.
Microsoft Multiplan Addendum, Version 1.1, 1985, 21 pg.
The first is a tutorial and reference manual. The second addresses the upgrade to Version 1.1.

If you want to do charts and graphs on your Mac, one of the leading programs has been Cricket Graph. CA-Cricket Graph III For Macintosh: Version 1.0 User Guide, 1992, 345 pg.

In the field of desktop publishing, Quark XPress has been one of the leaders. Three recent additions treat this software:

The Quark XPress Book, 2nd edition, by David Blatner, 1991, 504 pg.
 Quark XPress: Integrated Desktop Publishing System, by David P. Brown, 1988
 Reference Manual Quark XPress 2.0, 1988, 175 pg.

If you want to do 3-D graphics on your Mac, one of the early programs that permits you to do this is Phoenix 3D. The manual that came with the program was recently cataloged: User's Manual For the Apple Macintosh: Phoenix 3D Level One, Version 1.0, by Brian Keith McGregor, 1986, 65 pg.

A major player in the graphics arena on the Mac has been Photoshop. The library has the large commercial publication on Photoshop published by Hayden Books.

Photoshop 4 Complete by Kate Binder, 1994, 947 pg w/ CD-ROM. There is also the Peachpit Press publication: Real World Photoshop 5: Industrial Strength Production Techniques by David Blatner, 1999, 675 pg.

Another player has been Illustrator. Two recent additions to the library are:

Real World Illustrator 8 by Deke McClelland, 1999, 765 pg
 Macworld Illustrator 5.0/5.5 Bible by Ted Alspach, 1994, 731 pg.

Computer-specific

Several recent additions provide lots of information about the Macintosh, no matter what model you might own (as long as it isn't one of the new ones.)

Macs for Dummies, 2d edition, by David Pogue, 1993, 308 pg.
 Macs for Dummies, 4th edition, by David Pogue, 1996, 367 pg.
 More Macs for Dummies, 2d edition, by David Pogue, 1996, 374 pg.
 MacWorld Mac Secrets, 4th edition by David Pogue, 1997, 1139 pg.

Macintosh User's Guide for Desktop Macintosh Computers, 1993, 247 pg.
 Macintosh User's Guide for Macintosh Powerbook Duo 210 and 230 Computers, 1992, 296 pg.
 Macintosh SE/30 Owner's Guide, 1988, 71 pg.
 Getting Started With Your Macintosh Classic II, 1992, 23 pg
 Getting Started With Your Macintosh Centris 610, 1992, 41 pg.
 Getting Started With Your Macintosh LCII, 1992, 24 pg.
 Getting Started With Your Macintosh IIsi, 1991, 36 pg.

The library also has Apple II specific books.

Apple For the Beginning Beginner by Helen Joseph, 1983, 120 pg.
 Understanding the Apple II by Jim Sather, 1983

A very helpful book that provides a lot of information for someone who is getting started on an Apple IIGs is from CompuShare Press:

Your IIGS Guide: Second Edition by Shelly Lisoshie, 1989, 188 pg.

Of course the library even has books for the Lisa:

Lisa 2 Owner's Guide, 1983

If you are interested in programming the Macintosh, a couple of early books were added to the collection:

Macintosh Revealed: Vol. 1: Unlocking the Toolbox: Second edition by Stephen Chernicoff, 1987, 446 pg.

Macintosh Revealed: Vol. 2: Programming with the Toolbox: Second edition by Stephen Chernicoff, 1987, 451 pg.

The Internet

The library has received a number of books dealing with the Internet:

The Internet for Macs for Dummies by Charles Seiter, 1994, 213

pg.
 Net Tech by Michael Wolff, 1995, 289 pg.
 Net Chat by Michael Wolff, 1994, 229 pg.
 Net Guide by Michael Wolff, 1994, 307 pg.
 What's On The Internet by Eric Gagnon, 1994, 254 pg.
 Navigating the Internet: First Edition by Mark Gibbs, 1993, 245 pg.
 Live Wired: A Guide to Networking Macs by James K Anders, 1993

Programming

If you are interested in programming, pick your language. The library has books for any programming language, starting with Assembly. If you are still interested in trying to program for the 6502 or the 65C02 chips, you might be interested in:
 Work Bench: About Your Enhanced Apple IIE: Programmer's Guide:



There were many interesting things for sale. It wasn't clear if the price tag in this case was for the stroller or the baby. (Photo by Lawrence I. Charters)

ProDOS Technical Reference Manual, 1983
 Merlin: the Macro Assembler for The Apple, 1984, 185 pg.

If you are interested in programming in BASIC, a recent addition to the catalog is:
 Applesoft BASIC Fundamentals and Style by James Quasney, 1986, 416 pg.

There are several books treating programming in C.
 Numerical Recipes in C: The Art of Scientific Computing by William Press, 1988, 688 pg.
 Visual Architect and THINK Class Library Guide by David Allcott, 1994, 982 pg.
 Compiler Guide by David Alcott, 1994, 110 pg.
 C Programming: A Complete Guide to Mastering The C Language by Angie Hansen, 1989, 318 pg.
 ANSI C Made Easy by Herbert Schildt, 1989, 379 pg.
 Learn C++ on the Macintosh by Dave Mark, 1993, 305 pg.
 THINK C User's Guide by David Allcott, 1994, 685 pg.
 C++ Compiler Guide by Priscilla Lynch, 1993, 68 pg.

It is possible to get experience programming in any language no matter what computer platform you are using. To program in C on the Apple IIGs, you would want to look at:
 ORCA/C: A C Compiler and Development System for the Apple IIGs, 1991, 336 pg.

Output devices

Apple Computer, Inc. has produced several different types of printers over the years. Some of the user manuals that have been added recently to the library's collection include:
 LaserWriter, 1984, 103 pg.
 LaserWriter and LaserWriter Plus, 1986, 116 pg.
 Dot Matrix Printer User's Manual:

Part 1: Reference, 1983, 73 pg.
 StyleWriter Owner's Guide, 1991, 86 pg.
 Personal LaserWriter NT Owner's Guide, 1990, 93 pg.
 Personal LaserWriter LS Owner's Guide, 1991, 64 pg.
 ImageWriter LQ Owner's Guide, 1987, 147 pg.

Telecommunications

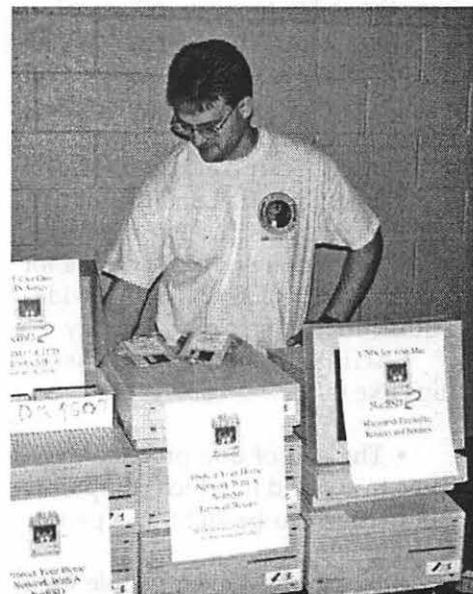
Recent additions to the library catalog include books on telecommunications services that aren't around anymore. In the days before the Internet, people used to share thoughts and files through bulletin board systems like Prodigy and Genie.
 Online: A Guide to America's Leading Information Services by Steve Lambert, 1985, 286 pg.
 Glossbrenner's Master Guide to GENIE by Alfred Glossbrenner, 1991, 545 pg.
 How To Use Prodigy by Douglas Herbert, 1994, 129 pg.
 CompuServe: Consumer Information Service User's Guide, 1984.

Multimedia

One of the first programs to really bring together a multimedia experience on a personal computer was HyperCard. Later, there was Director.
 HyperCard Made Easy: Second Edition by William B. Sanders, 1989, 390 pg.
 HyperCard Basics by Apple Computer, Inc., 1991, 33 pg.
 Director Multimedia Studio Authorized by Karen Tucker, 1997, 223 pg.
 Lingo Dictionary: Version 4 by Joe Schmitz, 1994, 321 pg.
 Learning Director: Version 4 by Jeff Schwamberger, 1994, 221 pg.
 Using Director: Version 4 by Jeff Schwamberger, 1994, 521 pg.
 Director 4 for Macintosh: Visual Quickstart Guide by Andre Persidsky, 1995, 219 pg.

"...briefly describe some of the books that have been cataloged and placed on the shelves over the past few months."

These are just a few of the books recently cataloged. The library is an excellent resource for answering Apple related questions. If you can come to the office, you are welcome to use the books there. If you can not make it to the library and the question does not involve making copies, you may contact me by email at brian.mason@wap.org and I will do my best to get you the information you need. If you have a question that involves making a copy of the materials, please write me in care of the WAP and enclose \$1, and I will be happy to send you the answers to your questions if I can. If not, the \$1 will be returned. ■



One enterprising entrepreneur combined older, 68K-based Macs with MacBSD (a variant of UNIX) and offered the combination as routers, firewalls, and servers. (Photo by Lawrence I. Charters)

Privacy Wars

By John Ludwigson

This review Copyright © 2000 by John O. Ludwigson <john.ludwigson@wap.org>

A review of: *Database Nation, The Death of Privacy in the 21st Century* by Simson Garfinkel* O'Reilly & Associates, Inc. ISBN 1-56592-653-6

WHEN YOU fill out the registration card that comes with your new computer, does the information just go to good old Apple? Or does it wind up lumped with information from your insurance company, your credit card company, your local hospital, or state motor vehicle records in a database you may not even know exists, let alone have the ability to see or influence?

Don't know the answer? You're not alone. And, given how fast data can travel these days, no one else may know the answer, either.

Simson Garfinkel has written a book about that. That and the myriad other hazards and traps of the still-aborning computer age. There's a lot of them, and Database Nation provides a quick but comprehensive survey.

Garfinkel's list, paraphrased, runs like this:

- The end of due process—welcome to a world in which computers are assumed to be right and people wrong.
- Biometrics—even people long dead can be identified from the DNA in a scrap of tissue; children are fingerprinted for their own protection; iris scans identify almost infallibly those authorized to access data or

places.

• Pervasive data collection—every transaction you enter into, all your records of any kind, emails and web pages are being collected, mostly automatically in databases that are never purged.

• Surveillance everywhere—video cameras scan our world, the highways (Aggressive Driver Imaging in Use for Your Protection!), stores, banks, backyards...wherever paranoia prevails.

• Medical confidentiality vs. the insurance industry—your doctor may protect your secrets, but insurance companies do their best to find them out and add them to their databases.

• Targeted marketing—increasingly, junk mail, evening sales calls, and email Spam are based on personal information in the perpetrators' databases.

• Personal information as a commodity—data on your life is bought and sold as a product, entirely without your consent or even knowledge.

• Genetic information—based on the belief that your destiny is written in your chromosomes, you soon may be evaluated for a job, for insurance, or for medical treatment on the basis of analysis of your DNA.

• Micromanagement of intellectual property—encrypted keys on DVDs was only the beginning, "magic cookies" only the camel's nose under the tent; today software calls home to make sure it's authorized to do its job for you, and laws ever more friendly to manufacturers (UCITA, for example) are being passed in state legislatures.

• Terrorism—from political/religious fanatics slaughtering their

neighbors in the name of their cause, to police crashing into citizens' homes with submachine guns at the ready, terrorism is not only common, but all too easy thanks to the ready availability of "...astonishingly lethal technologies..."

• HAL unleashed—computers are closing in; "The ultimate threat to privacy will be intelligent computers....that can use human-like reasoning powers...to assemble coherent data portraits, interpret and anticipate our mental states, and betray us with false relationships."

It's vastly more than privacy, as Garfinkel realizes: "The problem with this word 'privacy' is that it falls short of conveying the really big picture. Privacy isn't just about hiding things. It's about self-possession, autonomy, and integrity. It's the right of people to control what details about their lives stay inside their own houses and what leaks to the outside. Privacy is fundamentally about the power of the individual."

Indeed it is, and it's on the run as witness just these recent headlines:

- "Credit card thieves steal, shop, swap online worldwide; Hackers gain access to account information on re-



tailers' computers; Data traded in chat rooms" — from The Baltimore Sun web site, April 2, 2000.

- "Aided by Internet, Identity Theft Soars" — from The New York Times web site, April 3, 2000.

- "When Your Good Name Is Stolen" — a column by Michelle Singletary in The Washington Post, Business section, Sunday, May 7, 2000.

- "Clinton says reforms would protect Americans' privacy" — on the President's proposed financial privacy legislation, from the CNN web site, May 1, 2000

- "FTC official: Net privacy violators not immune" — from the IDG web site, April 10, 2000.

- "Multi-Nation Conference Confronts Cybercrime..." — from The Washington Post, World News section, May 17, 2000.

This last story, datelined Paris, quoted French President Jacques Chirac as telling the 300 delegates to an international conference, "The Internet, whose construction was fired by the universal ideals of freedom and solidarity, is testing our institutions."

And a U.S. Assistant Attorney General observed, "These technologies grow on a daily basis, and people are exploiting them all the time."

Garfinkel describes the many faces of the problem clearly, but his book presents only a lukewarm agenda for a solution. In a chapter with the promising title of "Privacy Now!" he introduces a series of proposals with very little discussion of what it will take to actually move forward with any of them.

For example, in a section entitled "A Government Privacy Agenda for the Twenty-First Century" he suggests the creation of "... a permanent federal oversight agency charged with protecting privacy." The agency (Garfinkel doesn't offer a name for it.... maybe the Privy Council?) would rein in the feds' tendency to sacrifice

people's privacy for other goals, enforce the few existing privacy laws, guard individual privacy in the business world, and "be an ombudsman for the American public....".

"It is estimated that such an agency could be created for less than \$5 million..." he offers. A glance at the notes in the back of the book shows the single source of this optimistic estimate to be: "Estimate by Evan Hendricks, chairman, U.S. Privacy council; publisher, Privacy Times." How to establish this agency? Who would sponsor the legislation? The book is silent, noting only that there might be considerable public support for governmental controls on key issues such as the protection of medical records.

There are more proposals (bringing back the Office of Technology Assessment, an arm of Congress that used to turn out some of the best information in Washington D.C., is my favorite), but precious little in the way of suggestions for actually accomplishing any of them.

Still, it's obvious that our author has done his homework. He clearly sees a growing civic problem and the need to do something about it before things get farther out of hand. The book provides a good bibliography, a helpful notes section, organized by chapter, a list of pertinent web sites (But why aren't these cited as pertinent throughout the book?), and a useful index.

This book is a beginning; it would be a good primer for members of Congress and their staffs considering the problems of privacy in the electronic age and what to do about them; and it's a good intro for anyone who might be just a little worried about where all those customer registration forms, medical forms, insurance forms, driver's license records, and web site sign-ins are winding up.

And as for "good old Apple"? Their web site privacy policy statement <[gal/privacy/> says, in part:](http://www.apple.com/le-</p>
</div>
<div data-bbox=)

"If you browse Apple's web site, you do so anonymously. We do log your IP address (the Internet address of your computer) to give us an idea of which parts of our web site you visit and how long you spend there. But we do not link your IP address to anything personally identifiable. The only other information automatically provided to us is the type of computer and operating system you are using.

"At times we may request that you voluntarily supply us with personal information, such as your email address and postal address, for purposes such as corresponding with us, registering at a site, making a purchase,

"We use the personal information you provide to create a personal ID, called Apple ID. Your Apple ID gives you easy access to Apple services including product registration and the Apple Store.

"If you provide us with your email or postal address,... we will ask you if we can use it to send you updates on the latest Apple products and promotions. We also ask if you want us to share your personal information with other companies that offer related services. If you do not want us or other companies to contact you, you can choose to "opt out," and Apple will respect your wishes.

"Apple is actively involved in current industry initiatives—such as the Online Privacy Alliance <<http://www.privacyalliance.org>> —to preserve individual privacy rights on the Internet and in all aspects of electronic commerce. If you have a question specific to privacy, please contact us at <privacy@apple.com>.

"Apple's privacy policy is subject to change at any time and without notice. For updates, please check here." ■

* Simson L. Garfinkel: <<http://simson.vineyard.net/>>

As an example of how the move toward coping with the electronic world has long been sidelined, Database Nation cites the following, from a report prepared by a commission appointed by Elliot Richardson, President Richard Nixon's Secretary of Health, Education, and Welfare.

The Code of Fair Information Practices*

The Code of Fair Information Practices was the central contribution of the HEW (Health, Education, Welfare) Advisory Committee on Automated Data Systems. The Advisory Committee was established in 1972, and the report released in July. The citation for the report is as follows:

U.S. Dep't. of Health, Education and Welfare, Secretary's Advisory Committee on Automated Personal Data Systems, Records, computers, and the Rights of Citizens viii (1973).

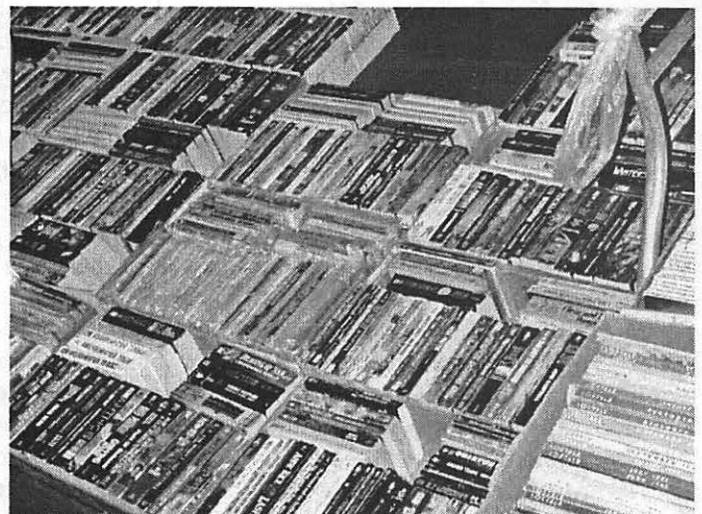
The Code of Fair Information Practices is based on five principles:

1. There must be no personal data record-keeping systems whose very existence is secret.
2. There must be a way for a person to find out what information about the person is in a record and how it is used.
3. There must be a way for a person to prevent information about the person that was obtained for one purpose from being used or made available for other purposes without the person's consent.
4. There must be a way for a person to correct or amend a record of identifiable information about the person.
5. Any organization creating, maintaining, using, or disseminating records of identifiable personal data must assure the reliability of the data for their intended use and must take precautions to prevent misuses of the data.

* From: <http://www.epic.org/privacy/consumer/code_fair_info.html>

Election Moments

From left to right: Alden Bestul, Steve Fink and John Barnes (chair of the election committee) slit open stacks of ballot-bearing envelopes, preparing to count the results of the May 2000 election. Prior to this stage, committee members searched the Pi offices for sharp objects — mainly knives and scissors — which caused some alarm since they failed to explain why they wanted the sharp objects. The extravagant mess at the far end of the table has nothing to do with the election process; all counting is done by hand. (Photo by Lawrence I. Charters)



Books and magazines were in abundance. This particular collection include a large measure of science fiction and techno-thrillers. Some were even computer related. (Photo by Lawrence I. Charters)



Microsoft Internet Explorer, Version 5.0 Outlook Express Version 5.02

review by Al Lubarsky

Disclaimer - While this article was started prior to the publication of the Internet Explorer 5.0 test in May/June WAP Journal, it obviously wasn't finished before the conclusion of that test by WAP Labs. Since the Lab has vast quantities of both expertise and facilities, the reader is cautioned to carefully consider the points made in this article in light of that Quick Look. It is understood that at the Labs,, among other things,, there is a known relationship between the grounded AC receptacle s and true ground potential.

IT BEGAN when I felt the need to review the first reasonably decent Mac Internet offering s from Microsoft (I.E. 4.5/O.E. 4.5) for the March/April 1999 *Washington Apple Pi Journal*. Then just in time for a review in the January/February 2000 *Journal* edition, along came OE 5.0. Now it's Internet Explorer(I.E.) 5.0 and an update to Outlook Express (O.E. 5.02).

Again, the first indication of the new release came to me from Apple eNews:

6. Introducing Internet Explorer 5

Microsoft set itself some mighty big goals. Not content with the performance offered by the already stellar Internet Explorer 4.5, Microsoft was determined to deliver the fastest, most reliable, and easiest-to-use web browser on the planet.

Internet Explorer 5—now available—does that and more, offering features sure to make your Internet browsing more enjoyable than ever. For example, with Internet Explorer 5 you can easily track your auction activity, drag URLs to your desktop, manage your favorites, archive web pages in its new Scrapbook area, customize your Internet work space, and much, much more.

Learn all about Internet Explorer 5, the exciting new web browser for Macintosh, by visiting Microsoft's MacTopia website:

<http://www.microsoft.com/mac/>

Installation

After checking out the size of the download and comparing it with my patience and time avail-

The screenshot shows an Internet Explorer browser window with the address bar set to http://www.gon.com/vol19_no12/reviews/2008-1.html. The main content area displays a comparison table titled "Mac users enjoy the best browsing experience—with Microsoft". The table compares Internet Explorer, Netscape, and Opera across various categories including operating system, system requirements, pros, cons, and price.

Mac users enjoy the best browsing experience—with Microsoft							
	I Cab iCab Co. Braunschweig, Germany www.icab.de	Internet Explorer Microsoft Corp. Redmond, Wash. 425-892-8080 www.microsoft.com/ie	Netscape Netscape Communications Corp. Mountain View, Calif. 050-254-1900 www.netscape.com/browsers/	Opera Opera Software Oslo, Norway 47 23 23 48 68 www.opera.com			
Operating system	Mac OS 2.0 preview	Mac OS 5.0	Windows 5.5 beta 1	Linux 6 preview 1	Mac OS 6 preview 1	Windows 6 preview 1	Windows 4.0 beta 3
System requirements	Mac OS 7.5, Power PC or 68000 processor, 12M of RAM, 4M of free storage	Mac OS 7.6.1, Power PC or 68000 processor, QuickTime 3.0, 12M of RAM, 15M of free storage	Win9x, NT or Win2000, Pentium II or faster, 64M of RAM, 20M of free storage	Linux 2.2 or later with glibc 2.1, 200-MHz Pentium or faster processor, 64M of RAM, 15M of free storage	Mac OS 8.5 or later, 200-MHz Power PC 604 or faster, 32M of RAM, 28M of free storage	Win9x, NT or Win-2000, Pentium II or faster, 64M of RAM, 20M of free storage	Win9x, NT or Win-2000, 200-MHz Pentium or faster, 32M of RAM, 10M of free storage
Pros	+ Small storage and memory needs; good for older systems + Extremely customizable and user-friendly	+ Slight improvements in speed and stability + Uncluttered appearance	+ Print preview feature + More Dynamic HTML support	+ Looks pretty much the same regardless of operating platform + Good control of cookies	+ Looks pretty much the same regardless of operating platform + Good control of cookies	+ Looks pretty much the same regardless of operating platform + Good control of cookies	+ Small footprint + Fast, non-nonsense
Cons	- Not free - Not yet compatible with some advanced Web content	- Installation hard to follow - Cookies hard to control	- Not much new - Print preview still lacks needed features	- Complex installation, shell commands - Extremely cluttered interface	- Extremely cluttered interface - Can't remove My Sidebar component	- Extremely cluttered interface - Can't remove My Sidebar component	- Can't handle some content - Not free
Price	\$20	Free	Free	Free	Free	Free	\$35



able, it became obvious that the easy way this time is to just order the CD from Microsoft. The "handling charge" is \$9.95 plus state tax (\$10.45 in Virginia), delivery is promised in 6 to 8 weeks and all sorts of credit cards are acceptable to order on-line. The usual hesitation about providing additional funding to Mr. Gates was tempered by the feeling that he would soon loose about \$30 billion in the upcoming stock market correction, so he would probably be more than usually grateful for my modest contribution.

After returning from a short trip out of town, the NASDAQ had begun to correct itself and the US Postal Service had delivered my saved mail (the other kind, which comes in a large plastic tub); it included the envelope from Microsoft. Delivery time of about a week, maximum.

Installation is still simple. Copy the disk icon onto the hard drive and check off the agreements. Everything goes smoothly. Favorites, preferences and settings from I.E. 4.5 automatically get carried over. And no need to download a separate 128-bit encryption file as in the past— this version has it built-in — a practice now allowable, evidently, by changes to Federal regulations.

For updating to O.E. 5.02, you do need to move existing 5.0 files into the new O.E. folder, unless Mac OS 9 is being run, in which case, this step is not required. These are located in the "Identities" folder within O.E. in both cases. If you are updating from O.E. 4.5 or earlier, it will be somewhat more time consuming, but also fairly easy. (See the Jan./Feb. 2000 *Journal* article, if you must.) Also note that while I.E. 5.0 will run under Mac OS 7.6.1, O.E. 5.0 won't. It needs 8.1 or later — for real, since I've tried it once or twice on another machine, with 7.6.1 without success.

I. E. 5.0 Performance

The first big change is that the type size on a Web page, as viewed

Progress Connect 2.3 ReadMe

PROGRESS WINDOW CONNECT 2.3

This script will open the Progress window while receiving mail, for those using OE 5 who miss this feature from OE 4.5. **It will show you the progress of your download as you receive mail, and then close, exactly like OE 4.5, when you are in OE.** It is not affected by the current bug in OE 5 which rendered some other scripts ineffective (some scripts open a "Progress" window which does nothing during downloads). It may be called in Schedules you define and so can be set to run on Startup and on Schedules — including "Send & Receive All" set to run every few minutes — even if you are not at your computer. **Version 2.3 lets you select which of your accounts' downloads you wish to view in the open Progress window if you have more than one account.** It does not call, nor can it exclude, Hotmail accounts, which are not scriptable. Nevertheless, if there is any mail being downloaded on a Hotmail account, it should still show up in the Progress window. Provision for this is made in the Schedule set-up instructions below.

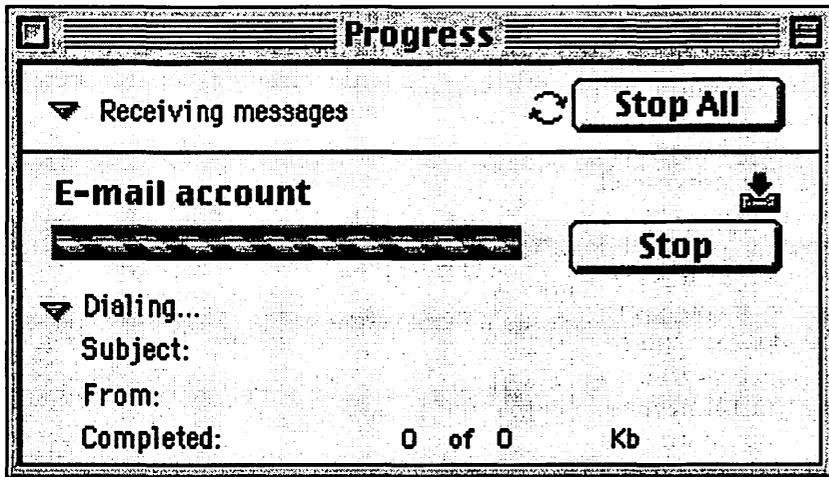
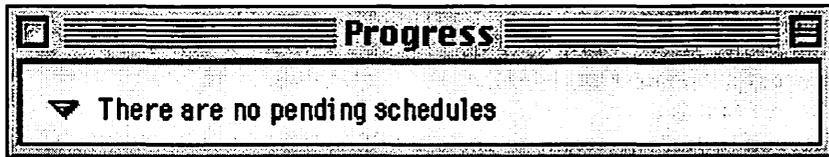
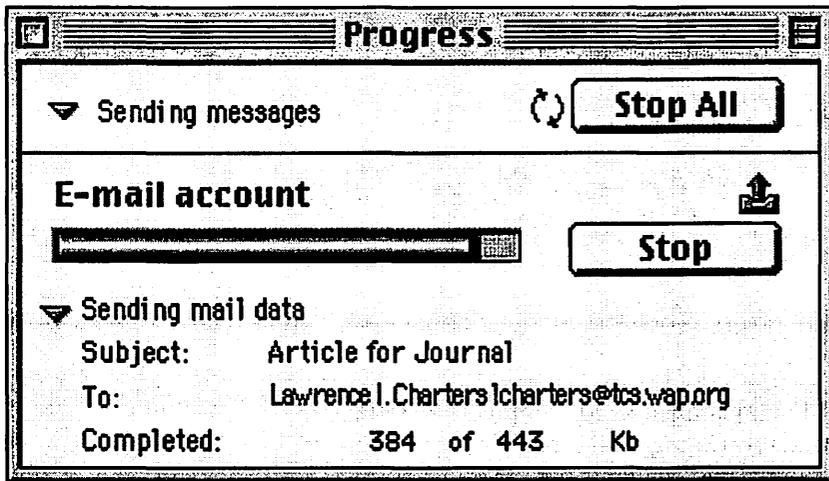
NEW in v2.3:

- If you have the script set to run on "Send & Receive All" Schedule every so many minutes, and you leave OE open in the background while you switch to another application, your scheduled mail checks will occur as usual without any interruption, although the Progress Window does not open while OE remains in the background. (Some users found the first version of this script annoying when it would bring OE to the front every time it checked mail. Versions 2.0 and 2.1 removed this problem, and it now all works smoothly. The only way that a script can open the Progress Window is through menu or keypress emulation, which requires that OE be the front application.) You can always click another window to the front if you wish: the progress window will still close when it's finished downloading.

on an older (PM 6100) Mac is large and the font strange-looking. This can be changed fairly easily by entering the correct monitor resolution values under "Preferences: Language/Fonts". However, after using the larger and somewhat unusual font size for awhile, I find it sort of comforting to my aging eyes.

Next comes the subtitle out-guessing game, similar to the email address game on O.E. 5. As you fill in the desired URL, I.E. 5 attempts to decide which, of any sites previously visited, are of current interest. These show up in a logical listing (shortest to longest, perhaps) just beneath the address blank. While it is difficult to keep an accurate score, Microsoft usually wins this game, unless you go to the trouble of fixing the outcome in advance.

Now equipped with Netscape Navigator 4.08 (N.N.) and I.E. 5.0, the acid test on my screaming 66 MHz machine. Try a few timed tests to see if MS's great Tasman rendering engine is actually faster than the warmed over Navigator. A few simple tests without benefit of calibration; about the same performance when viewed at the end of a WAP Explorer 33.6 kbps dial up circuit in opening Web pages. A few seconds faster in loading some pages, but not consistently so. Never slower than N.N. I.E. 5.0 consistently opens about 5 seconds faster than N.N. on my machine — that might save someone an hour and a quarter a year? For larger (1-2MB) downloads, Navigator still appears faster. Since it is not possible for me to duplicate Internet conditions between downloads, quantification is



difficult. But using the average of several attempts, Navigator consistently displays faster speeds than the I. E. Download Manager. Usually N.N. shows about 3.3k while I.E. is below 3.0k, but this might just be an overly optimistic method of calculating speed by the N.N. "speedometer". Total download times while faster, do not appear to differ by the 10% or so shown.

Then off to check the weather maps with I.E. Weather Channel's

looped local radar picture (formerly on Fairfax County cable TV; but now gone thanks to Cox's recent takeover) requires MRJ 2.2 in lieu of the 1.X version that was supported by OS 8.1 and I.E. 4.5. After about an hour, this 4.1 MB file is downloaded from Apple.com and installed — the green blotches again move over Northern Virginia with vigor (sometimes they do stagger a little).

The other new features have been widely reported by now in the *Jour-*

nal, the Mac magazines, on-line and even in the "trade press", so there is no need to reiterate. Change the color, get rid of the tool bar, customize, use the scrapbook feature and have fun.

About the only conclusion concerning the performance of browsers on old machines in locations with dial-up service, is that it doesn't seem to make much difference. Just pick the one you, or your favorite Web pages, like the best.

OE 5.0, Revisited

The "Read Me" blurb on O.E. 5.02 states that it fixes some bugs in the original but doesn't get specific about new features. Since it is supplied on the same MS CD-ROM, (my first "hard copy" of these MS Internet applications, since the ones previously downloaded exist only on two hard drives) and the installation is relatively painless, it might be a good opportunity to try customizing O.E. 5. In my case, to add the feature most missed from O.E. 4.5 - namely the Progress Window. In O.E. 4.5, when logging onto the mail server, the Progress Window appeared. It contained some information as to the total size of the messages being downloaded and those being sent, as well as the barber pole representation of "Progress". For those using dial up service who occasionally receive multi-MB attachments at inopportune times, it may be considered an essential feature. But it is nevertheless mysteriously absent from all versions of 5.0.

After digging around on the Mactopia site and following the link to the "Unofficial" MS O.E. site for Macs, low and behold, several Apple Scripts designed to reinstall the missing Progress window. The latest of which, that claims to avoid the bugginess of earlier editions, is a freeware program called "Progress Window Connect 2.3", by Paul Berkowitz. After downloading this one, it also turns out that several other Scripting Additions are necessary to complete the



installation. The helpful link to <http://bbs.applescript.net> allows downloading of *Jon's Commands 2.1*, *Sigmas_Additions* and *Sleep Commands .9b6*. For those using Mac OS 8.1, a single script ("Choose from List") contained in the *GTQ_Scripting_Library 1.2.1* is also needed. (As mentioned earlier, 5.0 doesn't support Mac OS prior to 8.1; 8.6 and later have a later version of this script already installed.) After following the rather straightforward instructions supplied with *Progress Window Connect 2,3* all the scripts get properly placed—AND—a Progress Window that has more features than the original one in 4.5 appears. Great! In fact, it will handle several email accounts and contains a work around for the supposed O.E. 5 shortcomings in using Hot Mail accounts. Having no experience with these features, I'll leave that discussion to others. For me, this completes an email package — (almost) for free and with no ads—that does all that I ask, and lots more. Until a better one comes along, that is.

As I finish this article, a copy of *Government Computer News*, May 22nd edition comes across the desk. Headline: "Internet Explorer rules on Mac and PC". Of the seven browsers compared (iCab, O.E. 5.0 and Netscape 6 preview 1 -all for the Mac and I.E. 5.5 beta 1 for Windows, Netscape 6 preview 1 for Windows and Linux and Opera 4.0 beta 3 for Windows) the highest grade, the only A-, is awarded I.E. 5.0. (Its PC version gets a B+, if you must know and/or care.) This from a publication that sometimes has trouble even spelling "Macintosh". And if you are anxiously awaiting Netscape's latest offering, be prepared for a "C", perhaps. (You may find the article at: http://www.gcn.com/vol19_no12/reviews/2008-1.html)

—Enough said. ■

Al Lubarsky has been a WAP member since 1995. His bio has appeared previously.

Free QuickTime Movie Software iMovie Sans the iMac

©By Dennis R. Dimick

IN CASE YOU haven't noticed recent television ads for Apple's iMac, the message of late has been this: You can become your own Hollywood mogul, and iMac with its iMovie software can transform you into a movie producer.

That's fine, except for those of us who haven't got a latest model iMac. Even if your Mac is a "colored" G3 or G4 Mac, you haven't been able to get iMovie until now.

Someone in Apple's corporate suite must have seen the potential in freeing iMovie from the bonds of iMac, for recently Apple posted iMovie, all of it, to its website for free downloading by anyone.

The file download runs about 19 megabytes, so plan on a long wait if you've got a dialup web connection. If you have a Mac of adequate "horsepower" and haven't tried making QuickTime movies yet, iMovie offers a simple and reasonably powerful way to get started.

Apple makes it sound like the only Macs that will support iMovie are the latest "Firewire" PowerBooks and G4s. If you want to actually use iMovie you will need a powerful recent model Mac with G3 or better processor. (I have run it on a G3/266 desktop Mac.)

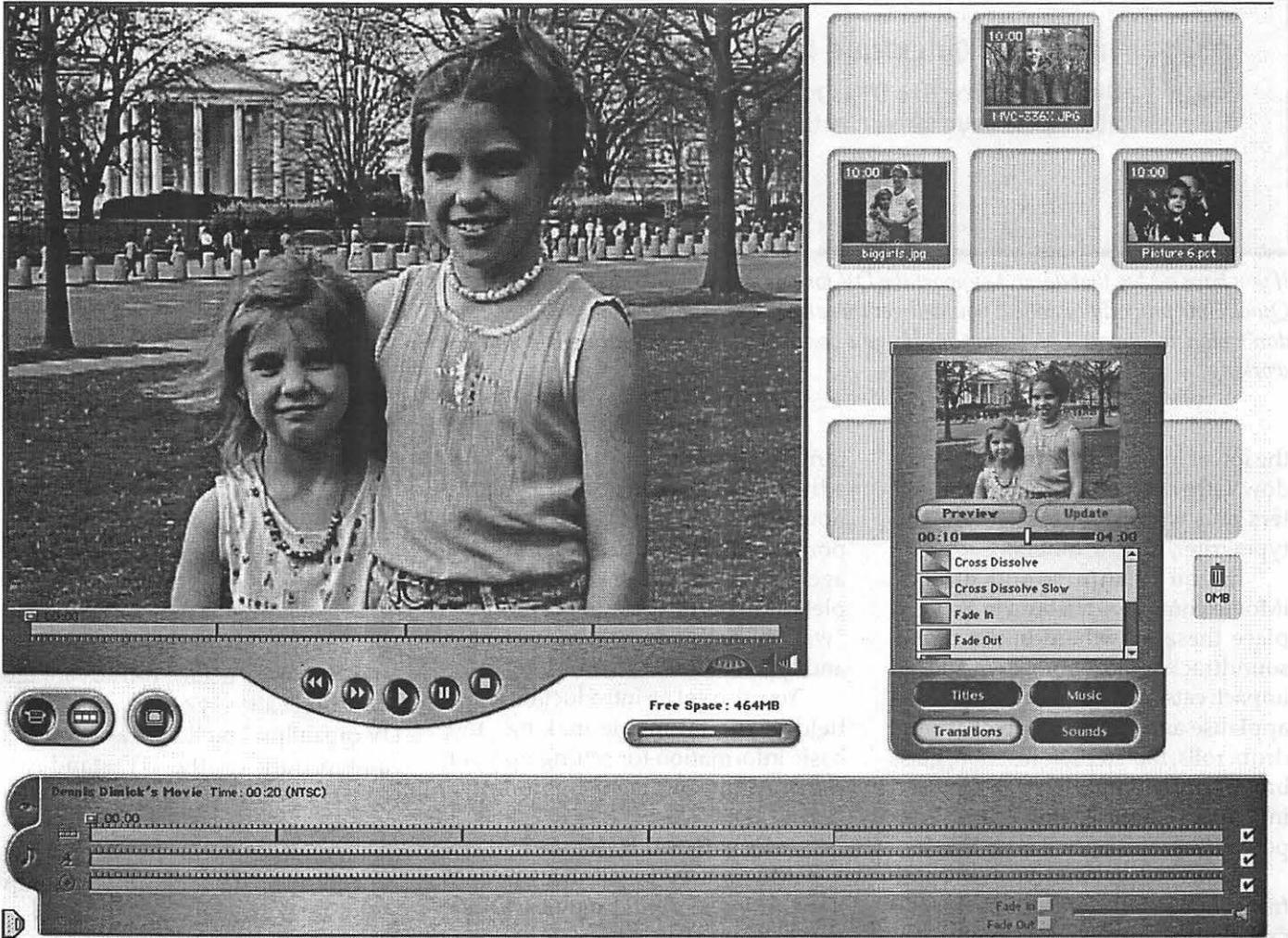
Optimally your Mac will have some sort of "Firewire DV" digital video input. Even if your Mac doesn't support DV it is still possible to make movies with iMovie. It will just be a bit harder.

The Basic Premise

Making QuickTime movies with iMovie is about as simple as it gets. A simple assembly sequence goes like this: 1.) Import video clips, pictures, or audio. 2.) Place and sequence them on a timeline window in the order you want them to appear in your movie. 3.) Add transitions between scenes. A common transition is the "cross-dis-



The sound window lets you choose from a variety of special effects sounds and also gives you controls to record your own voice using the Mac's built-in microphone inputs.



Apple's free iMovie program takes over your Mac's desktop. At top right the "bin" holds all files you've imported into iMovie. A timeline, at bottom, shows the sequence and duration of items. The timeline also converts to a "storyboard" so you can see an item-by-item sequence of items in the project. The large window at top left shows the current clip or image you are editing. The transitions window is at lower right: add transitions to a movie by dragging a selected transition to the junction between two clips on the timeline.

solve." 4.) Add titles. 5.) Finally, export the project to a movie file..

Besides owning a DV-equipped iMac which ships with iMovie, the ultimate in ease comes if you have a DV-format video camera and a late model "colored" G3 or G4 desktop Mac. iMovie will let you control the playback and record functions of the video camera through the Firewire connector cable so you can easily transfer video direct to disk from the DV camera.

If you have an older Beige G3 you'll need a separate PCI Firewire card such as those sold by ProMax

(www.promax.com). If you choose to add a PCI Firewire card to your older Mac, beware not all cards are created equal, as not all will work well with DV cameras. Apple maintains a list of supported DV cameras and other hardware on its website.

If your Mac doesn't have Firewire DV input, you can still use iMovie, you will just be limited in the media types you can use to make movies. You can use existing QuickTime movies, but you will have to convert them to DV format before iMovie will be able to "see" the files and work with them.

You can convert QuickTime movies to DV format by opening them in the "Pro-Enabled" version of Apple's QuickTime Player and export the files as QuickTime movies in DV format.

Bring on the Effects

iMovie comes with an array of preset titling templates that make it incredibly easy to make the titles on your movies look like those in a Hollywood feature. There's even a template so you can title your movie to look like those "music videos" where the artist and album name appears in



Improper QuickTime Installation

QuickTime Firewire DV is not installed. You will not be able to use your camera without them.

OK

If you have a Mac that doesn't support the DV format, or you don't have the DV parts of QuickTime properly installed, you will get this error box upon launching iMovie. If you don't plan to import DV format media you can just click through this box and keep working.

the lower left corner of the video window. Other choices include: flying letters and words, rolling credits and typewriter, among others.

If you're into sound effects, iMovie comes with a bunch. You can place these anywhere in the movie soundtrack to add your own special impact: cats meowing, crickets, crowd applause and clapping, dog barking, drum rolls, footsteps, forest rain, glass breaking, honking horns, a whinnying horse, laughing, thunder, a trumpet fanfare, and even a wild laugh.

Besides the sounds that come from your videotapes, you can further customize movies by recording "voiceovers" using iMovie and your Mac's microphone. You can also import audio tracks from audio CDs, and this "digital to digital" conversion from CDs causes no quality decline on import to your project.

The transitions offered, though limited in variety, will cover most of the basic needs: cross-dissolve, fade in and out, overlap, push right, and scale down (the first scene gets small and disappears while the new replaces it.)

Help is on the Way

One thing you don't get with iMovie is a printed manual. You can get by without one, because Apple has supplied a reasonably useful and comprehensive online help system.

Not only does online help explain

terms specific to digital video and editing movies, but it also explains how to create and set up projects, import media, and organize and manage your source files. You get a complete iMovie tutorial, and an online "walkthrough" on how to assemble and edit a movie.

You also get an introduction to the field of digital movie making, and basic information for setting up your camera and equipment.

How Good Is iMovie?

iMovie may be all most people need to make digital movies. Other more powerful programs such as Adobe Premiere and Apple's Final Cut Pro offer significantly more power, but you have to pay from \$600 to \$1,000 for them.

For example, iMovie does not allow you to move, or pan, across still images as part of a movie production. iMovie will not allow multiple images in the same frame, such as "picture in picture." Its library of transitions is limited, and it offers no video filters of the type one might find in Premiere, or in an image-

"Someone in Apple's corporate suite must have seen the potential in freeing iMovie from the bonds of iMac, for recently Apple posted iMovie, all of it, to its website for free downloading by anyone.

processing program like Photoshop.

The real cost of iMovie comes in the hardware requirements. You really do need a very fast recent "colored" G3 or G4 to take full advantage if you don't already own an iMac with DV capability. You'll also need a video camera built on the DV standard. (Apple's website lists DV cameras compatible with Apple's implementation of the Firewire DV standard.)

Still, even if your hardware setup



When you launch iMovie, a video clip runs to introduce the program. This is the last frame of that "splash screen" movie.



is less, there are ways to take advantage of aspects of what iMovie offers. You just need to be more creative, and understand that slower, older Macs will be limited in what they can do with iMovie, especially if your Mac cannot directly acquire DV format source video.

Pi member Dennis Dimick has been writing about graphics and QuickTime-related subjects for The Journal for nearly eight years. One day, not necessarily soon, he will get a Mac and video camera that support DV. He can be reached via email: ddimick@aol.com

iMovie v.1.02

Digital Video Editing Program

Free from: <http://www.apple.com/imovie/download/>

Apple's Stated Requirements:

- Power Mac G4 or PowerBook FireWire; Mac OS 9.0.4 or later, QuickTime 4.1 or later; 64 megabytes (MB) of random-access memory (RAM); iMovie requires a minimum of 16 MB of free memory.

- A CD or DVD drive; 2 gigabytes (GB) of available hard disk space highly recommended. A display that supports 800 x 600 resolution and thousands of colors (1024x 768 and millions of colors recommended). A built-in FireWire (IEEE 1394) port. A 4-pin to 6-pin FireWire cable (for use with DV camcorders).

Easy Miracles: Movies from Still Pictures

© 2000 Lawrence I. Charters

[Note: all of the images necessary to re-create this project, plus the finished clips themselves, are available on the Pi's Web site at:

<http://www.wap.org/journal/easymiracles/>

Feel free to grab the images and clips and experiment. Note, however, that some of the clips are fairly large.]

How Easy?

USING NOTHING more than a Power Macintosh and Apple's QuickTime Pro 4.0, you can make movies.

You don't need any other software at all. No movie making software, no movie editing software. Nothing else is required. But before we get to that, let's see why you'd want to do this.

Why Should I Care?

When I bought my first computer, all I wanted was a "magic typewriter." I wanted a machine that would allow me to type as fast as possible, without worrying about put-

ting the paper in straight, or having the paper fall out at the bottom of a page, or wondering how to correct mistakes without retyping. (Hint: the key to a good vocabulary is learning how to turn a typo into a word that you *really* wanted.) My first computer, a Radio Shack TRS-80 Model I, did all that.

By the time I got my first Macintosh, my wants changed: I wanted to draw. A young girl named Emily demonstrated a Macintosh on the top floor of the U.S. Marine Barracks in Yokosuka, Japan, in February 1984. Her father had purchased the machine in Hong Kong a few days earlier and Emily, with only an hour's experience with the machine, was drawing black-and-



The challenge: turn these 34 still images into a short QuickTime clip, using nothing more than a Power Macintosh and QuickTime Pro. All these images, incidentally, are on the Pi Web site, so you can try this yourself.



“It is one thing to know, in a vague sort of way, that QuickTime can import still images and turn them into motion pictures. It is quite another to actually try it. Usually, you need some sort of inspiration, and mine came in the form of a Nikon CoolPix 950 camera.”

white pictures of a house, a hill, and the sun, with sheep and cats and dogs and frogs and other things sprinkled liberally over everything. I decided I wanted to draw, too, and the Mac turned me into a (mediocre) artist.

I never really wanted to make movies, on a computer or through other means. Making movies requires a camera, film, time and talent. I had none of those ingredients. But then came QuickTime Pro 4.0. I discovered you don't need a camera, or film, or even much talent, and very little time. But you do need a Macintosh and QuickTime Pro.

Requirements

First off, make sure you have a Power Macintosh. Any currently shipping model will do, or any Power Macintosh dating back to the very first models. Apple says that QuickTime Pro 4.0 requires a minimum of 16 megabytes of RAM but (ha-ha!) this is more theoretical than practical. If you have a Power Mac and you have *less* than 64 megabytes of RAM, you are shortchanging yourself and your computer. Naturally, things work more quickly and el-

egantly if you have a machine with a G3 or G4 processor.

While QuickTime 4 works on Centris and Quadra Macs, QuickTime Pro requires a PowerPC-based machine. And money: \$29.99. You turn an “ordinary” version of QuickTime 4 into QuickTime Pro by pointing a Web browser to:

<http://www.apple.com/quicktime/upgrade/>

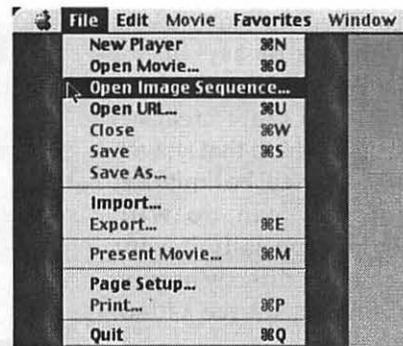
and filling in various blanks on a form, particularly your E-mail address (so Apple can E-mail you a registration code) and your credit card number. If you live or work in Cuba, Iran, Iraq, Libya, North Korea, Sudan, Syria, or other places (please check the U.S. State Department for an updated list), you aren't supposed to have access to QuickTime Pro, so find something else to do. Growing food would be a good choice.

Once you have these pieces (and assuming you have electricity to run the Power Mac), you're all set. No camera, film, special cables or chemicals are required to make movies.

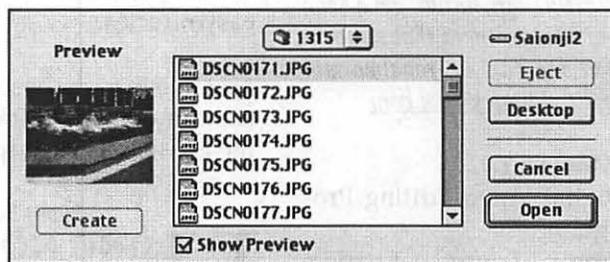
Step By Step

Making movies without a camera may seem difficult, but it comes from QuickTime Pro's ability to turn any sequence of images into a QuickTime clip. “Sequence of images” sounds like it could be tricky, but it isn't: QuickTime Pro will accept a wide variety of computer image formats, ranging from screen shots to high-resolution TIFF images. Let's start with something simple: screen shots.

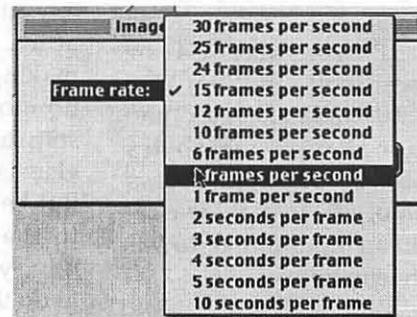
To take a screen shot, press the CMD-Shift-3 keys at the same time. [The CMD — Command — key has



From within QuickTime Player, go to the File menu and select Open Image Sequence. If your QuickTime Player doesn't offer this option, you need to upgrade from the “regular” QuickTime to QuickTime Pro.

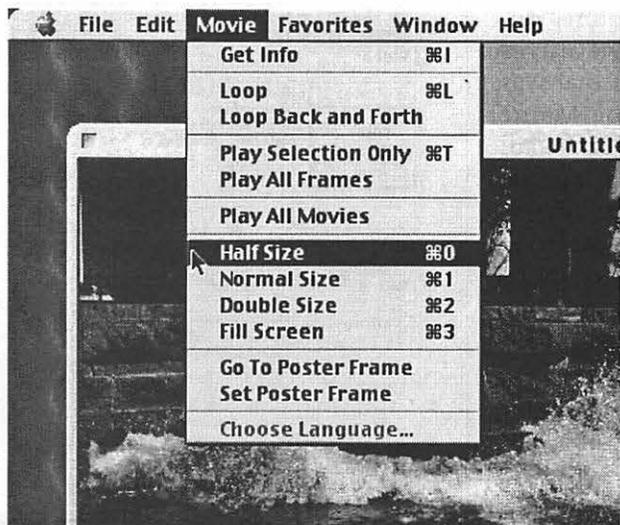


From the Open Image Sequence window, select the first image you want for your movie, and the rest of the images will be imported as well.



One of the first choices you'll have is: what frame rate do you want to use for your clip? Since the original still images were taken at half-second intervals, “24 frames per second” was selected.

an Apple and cloverleaf symbol.] You'll hear the sound of a camera shutter, which is a nice touch. If you look on your hard drive, you'll see a brand-new document titled Picture 1. Press these keys again, and you'll cre-



If your source material consists of fairly large images (in this case, 640 by 480 pixel photos), selecting *Half Size* from the *Movie* menu will put the entire clip on a diet. Not only do larger clips take longer to download (and take up more room on your hard drive), but they also tend to “break up” when seen on older or slower computers.

will take a picture of the current active window, and only that window.

Note that, while it is not a requirement, it is a Very Good Idea to make sure that all the images have the same dimensions and orientation. If the images don't have the same dimensions, all images will be stretched, or compressed, to match the dimensions of the first image imported. If the images don't have the same orientation (landscape or portrait), everything will work just fine, but look silly. Of course, you may want to deliberately change the orientation

of a picture to make it seem as if it is rotating, but that's a different issue.

One thing that is a requirement: all the images must have a common name. While you can mix file formats (GIF, JPEG, MacPaint, PICT, BMP), the images should all have the same common name, with just the number at the end differing. And yes, if you number the images backwards (Picture59 is renumbered Picture1, Picture58 is renumbered Picture2), the images will be imported backward.

Once you have your images collected, properly sized and oriented, and properly named, place them all in a folder. Then launch QuickTime Player, go to the File Menu, and select Open Image Sequence. Within the dialog box, open the folder containing your images, select the first image in the sequence, and press the Open Button.

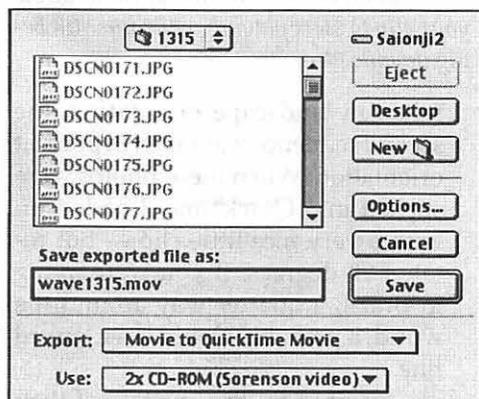
A box will pop up called Im-

age Sequence Settings, and offering a variety of frame rates. “Frame rate” is taken from the motion picture industry; you are being asked how many images should be displayed per second in your finished movie. The options range from 30 frames per second (professional movie quality) to 10 seconds per frame (appropriate for a “movie” consisting, say, of nothing but screen shots, or material requiring a lot of reading). After making your selection, your Mac will (quickly) grab all the images you've selected and assemble a QuickTime clip. You can then play the clip and, if you like it, save it to your hard drive. If you don't like the clip — say, you'd like the frames to play faster or slower — you can close this clip and re-import your images at a different frame rate.

Inspiration

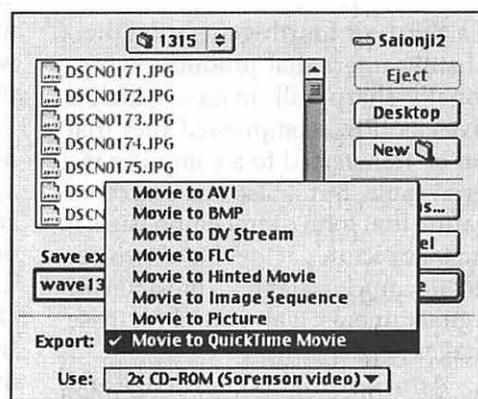
It is one thing to know, in a vague sort of way, that QuickTime can import still images and turn them into motion pictures. It is quite another to actually try it. Usually, you need some sort of inspiration, and mine came in the form of a Nikon CoolPix 950 camera.

As reviewed by John Barnes in a recent Journal article, the CoolPix 950

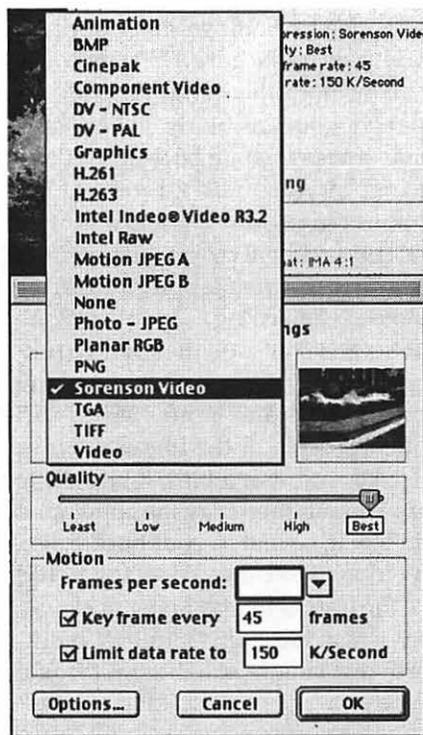


Saving your new movie is just as easy: from the File menu, select *Export Movie*. After giving the movie a file name you can simply press the *Save* button, or you can experiment with the various options presented by the *Options* button and the *Export* and *Use* pop-up menus.

Press these keys again, and you'll create Picture 2, Picture 3, etc. These three keys will “take a picture” of your entire screen, but if you press CMD-Shift-4, you can select which part of the screen you want saved as a picture file. CMD-Shift-4-CAPSLOCK



While most people will probably want to save their clip as a QuickTime movie, other options exist. In particular, note that you can export clips as a DV Stream, for use with FinalCut Pro and iMovie.



Buried as an option under the Options button are a number of choices for compression, ranging from a sliding bar for image quality to a choice of frames per second to a throttle on the data rate (useful, in particular, if you want your clip to play on older, slower machines). A variety of compression schemes are also available; experimenting with all these options will easily occupy an afternoon, even for short clips.

is a third- or fourth-generation digital still camera that produces exceptionally sharp still images, which it saves as JPEG-compressed files that can be transferred to a computer via serial cable. But it also has one other feature that John didn't emphasize: it can take pictures at the rate of two per second, much faster than most film or digital cameras. It also numbers these images sequentially.

Armed with this knowledge and a borrowed camera, I visited the Wave Pool Park in Silver Spring, MD. Wave Pool Park features a "sculpture" that, through the use of clever mechanical equipment housed underground, can

reproduce something like forty different kinds of waves. The waves crash against a stone wall that was allegedly inspired by the Maine coastline. The result is spectacular: you can sit on a bench in the middle of a metropolitan center (just a few hundred feet from the Silver Spring subway station), dozens of miles from the nearest beach, and watch (and listen) to crashing waves.

In just a few minutes, I filled the camera's CompactFlash memory card with pictures of the Wave Pool in action. After transferring these to my Macintosh, I made movies.

Slow-Scan TV

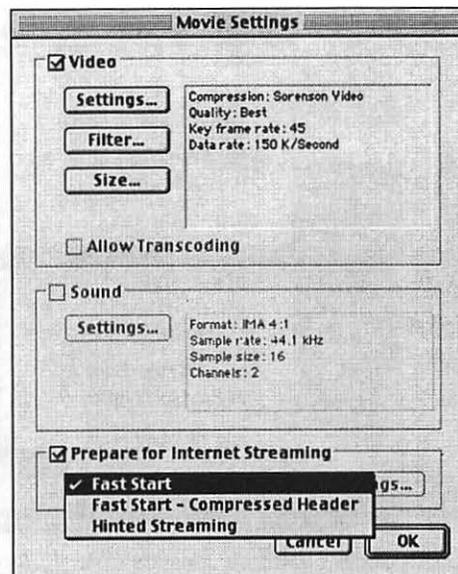
The Wave Pool turned out to be an almost ideal subject: it was a "moving" subject, but it didn't go anywhere. With the CoolPix taking pictures at the rate of two per second, the waves "jump" between frames, but still look reasonably natural. The overall effect was similar to slow-scan TV, most commonly seen in security surveillance systems.

One group of 34 photos looked particularly promising, so they were all placed in a folder and sucked up into QuickTime Player. As the photos were taken at two frames per second, the frame rate was set at two frames per second, too. The resulting clip was outstanding, but also very large 4.6 megabytes), since the original images were medium-resolution 640 by 480 pixel photos.

Selecting Half Size from the Movie Menu, and saving the clip again, greatly reduced the overall size, from. This worked so well that other options were tried, such as saving the clip using different compression schemes, and seeing the effect on file size of various streaming (video over the Internet) options.

Oops

Pleased with this success, I then tried another sequence of images. While the first set of photos were



The Options button allows you to set up your movie clip for streaming across the Internet. If you don't have a true QuickTime Streaming server, Hinted Streaming won't do you any good, but the Fast Start and Fast Start-Compressed Header options allow your clip to start playing while it is still being downloaded.

taken in landscape orientation, the second sequence was taken in portrait orientation. When these photos were sucked into QuickTime, I ended up with a very nice little clip — but rotated 90 degrees. If you were living in Brazil, a quarter way around the world, it probably would have looked fine.

Inspired by this mistake, I then tried importing the same images, but at too high a frame rate. This resulted in a nice clip, still rotated 90 degrees, of waves banging back and forth at high speed. I think of it as the "Wave Pool seen from Brazil, after too much coffee."

Documentation? What Documentation?

Some time later, I learned that it is easy — very easy — to correct the orientation of my "Brazil" clips. I might have stumbled on the secret myself, but instead I stumbled on something else: documentation for



Default Settings
Most Recent Settings
Streaming 20kbps - Music - High Motion
Streaming 20kbps - Music - Low Motion
Streaming 20kbps - Voice - High Motion
Streaming 20kbps - Voice - Low Motion
Streaming 40kbps - Music - High Motion
Streaming 40kbps - Music - Low Motion
Streaming 40kbps - Voice - High Motion
Streaming 40kbps - Voice - Low Motion
Streaming 100kbps - Music - High Motion
Streaming 100kbps - Music - Low Motion
Streaming 100kbps - Voice - High Motion
Streaming 100kbps - Voice - Low Motion
Streaming 20kbps - Music
Streaming 20kbps - Voice
Streaming 40kbps - Music (mono)
Streaming 40kbps - Music (stereo)
Streaming 40kbps - Voice
1x CD-ROM (Sorenson video)
✓ 2x CD-ROM (Sorenson video)
1x CD-ROM (Cinepak video)
2x CD-ROM (Cinepak video)

One of the last things you should do as you export your movie to disk is: select a streaming option. If you are saving a clip for use on the Web, there are lots of options for high-speed, medium, and low-speed connections, "tweaked" for different material, such as music or voice, mono or stereo. There are also several options for saving clips for use on CD-ROM. The most "compatible" option would be "1X CD-ROM (Cinepak video)", since this would allow the clip to be played on older, slower CD-ROM drives using older versions of QuickTime. "Streaming 40kbps - Music (stereo)", in contrast, would produce a clip optimized for computers with stereo sound and high-speed Internet connections.

(And if you don't have a Power Macintosh, pick up an iMac, or iBook, or PowerBook, or Power Mac G4).

Resources

Judith Stern and Robert Lettieri, *Visual Quickstart Guide: QuickTime Pro 4*. Peachpit Press, 1999. xxiv, 359 pp. \$17.99. ISBN 0-201-35469-1

<http://www.peachpit.com>

QuickTime Pro 4

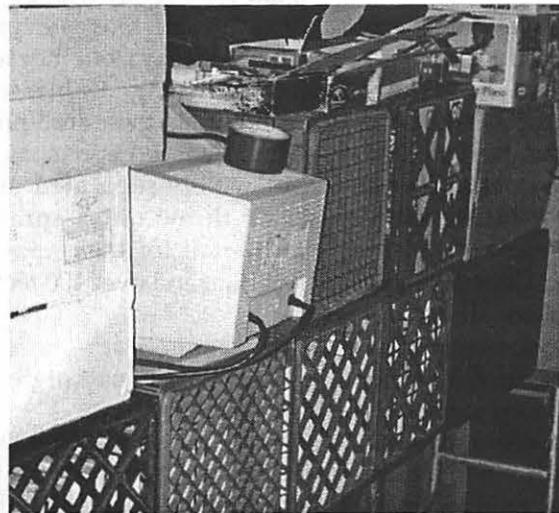
<http://www.apple.com/quicktime/upgrade/>

Sample images, clips

<http://www.wap.org/journal/easymiracles/>

tion at all: they'll let you upgrade to QuickTime Pro for \$29.99, but this price doesn't include any additional clues on how to use the software. But Judith Stern and Robert Lettieri have stepped into the gap with their excellent *Visual Quickstart Guide: QuickTime Pro 4*. Very well written and with an excellent index, I learned all kinds of new tricks, such as —

Come to think of it, these new tricks would best be covered in another installment. In the meantime, go out and get the *Visual Quickstart Guide: QuickTime Pro*, and upgrade your copy of QuickTime to QuickTime Pro 4.



Almost as popular as fruit boxes were plastic milk cartons. Note, too, the roll of duct tape on the monitor. (Photo by Lawrence I. Charters)



Given the huge number of Apples at the show, it isn't surprising that fruit boxes were very popular. (Photo by Lawrence I. Charters)

Best of the TCS

compiled and edited by John O. Ludwigson

Cheerios

Past BTCS columns have pointed out that the assorted varieties of computer geeks assembled electronically on the Pi's bulletin board system have a similarly assorted variety of interests. The present collection of tales continues in that tradition, beginning with a widely popular form of amusement: food.

Gourmet 1: My cat Gus started eating Grapenuts last week. We had a bowl out (with no milk) for my son and we put it on the counter. Later that day I saw Gus with his head stuck in the bowl. We put some in another bowl by the cats' water dish and we see him eat the Grapenuts every so often. Odd.

Oh well, his sister loves corn. Once even ate it off the cob.

Gourmet 2: One of my clearest memories of visiting my cousins in Connecticut when I was a child is of breakfast. They tended to eat cooked cereal there, which I don't much care for. But they always had Cheerios in the house, so I would have that. My aunt and uncle never said a word, but my cousins would giggle to each other. After a few visits, they explained the joke: Only their *cat* ate Cheerios, and they couldn't get used to the idea that I would have cat food for breakfast.

Gourmet 3: My guinea pig in Taiwan ate Cheerios. (I probably did, too, but I was five, and remember the guinea pig eating them, but don't remember eating them myself.) My spouse and child still look at me odd when I call

Cheerios "guinea pig food." But I'm willing to bet American guinea pigs will eat Cheerios, too, especially since guinea pigs are from Peru and neither Taiwan nor the U.S.

Thunderboats

Moving right along, the Pi's culture crowd took note of a phenomenon peculiar to very large lakes and frustrated stock car racers.

Fan 1: When I lived in Michigan, I would go to see the Gold Cup races for unlimited hydroplanes down at Belle Isle. These used to run Allison, Rolls Royce, or Packard aircraft engines and were called "thunderboats" for the noise that eight of these could make coming down for the flying start of each heat. Most are turbine powered these days, but the racing can be just as exciting. Unlike ocean racers with V-hulls, these are 3-pointers with widely spaced sponsons (attached, but widely separated outriggers). They throw out a spray, called a roostertail for their appearance, 30 feet high and over 100 feet long.

See them at: <http://www.thunderboats.org>

The 2000 season still has Detroit hosting the Gold Cup race, but that is their only unlimited race. For those in this area, the nearest race will be at Norfolk, VA.

Four other cities have one race each including San Diego, a traditional powerhouse, and Honolulu at their Pearl Harbor site.

If Indiana has two and Seattle has three, why can't Columbia, MD host one on Lake Kittamaquandi?

Fan 2: Given the speed and turning radius of a U-boat, Clyde's would be inside the course. Which would be bad for the boats since Clyde's is land-locked.

I think about the closest venue would be Baltimore's outer harbor. Though just imagine what you could do to traffic if you had a couple of these racing down the Potomac at rush hour.

Fan 1: Well, they go by the Roostertail Restaurant (owned by the Schoenith brothers who ran GALE III through GALE VII for W. D. Gale Electric) so Clydes would be no problem.

Actually, you're right. Lake Kittamaquandi is smaller than the pit area adjacent to the Detroit Yacht Club. The course is a 4 mile triangle with plenty of runoff area. The slight taper from the Roostertail to the Belle Isle Bridge causes a dreaded set of rollers that wreak havoc with unlimited hydros. Rollers are about 1 to 2 feet high and about 50 to 150 feet crest-to-crest. Boats are coming off the tightest turn and accelerating from 130 feet per second trying to get to 200+ feet per second at the bridge. Highest speed is at the end of the back straight, about 270 feet per second. At this speed it could run the whole length of Lake Kittamaquandi in a few seconds.

Seattle has the fastest speeds, thanks to calm waters and a larger course. Boats appear to travel slower because they don't bounce as much and the roostertails stay the same shape as they go by.

Have you had a chance to see the current generation of unlimiteds race? They have closed cabs, pickle fork noses, cabover driver compartments, turbine engines, 3-piece high-wing

rears, high-tech composite skins, ...

Fan 2: When Atlas Van Lines sank the Coast Guard cutter on Lake Washington, it was going 180 mph. It "only" clipped it (after losing a skid fin) but neither hydroplanes nor cutters are designed for high-speed bumper cars.

>have you had a chance to see the current generation of unlimiteds race?

Yes and no. I saw some of the early turbine boats — they make the wrong noise, but you can't have everything — but I haven't seen, in person, a race since the field basically went all-turbine. I was watching a live TV broadcast when Bill Muncey was lost in Mexico, which pretty much forced the current design of hydroplanes.

Now that I think about it, I think Muncey was driving Miss Thriftway when he sank the Coastie cutter. I was reminded of this recently while looking at a Coast Guard Web site, showing the history of various cutters and what became of them:

- _____ (scrap)
- _____ (U-boat)
- _____ (sold to Switzerland)
- _____ (U-boat)
- _____ (hydroplane)

Fan 1: > ... it was going 180 mph. It "only" clipped it (after losing a skid fin) but neither hydroplanes nor cutters are designed for high-speed bumper cars.

No, but sometimes they are used on the Beltway by aggressive drivers.

Online...Maybel (reprise)

Then, tiring of the wide-ranging inquiry into human amusements, the multitude turned to a topic of recurring interest on the TCS: computers and how to wire them together. And how some people amuse themselves by gumming up such

endeavors.

Pi-ster 1: On trying to fetch email with Claris EMailer 2.0v3 just now (10:33 PM, Sunday, February 20, 2000), I only get an error message:

>Execution of Schedule "Connect Now" at Sun, Feb 20, 2000 10:30:21 PM

Using Internet Config settings.
Checking email account "joe.performa@mailroom.wap.org"

** Couldn't complete the last command because a network stream error occurred.

This usually means someone has taken the POP server offline for maintenance, at least on Saturdays. But this ain't Saturday. Is anything going on at the Pi...penguins in the TCS salon? Vandals on the Internet?

Or - oh horrible thought - is it at my end? <Sigh!>

Pi-ster 2: I don't think so; none of the Pi's Web servers can be (reliably) reached from the outside.

Pi-ster 1: Thank you. By now I've finished monkeying with my message here. Whadda you think might be wrong?

Pi-ster 2: Don't really know, but using Secret Diagnostic Information known only to a tight-knit cabal that, sadly, does NOT have access to Alan Greenspan's future prognostications, I can say the problem cleared up shortly after midnight. There was a massive, wide-spread attack on several thousand Internet sites over the weekend that greatly disrupted lots of ISPs (Internet Service Providers). This differed a bit from the attacks earlier in the month aimed at the Amazon.com and eBay.com sites, mostly because they were more broadly based, picking on smaller targets. The Pi may have been in the

crossfire; it doesn't look like we were a direct target, but the Internet works best when all parts are working. Many parts this last weekend weren't working at all.

If you know of someone who fancies himself an Internet vandal (and they are almost always "he" rather than "she"), recommend to your local law enforcement and judicial officials that they be involuntarily neutered. Internet vandals usually lack opportunities to pass on their DNA, but it never hurts to take precautions.

Pi-ster 3: Oops — yes, I spoke with the firewall during one of its "on-again" moments, took care of it, and forgot to get back with a message.

******(time warp here)*

Pi-ster 4: Hi. I can see that burying one's head in the sand really doesn't work, especially in the new Internet environment.

I believe that it is very likely that I have been part of the hacker attacks on Amazon.com, e-Bay, etc, last night.

I had logged on to wgms.com to get the music schedule. I got what I wanted and then tried to go somewhere else. Nothing. I tried to go somewhere else. Nothing. I tried to go to Apple. Nothing. Then, I noticed that my cable modem was on high frenzy. The indicator lights for transmit and receive were flashing at a constant very high rate. Something was going on, really going on, but I wasn't seeing any of it.

Remembering the bit about other people being able to use your computer as part of a network to do what big supercomputers can do, I decided that someone was using me and signed off and cut the connection.

Then, this morning I read in the pa-

per about the hacker attacks on Amazon.com, etc.

Well, I didn't pay a lot of attention to the "SonicWall" discussions because it seemed out of my price range and probably not critical. That was then. I guess we all need to know as much as we can about everything, especially in this new net environment.

Tell me what you think about all this. Did my computer really help the hackers??? Will SonicWall keep them out of my machine? And still let me get out to the net? If so, what SonicWall equipment is out there? What "SonicWall" software is out there? What are the prices?

Of course I don't expect to learn all about this in one TCS message, but at least I need to start getting the sand out of my ears.

P-4, (again): I had gotten behind reading the TCS so my earlier message this morning was send before I read the past week's messages. Things are certainly getting hot and complicated. Well, maybe they always were, but I wasn't noticing.

Frankly, it seems a bit too complicated for "the rest of us". But I guess I will just have to keep paying attention and slowly catch up with it.

Pi-ster 3: Every couple weeks somebody's ears pop up for the first time and they ask "tell me about firewalls". Is there a particular issue of the Journal whose Best of the TCS I can point them to for the next while? This is always going to be a topic for which people glaze over until the time comes that they have to deal with it themselves. But it's also a topic that's too rich and diverse to start from scratch for each individual. /;+/

Pi-ster 2: >Did my computer really help the hackers???

No. It is more likely that different hackers were busy shutting you down.

>If so, what SonicWall equipment is out there?

This is covered in the Journal article, and also re-posted on the Web site:

<http://www.wap.org/journal/sonicwall/sonicwall.html>

Pi-ster 3: The following is an excerpt from an interview with Dave Dittrich, an expert on distributed denial-of-service attacks (DDoS) from the University of Washington.

These DDoS attacks have recently shut down high-visibility e-Commerce sites such as Amazon.com, e*trade and others. In a nutshell, they work as part of a large distributed framework of remote-controlled attack robots.

What on Earth does that mean? Consider SETI@Home, the distributed processing application that many of you use to lend spare computing time to the search for E.T. (Lest I be misquoted, there's nothing wrong with SETI@Home and it's not being used for attacks.) What if you had a program installed that uses similar technology to lend spare bandwidth and IP addresses? And that you weren't aware that this software was installed — it was put in by an intruder.

So your machine, having been infiltrated by expert hackers (and lest I be misquoted again, this isn't currently a Mac OS thing but usually an unmonitored and preferably archaic Unix or Linux system thing), can now accept instructions to launch the typical kinds of denial-of-service attacks. Bandwidth flooding, synchronization

overflows, stuff you've read about before. Only the difference here is that the attacker is using -your- resources to do it, and by the time the victim and authorities can trace back to you, the attacker is long gone. Hidden behind many tiers of this, sending off cascading assaults to wherever from systems all over the globe.

Anyway, that's essentially what the current DDoS attacks are. Experts had been noticing systems being infiltrated and these command posts being installed for months (and removing them and patching up the security holes that allowed them to be installed on a case-by-case basis), and I personally thought they were going to be sprung into action on January 1 to take advantage of Y2K hysteria and cause real damage. Turns out I was off by a month.

Slashdot, the forum, is an increasingly influential online news and discussion group for the technically inclined and the people who love them. So not all of the interview is going to make sense (Dittrich's talks to the general press are more approachable for the merely curious), but it has its moments even then. It's arranged as responses to questions posted and selected by other readers.

<<http://slashdot.org/interviews/00/02/16/1836215.shtml>>

This particular question, I thought, struck a bell with what comes up here on the TCS every couple of weeks as each person in sequence temporarily unglazes his eyes and wants to understand what appears to be a brand new topic.

More to the point, it occurred to me that **** would get a kick out of goading me with the term "Joe DSL". :)

"Firewalls for Dummies?"
by hiendohar

"With the increasing popularity of broadband, always-on connections and the increasing distribution of networking software, it seems like "Joe DSL" faces a greater risk of having his system compromised than before. How much can the average user be expected to learn about securing their system? Do you foresee developments, either in software, education or in other services that might help private computer users or small time administrators protect themselves better?

"Dave:

"I expect the average Joe DSL to probably learn the hard way, just like he learned not to step off the curb in rush hour against the traffic light, and to take everything valuable out of his car when he parks it on a dark city street: by suffering an incident, and the resulting cleanup cost.

"This is an education problem of *huge* proportion, and just like the filtering question, there isn't much motivation for ISPs to hand-hold their growing customer base, and their marketing department — just take a look at their ads — tells you how fast they are, but doesn't say a word about the new risks you will face (some will mail you a warning a few months later, which may be a bit too late.)

"Not only that, but most broadband ISPs have user bases far larger than they have staffing to support, so even trying to contact them, find your way through the tier1/tier2/first line manager/Nth line manager hierarchy, and actually identify the owner of a compromised cable modem or DSL served system can take days. These customer's systems make excellent bases for scanning/attacking other sites, running eggdrop bots, or "bouncing" connections to make it harder to trace attack activity, and the intruders know this.

"As for education, I am not quite sure what can be done there. Mandatory "driver's license" style tests before getting a DSL account? Forget it. "Tickets" handed out by the Net Police for allow-

ing your system to be compromised and used to attack other sites? Not likely, and I don't think anyone wants that. Law suits by victims of attacks against the owners of compromised systems? That is already starting to happen, but do we really want people to learn as a result of law suits, to throw lawyers at the problem, diverting badly needed system admin funds to pay \$200 an hour to the suits?

"There probably will need to be some monetary incentive to securing systems (because people pay attention to money.) The federal government is passing laws about privacy of personal, medical, and credit information (and these can't be private if the systems that house them are not secure), and insurance companies will likely start charging higher rates for systems that are not managed well and become involved in security incidents with high dollar damages (but PLEASE, first raise the rates on anyone who drives a car while talking on a cell phone!)

"Some ISPs now offer security services, and will provide "firewall" services for their customers, but this comes at a high price. Most users want \$19.95 a month service, which is basically just buying a raw, wide open pipe.

"Personal firewall" software is also becoming popular, but I've wasted many an hour explaining to someone reporting an "attack" that what his program was reporting was either a false positive, or was mis-categorized, and not at all what they thought. Feature filled packet filtering programs allow users to shoot themselves in the foot and break TCP/IP applications, while overly simplified programs leave gaping holes or users turn off too much and only think they have security. A lot more work and education is needed in this area."

Pi-ster 1: >AlphaGeek> More to the point, it occurred to me that **** would get a kick out of goading me with the term "Joe DSL". :)

Ahhhhh! You've met my brother "DSL"! Funny you should recognize how we write names here in beautiful homeland of Tierra Del Fuego! Always last name first...you know, like Chinese. We honor the family before the individual member. And you always thought my name was "Joe"! Hah! Is "Performa". Family is "Joe"! Lots of other brothers, too: is "Classic", Elcee I, II, III...., Bayzhee, Geethree, Geeewhiz, ...many, many family members in "Joe" family! All needed to keep the fires going to roast the oysters and send optical communications to elsewhere. (No needing funny little fibers in little pipes down here...*here* the air is transparent!)

So pleased you remembering me. Best to all others at delicious Pi!

Joe Performa

Pi-ster 5: Actually, is my EIMS (mail server) being used as a relay. I have relay protection turned on from anyone trying to use it to send e-mail from outside my office. But I received an e-mail on my postmaster account about an undeliverable mail for a flashmail.com address due to a bad account name. The original e-mail was sent by NFL4gift@mail.flashmail.com to coggy@wavephil.com, was not deliverable, then postmaster account sent a message to NFL4gift, which was bounced back (possibly account was closed by mail.flashmail.com for spamming). So I have a copy of an e-mail what was sent from outside my office to someone outside my office. The heading of the original message is:

Received: from mail.flashmail.com (38.31.209.175) by washingtonian.com with

SMTP (Eudora Internet Mail Server 2.2.2); Sat, 19 Feb 2000 20:24:11 -0400 From:

<NFL4gift@mail.flashmail.com>

Subject: The Ultimate NFL Gift!!

Date: Sat, 19 Feb 2000 20:25:36

Message-Id: <855.606449.865573@mail.flashmail.com>

Reply-To: NFL5gift@mail.flashmail.com

Mime-Version: 1.0

Content-Type: text/html; charset="us-ascii" To: undisclosed-recipients;

I'm looking at my Relay restringtion and I have selected "Only relay if for local domains or the following domains OR from a valid IP. I then enter my home computer's IP address. I assumed that this was a list of valid IPs, but now I think that I might have it wrong and it might be a list of valid domains to send e-mail.

The other option I see is to restrict Mail relay from a set of addresses and restrict SMTP from a set of addresses. What is the difference between restricting Mail Relay and SMTP?

Pi-ster 3: I'm not versed on recent EIMS, but say somebody's causing you grief connecting to your server via SMTP and doing something naughty, say making up hundreds of account names and trying to send to them one by one to try to harvest verified e-mail addresses. Or just opening dozens of simultaneous SMTP connections and exhausting your tables to deny service to anyone else trying to connect. Whatever. Maybe EIMS provides you an option to close off that line of discussion with that machine. Ordinarily you'd do that at a firewall instead, but there's no reason for EIMS not to as well — if that's what it is.

Pi-ster 5: On working on my own e-

mail server I have finally learned the difference between SMTP and Relay access. A SMTP server is used to send e-mail and might be the same or different as the server that you use to receive e-mail. "Relay" refers to sending mail out-side of the mail server's domain. For example, if I send e-mail to an address that is a non-TCS address via the TCS mail server, that is a relay.

The most secure way to setup an e-mail server is to not allow anyone to send e-mail outside of the server's domain UNLESS the sender's IP address is inside of the mail server's domain. For example, from work I can send e-mail to a TCS e-mail address, but if I try to send e-mail outside of the TCS I am denied with a "we do not relay message." But I can send to a TCS address.

I am able to setup my e-mail server to allow for this situation if the user has a e-mail program that supports SMTP Authentication (Eudora 4.2 and 4.3 support this feature) feature. I assume that Eudora Light does not. Am I correct in assuming that the TCS does not allow for relaying mail unless you have an Explorer account and are using it? I am not sure of my claim because I don't think I had a problem with MS Outlook Express 5, but I can't check this since removing MSOE from my home computer.

Anyway, up until today I never understood the "relay" settings on my e-mail server.

Source: <<http://www.eudora.com/techsupport/kb/1592hq.html>>

Pi-ster 6: > Am I correct in assuming that the TCS does not allow for relaying mail unless you have an Explorer account and are using it?

Uh. If you are using an Explorer account, then you are inside, and not relaying.

Pi-ster 3: >A SMTP server is used to send e-mail and might be the same or different as the server that you use to receive e-mail. "Relay" refers to sending mail out-side

Let me give it a shot. SMTP (simple mail transport protocol) is a procedure through which a program on one machine delivers a message to another program on another machine.

An SMTP server is a program which listens for that to happen and receives the message from the sending program. That's all it is. So what happens next?

An MTA (message transport agent) examines a message and determines where to send it to get at its destination. In the old days, this might take several steps and several intervening MTA's fed by different protocols. These days, an MTA will almost always contain an SMTP server component to receive messages.

So assuming that your MTA acts as an SMTP server and as an SMTP client, let's look at what happens when you send mail from your desk. Your e-mail program talks to your selected SMTP server via the SMTP protocol and delivers the message. Your SMTP server (more accurately your MTA) examines the message, queries the domain name system, and takes a pretty good guess at whose machine is responsible for delivering the message to its intended recipient. It then contacts somebody else's SMTP server (thus using the SMTP protocol as a client) and hands off the message to that machine. In all likelihood, that other machine might just be an external representative of, say, navy.mil and might perform other lookups to determine some other internal departmental server and keep handing the message along until it eventually winds up at an MTA which claims responsibility for storing the

Click City

Phrogs & Physics

Below is just a tempting sampler of URLs culled from the TCS in recent weeks. For hot links to these sites and many, many more, head for the mother lode:

[<http://www.wap.org/journal/clickcity1.html>](http://www.wap.org/journal/clickcity1.html)

Disclaimer! *The Web is a dynamic place, which means sites are here today etc. All of the sites listed here and on the Click City web page were live as of shortly before press time. Whether they will be in good health when you visit, we haven't a clue.*

Frogland!

All About Frogs: Lots of Frog and Toad Information (including Pet Care FAQs), Stupid Frog Jokes, Frog Art and Photo Gallery, Frog Stories, Frog Coloring Book, and even Free Froggy Computer Toys and Games!

[<http://allaboutfrogs.org/>](http://allaboutfrogs.org/)

Traffic Waves: Physics for Bored Commuters

[<http://www.eskimo.com/~billb/amateur/traffic/traffic1.html>](http://www.eskimo.com/~billb/amateur/traffic/traffic1.html)

Ever find yourself stuck behind lines of traffic on the interstate, but when you get to the end of the slowdown there's nothing there? Now you can find out how traffic phenomena like this occur at Traffic Waves...

Clip Art Review (nice starting point for getting clip art of all kinds)

[<http://www.webplaces.com/html/clipart.htm>](http://www.webplaces.com/html/clipart.htm)

Amusement Park Physics

How do physics laws affect amusement park ride design? Here is a web page that addresses those issues. Find out about amusement park physics by designing your own roller coaster and see if it passes a safety inspection. You can also experiment with bumper car collisions.

[<http://www.learner.org/exhibits/parkphysics/>](http://www.learner.org/exhibits/parkphysics/)

U.S. Surname Distribution

Enter a surname (last name) into the form [at this website] and you'll get a map of the United States showing the distribution of people with this surname within the 50 United States.

[<http://www.hamrick.com/names/>](http://www.hamrick.com/names/)

Charity Frog

Help Charity Frogs donate to the Red Cross. Charity Frogs is giving away \$1,000,000 to the American Red Cross-once a day, when you RIBBIT (i.e., click the link on the web page).

[<http://www.charityfrogs.org/>](http://www.charityfrogs.org/)

NEWS of the WEIRD

Find out how the other half lives by taking a look at the bizarre-but-true weird news from around the world, edited by Chuck Shepherd and nationally-syndicated by Universal Press Syndicate.

[<http://www.newsoftheweird.com/>](http://www.newsoftheweird.com/)

recipient's mail for retrieval.

Note that I'm throwing around the term "SMTP client" and that it sounds odd. This is because SMTP isn't a client-server protocol. (So to me, "SMTP server" is a little odd.) I'm trying to clarify the process by making the distinction. There's an SMTP sender, and an SMTP receiver, for every SMTP transaction. And a mail server (or MTA) will act as either or both in order to route messages.

In the grand old days, this was a giant bucket brigade. The message volume was low, most systems weren't connected to the Internet 24/7, and anybody's mail server would accept a message for anybody — just to help get that message the next step on its journey. These days, there are crooks out there taking unfair advantage of this collaboration and seizing it for personal gain through spam. Fortunately, most mail servers are now on the Internet 24/7, and there aren't as many steps that a message needs to be taken. Often a message only stops at two or even one mail server before coming to rest in a recipient's mailbox.

And the rest of spam prevention is made up in the logic of the MTA. For the first time, MTA's are concerned about the -origin- of the message instead of solely worrying about its destination. This isn't in the protocol — it's not very well addressed in the original standards at all. But there's some amount of flexibility in what an MTA can do with a message once received.

For example, when talking to unknown Internet clients, most MTA's will only accept messages destined to local mailboxes. They won't bucket-brigade, or "relay", a message intended for another outside source. A message delivered from unknown.net to wap.org, and addressed to aol.com, is considered an error. This is new behavior, and this is relay restriction:

However, most e-mail clients are configured to send all their outgoing mail to just one SMTP server. Let the post office deliver it — don't try to contact every recipient directly while still online. So the wap.org mail server needs to -sometimes- accept mail destined to outside addresses, only if it feels it can trust the origin of the message. And by convention, one easy way for it to trust the sender is for the sender to be contacting it from inside the range of IP addresses assigned to wap.org.

Which works great, except that

"Past BTCS columns have pointed out that the assorted varieties of computer geeks assembled electronically on the Pi's bulletin board system have a similarly assorted variety of interests."

wap.org people are sophisticated world travelers. They hobnob with the jet setters, and they switch ISP's with a flip of the Control Strip. They often need mail messages delivered while they sit somewhere other than inside that internal range of IP addresses. So the mail server has to devise a different way to recognize and trust them.

And one way to do that is to not use SMTP at all, but to use POP. POP starts out by asking for a username and password, and then once you've begun a POP session you're known and trusted. So there's an extension to POP that allows sending mail, completely separate from SMTP, and that's called XTND XMIT. The TCS's mail server supports XTND XMIT. Now that you mention it I think it

might also support the SMTP extension that does the reverse, authorizing an SMTP session, but I'm not sure; that's not as widely-supported by e-mail clients.

The really cool stunt that the TCS's mail server does is a collaboration between POP and SMTP — if your username and password clear through POP, then you're in. And if, from the same IP address, you then begin an SMTP session within a certain number of minutes, you're given the benefit of the doubt. This works with all e-mail client software. You just have to Get before Send.

<<http://www.stalker.com/SIMS/>>

You'll find that Stalker's explanations of this stuff are pretty good.

Pi-ster 3: > Uh. If you are using an Explorer account, then you are inside, and not relaying.

Good question, good answer, different vocabularies, misleading or hopefully just moot result. This is why I so often respond to simple questions with annoyingly lengthy discussions no one can bear to read. :)

If I understand you both correctly, "using" a TCS Explorer account involves dialing into the TCS Explorer modem pool. Dialing into the TCS Explorer modem pool has a natural side-effect of assigning you an IP address the mail server knows and loves.

Any mail server (MTA) will "relay" a message. Otherwise you couldn't send mail to it for delivery to aol.com. It has to relay the message for you.

If you have a TCS Explorer account and you're talking to our mail server, you're probably "using" that account — regardless of your location. It's just a matter of conveying this idea to the mail server through authorization. ■

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	Ile 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 II			
Bernie Benson	301-951-5294	Accounting	Apple SSC (Super Serial Card)
Neil Laubenthal	703-691-1360	Apple II GS	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	202-382-1783	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 II e			
Morgan Jopling	410-721-7874	Upgrade	
Apple II 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 II GS			
Ken Carter	301-834-6516	General	
Apple III			
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 Jemigan	540-822-5137	Integ. Packages	3 Easy Pieces
Paul Campbell	313-255-6497	Repairs	
Dave Jemigan	540-822-5137		3.5" Super Drive
Dave Jemigan	540-822-5137		SCSI Drives
Steve Truax	304-263-5749		Stemspeller
Dave Jemigan	540-822-5137		Stemspeller (before 9 PM)
Carey McGleish	313-332-8836		Word Juggler (evenings)

Cross Platform

Name	Telephone	Heading	Subjects
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 DeKrone	410-626-7716	General	
Curt Harpold	301-762-0887	Programming	JAVA
Craig Contardi	410-674-2752	World Wide Web	Netscape Navigator
Seth Mize	410-766-1154	World Wide Web	Sailor
Jaquie 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 Schosser	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 Jemigan	540-822-5137	Foreign Languages	FlashWorks
Dave Jemigan	540-822-5137	Foreign Languages	Greek Tutor
Dave Jemigan	540-822-5137	Foreign Languages	Hebrew Tutor
Dave Jemigan	540-822-5137	General	

July 2000

Washington Apple Pi Office
 12022 Parklawn Drive, Rockville, MD, 20852.
 M-W-F 10 a.m.—6 p.m.; Tue 7 p.m-9 p.m.; Sat 9 a.m.-2:30 p.m.
 Web address: www.wap.org
 e-mail address: info@tcs.wap.org

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
July 30	July 31 Camp					1 <i>Easier Than Easy Say It With Slickness</i>
2	3 <i>Appleworks - Intro AppleWorks 6</i>	(NO CLINIC) 4	5 <i>AppleWorks-Newsletters AppleWorks-Workshop Photoshop 1</i>	6 <i>Internet Intro Internet Downloading Intermed Mac-P1 Columbia Slice</i>	7 <i>AppleWorks-Classroom Graphics-Classroom</i>	8 <i>Web Wandering Global Refrig. Door Graphics SIG Frederick Slice</i>
9	10 <i>i Visit i Mac-P1 Scanner Intro Intermed Mac-P1</i>	11 <i>Clinic Intro to Mac-P1 Intermed Mac-P1 Photoshop 2</i>	12 <i>i Visit i Mac-P2 Digital Camera Intro WAP BoD</i>	13 <i>Intermed Mac-P2 Intro to Mac-P2</i>	14 <i>Web Page Workshop</i>	15 <i>Annapolis Slice Linux SIG</i>
16	17 <i>Advanced Mac-P1 PhotoDeluxe Intro Intro to Mac-P2</i>	(NO CLINIC) 18 <i>Netscape Connctr Outlook Express</i>	19 <i>Advanced Mac-P2 MovieWorks Intro Excel SIG</i>	20 <i>MacWorld Trip Intermed Mac-P2</i>	21	22 <small>Nova ConnCol</small> WAP General Meeting
23	Camp 24	Clinic 25 Camp <i>Illustrator - Intro</i>	Camp 26 <i>Quark-Intro</i>	Camp 27	Camp 28	29 <i>Lights, Camera, Action Multimedia Madness</i>

August 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
		Clinic 1 Camp	Camp 2 <i>Photoshop 1</i>	Camp 3	Camp 4	5 <i>Web Wandering Global Refrig. Door</i>
6	7 <i>BeginnerFinalCutPro</i>	8 <i>Clinic Netscape Intro to Mac-P1 Photoshop 2</i>	9 WAP BoD	10 <i>Intro to Mac-P2 PhotoDeluxe Intro</i>	11 <i>Filemaker Pro Intro Appleworks - Intro</i>	12 <i>Easier Than Easy Say It With Slickness Graphics SIG Frederick Slice</i>
13	14 <i>Web Page Workshop</i>	15 <i>Clinic Intro to Mac-P1 Intermed Mac-P1 Geneology SIG</i>	16 <i>Digital Camera Thru Scanners Excel SIG</i>	17 <i>Intro to Mac-P2 Intermed Mac-P2</i>	18 <i>PhotoDeluxe Intro Graphics-Classroom</i>	19 <i>Linux SIG Annapolis Slice</i>
20	21 <i>Adobe Go-Live BeginnerFinalCutPro</i>	22 <i>Clinic Intermed Mac-P1 Internet</i>	23	24 <i>Intermed Mac-P2 Downloading</i>	25 <i>Surfing w/Students Networking</i>	26 <small>Nova ConnCol</small> WAP General Meeting
27	28 <i>QuickTime Pro BeginnerFinalCutPro</i>	29 <i>Clinic Advanced Mac-P1 i Visit i Mac-P1 In Design</i>	30 <i>AppleWorks-Newsletters AppleWorks-Classroom Quark-Intro</i>	31 <i>Advanced Mac-P2 i Visit i Mac-P2</i>		

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 Bernie Benson at

Benson.family@wap.org for the July 15th meeting and Will Byrd or Gregory Kelley for the August 19 meeting (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— June & December

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, FAXciliate, GV
Henry Miller-Jones	703-478-3721	General	Fax Software
Joan Jernigan	540-822-5137	Hypermedia	HyperStudio
Jerry Iler	410-987-5432	Ilsi	General
Bill Geiger	703-237-3614	Integ. Packages	ClarisWorks
Sandy Kowalczyk	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 Kowalczyk	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 Gokiberg	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

Name	Telephone	Heading	Subjects
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
Jaquie Davison	703-644-7354	Virtual Reality	Alien Skin Texture Shop
Jaquie Davison	703-644-7354	Virtual Reality	Bryce 2
Jaquie Davison	703-644-7354	Virtual Reality	Specular Logomotion
Jaquie Davison	703-644-7354	Virtual Reality	Virtus - 3-D
Jaquie 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

- 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> Zselect File Areas

File Area Menu

- <A> Alphabetical List
- 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> Zselect Boards of Interest

Bulletin Board Menu

- <A> Alter/Edit an Existing Message
- 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

- 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

****NEW****

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. Topics 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: Introduction and Intermediate classes for the Macintosh or a good knowledge of the Mac OS and its interface.

Number of Sessions: One.

Price: Standard Members: \$75.00, Associate Members: \$125.00, Non-Members: \$125.00

Instructor: Barrett Thomson
8/7/00 7 pm - 10 pm

8/21/00 7 pm - 10 pm
8/28/00 7 pm - 10 pm

General Macintosh Classes

Introduction to Macintosh

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

Prerequisite: None.

Number of Sessions: Two.

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

Instructor: Pat Fauquet, Jim Ritz and Cordell Ratner

Evening Sets

7/10/00 and 7/17/00 6 pm - 9 pm each night

Day Sets

7/11/00 and 7/13/00 1 pm - 4 pm each day

8/8/00 and 8/10/00 1 pm - 4 pm each day

8/15/00 and 8/17/00 9:30 am - 12:30 pm each day

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

Intermediate Macintosh

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

Prerequisite: Introduction to Macintosh

Number of Sessions: Two

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

Instructor: Pat Fauquet, Jim Ritz and Cordell Ratner



Evening Sets

7/6/00 and 7/20/00 7 pm - 10 pm each night

Day Sets

7/11/00 and 7/13/00 9:30 am - 12:30 pm each day

8/15/00 and 8/17/00 1 pm - 4 pm each day

8/22/00 and 8/24/00 9:30 am - 12:30 pm

9/12/00 and 9/14/00 9:30 am - 12:30 pm each day

Advanced Macintosh

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

Prerequisite: Introduction to Macintosh and Intermediate Macintosh

Number of Sessions: Two

Price: Standard Members: \$70.00,

Associate Members: \$100.00, Non-Members: \$100.00

Instructor: Pat Fauquet and Jim Ritz

Day Sets

7/17/00 and 7/19/00 9:30 am - 12:30 pm each day

8/29/00 and 8/31/00 9:30 am - 12:30 pm each day

iVisit iMac

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

This two part, six hour class will introduce the various pieces of software included with the iMac. Students will learn how use the assistants and templates included with AppleWorks to perform tasks such as writing a letter; making a computer address book, flyer or certificate, and printing an envelope. They will learn how to send and receive a fax from their iMac and begin using Quicken to balance their checkbook. They will learn how to make a favorites list in Internet Explorer, use the address book and send a file to someone in Outlook Express. They will also learn how to edit a photo with Kai's Photo Soap, install and look up items in the World Book Encyclopedia and use the Williams-Sonoma cookbook. Students will also learn how to use Adobe PageMill 3 to make a personalized start page on their computer. Strategies to win with Nanosaur and protect children with the EdView Internet Safety kit will also be shown. **New:** This class now includes the new Kid Pix Deluxe, a children's graphics and animation program.

Prerequisite: Introduction to Macintosh

Number of Sessions: Two

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

Instructor: Pat Fauquet and Jim Ritz
7/10/00 and 7/12/00 9:30 am - 12:30 pm each day

8/29/00 and 8/31/00 1 pm - 4 pm each day

9/11/00 and 9/13/00 1 pm - 4 pm each day

Internet & Telecommunications

Introduction to the Internet

This three hour class, intended for users of all Internet browsers, will introduce you to the World Wide Web. Learn what the various buttons on the browser screen do. Learn to customize the browser window to meet your visual needs. Learn how an Internet address works and how to deal with error messages that appear. You will learn how to use Sherlock, search engines, directories and metasearch sites to find the information you seek. Learn how to capture pictures and text from the internet and how it print web pages. This class is appropriate for all users of the Internet including American Online customers. It is suggested that all participants enroll in one of the e-mail courses to complete their introduction to the Internet.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.

Number of Sessions: One

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

Instructor: Pat Fauquet, Jim Ritz

7/6/00 1 pm - 4 pm

8/22/00 1 pm - 4 pm

9/5/00 1 pm - 4 pm

E-mail with Netscape Communicator

This class will deal specifically the e-mail application with Netscape Communicator. Students will learn how to send, receive, reply to and forward email. They will learn how to save mail into folders, how to use and manage the address books and how to send mail to groups of people. They will learn how to attach files to e-mail messages and how to deal with the attached files that they receive. Students will also learn where their email and address books are stored



and how to back them up.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One

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

Instructor: Pat Fauquet, Jim Ritz
7/18/00 9:30 am - 12:30 pm
8/8/00 9:30 am - 12:30 pm
9/7/00 1 pm - 4 pm

E-mail with Microsoft Outlook Express

This class will deal specifically the e-mail application Microsoft Outlook Express. Students will learn how to send, receive, reply to and forward email. They will learn how to save mail into folders, how to use and manage the address books and how to send mail to groups of people. They will learn how to attach files to e-mail messages and how to deal with the attached files that they receive. Students will also learn where their email and address books are stored and how to back them up.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One

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

Instructor: Pat Fauquet, Jim Ritz
7/18/00 1 pm - 4 pm

E-mail with America Online

This class will deal specifically the e-mail application with America Online. Students will learn how to send, receive, reply to and forward email. They will learn how to save mail into folders, how to use and manage the address books and how to send mail to groups of people. They will learn how to attach files to e-mail messages and how to deal with the attached files that they receive. Students will also learn where their email and address books are stored

and how to back them up.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One

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

Instructor: Pat Fauquet, Jim Ritz
Call Office for Dates

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

Learn how to find files and software on the Internet. Learn how download them, how to install and use them. Learn about Macintosh viruses, and how to combat them. This one Session class is intended for students who have completed Intro to the Internet and an e-mail class and who want to learn more about the various software resources that are available on the Internet. These will include software, fonts, Sherlock and contextual menu plug-ins, Applescripts, and system resources.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One

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

Instructor: Pat Fauquet, Jim Ritz
7/6/00 9:30 am - 12:30 pm
8/24/00 1 pm - 4 pm
9/12/00 1 pm - 4 pm

Microsoft Office 98

Microsoft Word for Office 98

This class will introduce the student to the fundamentals of the Microsoft Word for Office 98 word processing software package. The course is designed for those with very limited or no previous knowledge of Word. Topics that will be covered include: reviewing the screen elements of a basic new Word document (the standard and formatting toolbars and

the menu bar); setting default options such as spell checking and document editing choices, default font selection that are applied to a basic document; creating, editing, saving and deleting a simple Word document; using the on line help function; simple formatting using tabs and setting margins; creating a simple table; and reviewing predefined templates such as the letter template that are included in Word.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.

Number of Sessions: One

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

Instructor: Cordell Ratner
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 work-



book, and creating headers and footers printing of selected cells and an entire workbook. Finally, we will create basic charts using pie and bar charts as examples, and will wrap up by discussing worksheet style techniques along with reviewing the set of workbook options in the tools menu.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, **Number of Sessions:** One.

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

Instructor: Cordell Ratner
Call Office for Dates

AppleWorks (ClarisWorks)

Introduction to AppleWorks (a.k.a. ClarisWorks)

This class will introduce the student to the integrated software package, AppleWorks. The course will begin with an introduction to the fundamentals of the AppleWorks environment: the window layout, the help menu, and the universal commands. Each of the six modules (Text, Draw, Paint, Spreadsheet, Database, and Communications) will be treated separately but the emphasis will be on text and draw documents. The course will conclude with an examination of some basic integrated applications.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One

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

Instructor: Pat Fauquet and Jim Ritz
7/3/00 9:30 am - 12:30 pm
8/11/00 1 pm - 4 pm
9/8/00 9:30 am - 12:30 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: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. In addition Introduction to AppleWorks class or a good working knowledge of another word processing application is suggested before attending this class.

Number of Sessions: One

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

Instructor: Pat Fauquet

Attendance in an Introduction to

AppleWorks class or a good working knowledge of another word processing application is suggested before attending this class.

7/5/00 9:30 am - 12:30 pm

8/30/00 9:30 am - 12:30 pm

AppleWorks (a.k.a. ClarisWorks) Advanced

In this class we will take AppleWorks to a new level! Learn how to make easy outlines, lists, and 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 in-

Some Specifics

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



cluded will be using the capabilities of ClarisWorks 4.0 and AppleWorks 5.0. Students will receive templates, stationary files and handouts to take home. If you have any feature of the program that you would like covered in particular, please mention it when you sign up.

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

Number of Sessions: One

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

Instructor: Pat Fauquet
Call Office for Dates

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

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

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

Number of Sessions: One

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

Instructor: Pat Fauquet
7/5/00 1 pm - 4 pm

Moving up to AppleWorks 6

Come learn about the changes and new features that are found in AppleWorks 6. Learn how to use the new buttons, menus and tools to produce word processed documents, databases, spreadsheets, graphics and slideshows. Learn how to access the templates and clip art installed with the program and the array of addi-

tional items that will be available on the internet. This class is intended for those who have completed Introduction to AppleWorks or who have a good understanding of the previous versions.

Prerequisite: Introduction to AppleWorks or previous experience with AppleWorks

Number of Sessions: One

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

Instructor: Pat Fauquet
7/3/00 1 pm - 4 pm

*** New for Teachers and Parents - Successfully Surfing the Web with Students**

The Web is huge and finding great sites for children can be daunting. Come sharpen your surfing skills in this three hour class. Learn about great web resources for teachers, parents and students. Learn how to find educational from foreign countries and how to view them in English. Learn how to translate messages into languages such as French, Spanish, Russian, and German. Also learn how to put links to these sites into an HTML page which your students can use in classroom and home web activities.

Instructor: Pat Fauquet
Successfully Surfing the Web with Students

8/25/00 9:30 am - 12:30 pm

AppleWorks in the Classroom

Teachers, come refresh your AppleWorks techniques, templates and ideas in this three hour class. Participants will review the capabilities of the various components of the program and learn new strategies to incorporate word processing, databases, spreadsheets and drawing and painting across the curriculum and in classroom management. The instructor will share lesson plans, techniques, handouts, templates, clip art, internet resources and projects. Please bring a

Zip Disk and Zip drive to take home these materials. This class is not an introduction to AppleWorks. Students should have a good working knowledge of the program. Attendance in an Introduction to AppleWorks class or a good working knowledge of another word processing application is suggested before attending this class. Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

Instructor: Pat Fauquet
AppleWorks in the Classroom
7/7/00 9:30 am - 12:30 pm
8/30/00 1 pm - 4 pm

Graphics in the Classroom

Calling all non-artists who need to use graphics for newsletters, worksheets, class web pages, presentations and classroom lessons! Class participants will review the Draw and Paint modules of AppleWorks to discover the many easy things that can be done with this program. They will learn how to construct a graphic using the draw module, edit clip art to change colors and parts to re-purpose it for web, newsletter and worksheet use. They will learn how to use the AppleWorks tools to make „layered% pictures and translucent objects. They will learn how to make and edit screen shots to make how-to instruction sheets. Basic photo editing and touch-ups will also be covered. Techniques for making web and clip art sets will be shown. No artistic talent is needed to benefit from this hands-on how to filled workshop. Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

Instructor: Pat Fauquet
Graphics in the Classroom
7/7/00 1 pm - 4 pm
8/18/00 1 pm - 4 pm



Networking

Networking for the Home and Small Office

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

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

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

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

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

Number of Sessions: One

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

Instructor: Pat Fauquet

8/25/00 1 pm - 4 pm

Web Page Development

Adobe GoLive

Learn to use Adobe GoLive to create web pages and sites. This software package allows pixel-level control of graphics and ease in adding JavaScript actions. This class is intended for those who have completed

the "Web Page Workshop" and "Preparing Graphics for the Web" or their equivalents. It is an introductory course and is not intended for advanced users of the program.

Prerequisite: Web Page Workshop and Preparing Graphics for the Web or a good knowledge of web site development

Number of Sessions: Two.

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

Instructor: Pat Fauquet

8/21/00 9:30 am - 4 pm

Preparing Graphics for the Web

In this all-day workshop students will learn how to make and prepare backgrounds, headlines, clip art, buttons, rules, dividers and animations for web pages. They will also learn how to construct graphic sets. These will be made using AppleWorks, GraphicConverter and Adobe PhotoDeluxe. Students will learn about the GIF, JPEG and PNG formats and when to use them. If you want to use these projects in an actual web page, please sign up for Web Page Workshop in addition to this class. If you have an external Zip drive, please bring it to class. If you have an internal Zip drive at home, please bring an empty Zip disk to class. This is an all day workshop. Please bring a sack lunch or money to order lunch in.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.

Number of Sessions: Two.

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

Instructor: Pat Fauquet

Call Office for Dates

Web Page Workshop

Come design a web page! In this class students will be introduced to HTML and how it works. They will learn how to use Claris Home Page or Adobe PageMill or GoLive

CyberStudio Personal Edition to make a series of linking web pages using pre-made backgrounds, graphics, animations and sounds. They will learn how to plan and organize their files for easy web page maintenance. They will learn about the principles of good web page design. Their pages will be ready to upload to the web. If you have an external Zip drive, please bring it and an empty Zip disk to class. If you have an internal Zip drive at home, please bring an empty Zip disk to class. This is an all day workshop. Please bring a sack lunch or money to order lunch in. It is suggested that a good follow-on class would be Graphics and Sound for My Web Page.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.

Number of Sessions: Two.

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

Instructor: Pat Fauquet

7/14/00 9:30 am - 4 pm

8/14/00 9:30 am - 4 pm

9/15/00 9:30 am - 4 pm

Consumer Graphics and Multimedia

Introduction to Scanners

This class will cover basic scanner operation. Students will learn how to scan photos and text. They will learn how to adjust the scanner settings to produce better scan and how to prepare a photo file to attach it to an e-mail message. They will learn how to use scanned photos in text documents and how to scan directly into applications such as Adobe PhotoDeluxe and Kai's PhotoSoap. They will learn how to use OCR software to turn scanned text into a text file.

Prerequisite: Introduction to the Macintosh or a good knowledge of



the Mac OS and its interface, Introduction to the Internet and an E-mail class.

Number of Sessions: One.

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

Instructor: Pat Fauquet

7/10/00 1 pm - 4 pm

8/16/00 1 pm - 4 pm

9/6/00 1 pm - 4 pm

Introduction to Digital Cameras

Learn how to use your digital camera to its best advantage. Learn how to download photos you've taken and how to bring them directly into applications like Adobe PhotoDeluxe and Kai's PhotoSoap. Learn about cropping and improving image quality. Learn how to decrease file size so that you can send photos via e-mail.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, Intro to the Internet and an E-mail class.

Number of Sessions: One.

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

Instructor: Pat Fauquet

7/12/00 1 pm - 4 pm

8/16/00 9:30 am - 12:30 pm

9/6/00 9:30 am - 12:30 pm

Calling all people

who don't want to be graphic professionals, but who would like to be able to put a picture into a 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 clip art CDs and the web to enhance their documents.



They will also learn how to re-size and re-color graphics that are "just about right" to make them "just right."

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, **Number of Sessions:** One.

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

Instructor: Pat Fauquet

Call Office for Dates

Working with QuickTime Pro

Have you ever wished you could make a video from your computer instead of writing a report? Have you ever wanted to add titles, credits and/or a new sound track to your home videos? Have you ever wanted to cut or mix your own audio tapes? Have you wanted to make your own QuickTime movie, a QuickTime panorama or make QuickTime VR object? Do you know what equipment you need and how to hook it up to your Mac to make all those things happen? All these projects can be done with QuickTime 3 Pro which is included in Macintosh OS 8.5 In this class we will explore these projects, discuss what you need to do them, and show you where to buy the missing parts without spending a fortune. If you have an external Zip drive, please bring it and an empty Zip disk to class. If you have an internal Zip drive at home, please bring an empty Zip disk to class. This is an all day workshop. Please bring a sack lunch or money to order lunch in.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, Intro to the Internet and an E-mail class.

Number of Sessions: Two

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

Instructor: Pat Fauquet

8/28/00 9:30 am - 4 pm

Introduction to Adobe PhotoDeluxe

This inexpensive program is fun

Other Educational Opportunities

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

EEI—Training
703-683-7453
www.eecomunications.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

and easy to learn. It can be used to edit images for the web. It also can be used to enhance digital photographs or scanned images, make calendars, posters, and cards. The only major drawback to the program is its poorly written manual with lots of neat examples but few detailed instructions. In this class students will learn how to use this program to accomplish many tasks that normally require Adobe PhotoShop.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.

Number of Sessions: One.

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

Instructor: Pat Fauquet



7/17/00 1 pm - 4 pm
 8/18/00 9:30 am - 12:30 pm
 9/8/00 1 pm - 4 pm

Introduction to MovieWorks

Many Washington Apple Pi members purchased MovieWorks at the November General Meeting. Come learn how this software works in a hands-on Sessions. We will make a "movie" that brings in several pictures, adds titles, has narration and an animation and transitions between pictures. We will then make QuickTime movies that can be played on a computer and over the Internet. The instructor will demonstrate how to digitize a movie on a computer with a video capture card and how to record from the computer to a VCR. We will discuss how to add video capture and video out capabilities to your computer. We will also discuss how to optimize your system to make the best possible movies with MovieWorks. Students are invited to bring their own pictures to be put into their MovieWorks projects. If you own a Zip drive or other large capacity storage device you may want to bring it

to take your project home. If you do not own MovieWorks, information will be provided on where to obtain the software.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.

Number of Sessions: One.

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

Instructor: Pat Fauquet
 7/19/00 1 pm - 4 pm

Computer Crafting Class

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

NEW: Saturday Kids' Courses Due to member requests, Ron Evry has agreed to teach some classes for our younger members on Saturdays.

If you would like to contact Ron about these classes please do so at <revry@clark.net>.

Please remember that Ron can not sign anyone up for classes. That must be done through the office. Please also remember that you as the parent or guardian of the younger member must be at the office 5 minutes before the scheduled class ending time to pick up your child.

Washington Apple Pi Tutorial Registration Form		Washington Apple Pi 12022 Parklawn Drive Rockville, MD 20852 301-984-0300
Name _____	Please fill in the name(s) and date(s) of the class(es) that you wish to attend.	
Address _____	Class #1 _____	
City/State/Zip _____	Class #2 _____	
Phone (day) _____ (evening) _____	Class #3 _____	
Member Number _____ Non-member _____	Class #4 _____	
Number of Classes ____ x Class Fee \$ _____ = Total Fee \$ _____	Class #5 _____	
<input type="checkbox"/> Check/Money Order <input type="checkbox"/> Visa/MasterCard	Class #6 _____	
Card Number _____		
Card Expiration _____ Signature _____		
Mail registration and payment to the above address.		



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

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

Creativity grows in a creative environment. Come play with us. Each class will be different based on the needs and skills of the students. Requests for specific content are invited. When you register, tell us what you want to learn, what software you want to use and anything else you want to share.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, **Number of Sessions:** One.

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

Instructor: Mary Keene
Call Office for Dates

Home and Small Business Financial Management

Introduction to Quicken

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

Students should have some familiarity with the program and made an attempt to use it before class. The class will be taught using Quicken 7 (not

the deluxe version). The instructor will try to answer all questions as long as they are within the curriculum outlined above. Bring your written questions.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, **Number of Sessions:** One.

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

Instructor: Pat Fauquet
Call Office for Dates

Databases and Spreadsheet Programs

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

This course covers what a database is, database terms, how to plan a database, and create database fields and layouts. Searching, sorting, printing and editing information in a database will also be covered. The differences between the AppleWorks module and FileMaker Pro will be discussed as well as when and how to migrate an existing database into FileMaker Pro.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, **Number of Sessions:** One.

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

Instructor: Pat Fauquet and Jim Ritz
8/11/00 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 a sample of things you would like help.

Prerequisite: Introduction to the Macintosh or a good knowledge of

the Mac OS and its interface. **Number of Sessions:** One.

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

Instructor: Pat Fauquet
Call Office for Dates

Introduction to Spreadsheets

This class will introduce basic spreadsheet concepts. Students will learn how to set up a spreadsheet, how to enter and edit numbers and words, how to enter basic formulas and make basic charts and graphs. They will learn how to sort data and how to print the whole spread sheet or only a portion of it. Students will use either the spreadsheet module of AppleWorks (ClarisWorks) or Excel. This class is not meant for persons who are intermediate or advanced users.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface.

Number of Sessions: One.

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

Instructor: Pat Fauquet or Jim Ritz
9/14/00 1 pm - 4 pm

Professional Graphics and Desktop Publishing

Adobe Photoshop Part 1

Learn the basic fundamentals of Adobe Photoshop, the most widely used graphics program. Learn the proper way to configure the Photoshop preferences and how to use the tool, info, channel and color palettes. Also learn how to use each of Photoshop's tools, create new documents, define colors and manipulate text and images. Also covered will be the proper format to save your image in, and what compression will or won't do to your image.

Prerequisite: Introduction to the



Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One.

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

Instructor: Paul Schlosser

7/5/00 6 pm - 9 pm

8/2/00 6 pm - 9 pm

9/6/00 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. The prerequisite for this class is Photoshop 1.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, and Adobe PhotoShop Part 1 or a knowledge of the topics covered in that class.

Number of Sessions: One.

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

Instructor: Blake Lange

7/11/00 7 pm - 10 pm

8/8/00 7 pm - 10 pm

9/12/00 7 pm - 10 pm

* NEW 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.

Instructor: Blake Lange

8/29/00 7 pm - 10 pm

* NEW 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.

Instructor: Blake Lange

9/26/00 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: Introduction to the Macintosh or a good knowledge of

the Mac OS and its interface. **Number of Sessions:** One.

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

Instructor: Blake Lange

7/25/00 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: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One.

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

Instructor: Paul Schlosser

7/26/00 6 pm - 9 pm

8/30/00 6 pm - 9 pm

Quark Xpress Clinic

This class is for those who have some experience with Quark Xpress and are interested in asking questions and having specific problems discussed. The class will be a question and answer format and you should bring along on floppy a sample of things for which you would like help. **Prerequisite:** Introduction to Quark Xpress or a good knowledge of the basics of Quark Xpress and its interface. The price is \$35 (\$50 for non members).

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface, and a



good working knowledge of Quark Xpress

Number of Sessions: One.

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

Instructor: Paul Schlosser
Call Office for Dates

Introduction to PageMaker

Using the basic commands, tools, and palettes, you will import, format, and position text and graphic elements needed to assemble a single-page, black and white flyer. This project will cover the following topics: Restoring default PageMaker settings. Changing the view of a publication. Creating a new publication. Opening an existing publication. Setting up the horizontal and vertical rulers. Displaying and hiding guides. Positioning the zero point. Using the pointer tool, the text tool, and the zoom tool. Specifying multiple columns. Locking the guides. Creating, placing formatting, and positioning text and graphic elements. Creating a drop cap. Applying a tint to text. Specifying a hanging indent. Creating ruler guides. Drawing circles, rectangles, and lines. Adjusting the stacking order of elements on the page. Range kerning text. Using the Snap to Guides option.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. **Number of Sessions:** One.

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

Instructor: Blake Lange
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: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface and Introduction to PageMaker or a good knowledge of the basics of PageMaker and its interface. **Number of Sessions:** One.

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

Instructor: Blake Lange
Call office for dates

NEW: Saturday Kids' Courses

Due to member requests, Ron Evry has agreed to teach some classes for our younger members on Saturdays. If you would like to contact Ron about these classes please do so at <revry@clark.net>. Please remember that Ron can not sign anyone up for classes. That must be done through the office. Please also remember that you as the parent or guardian of the younger member must be at the office 5 minutes before the scheduled class ending time to pick up your child. Saturday Kids' Courses note: all courses will cover use of commercial programs and freeware and shareware alternatives.

Easier Than Easy: Macintosh Skills, Tips & Tricks

Sure, using a Mac is pretty easy right out of the box! But there are plenty of unbelievably simple Mac OS shortcuts and secret tricks that can make any user look like a pro! Also learn how to make your Mac obey your spoken commands, create AppleScripts without knowing a thing about programming, and set things up to happen on schedule without your being anywhere around!

Prerequisite: None.

Number of Sessions: One

Price: Standard Members: \$35.00 Associate Members: \$50.00, Non-Mem-

bers: \$50.00

Instructor: Ron Evry

Saturday 7/1/00 - 9 am - Noon

Saturday 8/12/00 - 9 am - Noon

Say It with Slickness: Desktop Publishing and Page Layout

One thing that Macs have always done (and still do) better than anything else in the computer world is to make publishing and page layout fun! Whether you're writing a report, sending a letter to a friend or relative, or making a club newsletter, your Mac puts you in control! Your only limits are your imagination. Learn how to use photographs you take in your publishing, and find out where to get all kinds of free fonts and clip art.

Prerequisite: None.

Number of Sessions: One

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

Instructor: Ron Evry

Saturday 7/1/00 - 1 pm - 4 pm

Saturday 8/12/00 - 1 pm - 4 pm

Wandering the Web: Get What You Want When You Want It!

With over 600 million web pages out there, it's easy to get lost. However, it's really much easier to get exactly what you're looking for! There's a world of great stuff that is easy to find once you know the secrets behind navigating the Internet. Discover the universe's greatest reference source, created by a teenager! Learn exactly how to get great games and other programs from the web, and what it takes to unpack them and run them. Also discover how to find tons of great free music for the downloading!

Prerequisite: None.

Number of Sessions: One

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

Instructor: Ron Evry

Saturday 7/8/00 - 9 am - Noon

Saturday 8/5/00 - 9 am - Noon

(tutorials continue on page 64)



THE PRICE LIST

Can you create a document correctly?

Oy Europrint Ltd has produced **professional self-training CD's** 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 Brochure bank	340 USD	+25 USD

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

The order instructions

The customer will send the order to europoint@europoint.inet.fi and pay it by bank to the account of the Euro Print Ltd. Please pay via Eurogiro or swift to our account 800019-70542776 with Leonia Bank, PO.Box 6, Helsinki, Finland. Swift address PSPBFIHH-PGIRO-FI. When payment is received to our account, we will send CD's by mail to the orderer. **You will find the electrical order form www.europoint.fi/english -> select Order Now!**

Professional training CD's

Professional training package 1&2:

FreeHand 8.0 and Photoshop 5.0/5.5
- includes also combined exercises

Professional training package 3&4:

Acrobat 4.0 and PageMaker 6.5

Professional training package 5:

FreeHand 8.0

Professional training package 6:

Photoshop 5.0/5.5

Professional training package 7:

PageMaker 6.5

Professional training package 8:

Acrobat 4.0

Professional training package 9&10:

PageMaker 6.5 and Photoshop 5.0/5.5

Professional training package 11&12:

Acrobat 4.0 and Photoshop 5.0/5.5

Professional training package 13:

InDesign 1.5



Contents of training packages:

- exercises with instructions
- instructions for tools and menus
- Production manual for creation of a printed publication

Best regards

Oy Euro Print Ltd.
Pihlajatie 46, FIN-00270 HELSINKI
FINLAND



Further information www.europoint.fi/english



The Global Refrigerator Door: Creating a Web Page and Way, Way Beyond

Not that long ago, just browsing the web was the height of coolness. Now, there's no excuse for anybody not to have at least their own web pages, and maybe a lot more! Lots of web page space is available for free! Creating your own pages is incredibly simple. Find out just what to do to make animations, password-protect your web site, put interactive games, counters, and lots more stuff that used to be only done by programmers! Finally, learn how to easily put your own radio or television programs on the internet!

Prerequisite: None.

Number of Sessions: One

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

Instructor: Ron Evry

Saturday 7/8/00 - 1 pm - 4 pm

Saturday 8/5/00 - 1 pm - 4 pm

Lights, Camera, Action! Produce Your Movie Masterpiece on the Mac

Are you the next Steven Spielberg? A famous French movie director once said, "Movies won't be an art until the materials are as inexpensive as paper and pencil." We are just about there. You can make movies on your Mac and create effects that would have taken millions of dollars worth of equipment just a few short years ago! Learn exactly what you need to make your masterpiece, and when you pick up your Oscar, you can thank Washington Apple Pi!

Prerequisite: None.

Number of Sessions: One

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

Instructor: Ron Evry

Saturday 7/29/00 - 9 am - Noon

Multimedia Madness: Razzle-Dazzle Reports and Eye-Popping Presentations

Writing on paper is so 20th Century! Express yourself by creating your own interactive media. Combine sights, sounds, and viewer input to make your next report, story, or literary endeavor a hands-on, unforgettable experience! Teachers and business executives are mostly lagging around doing slide shows when they do anything at all. Become a power user and stretch your skills to the limits!

Prerequisite: None.

Number of Sessions: One

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

Instructor: Ron Evry

Saturday 7/29/00 - 1 pm - 4 pm ■

Lessons Learned in Recovering a Hard Drive

by Bob Whitesel

JUST BEFORE Christmas, I began having problems with the 500 MB partition of my 2 GB drive. I fixed those and went on. After Christmas, the sky fell—big time! The hard drive icons disappeared from the desktop. The "device with SCSI ID=0 is not mounted." Oh, woe is me! (For reference, I have a PowerMac 7100/66 running Mac OS 8.1.) Problems: (1) My backup medium (Zip Disk) was not quite up-to-date at the time of the failure. (2) I wasn't sure if this failure was a "crash-tinkle," or just a "thud"? (3) What did I do to cause this?

Lesson I— File recovery from an "unusable disk" can be achieved with Norton's UNERASE and Iomega Guest and a Zip drive.

1. My hard disk was no longer accessible because "an error of type -127 occurred." Disk First Aid (DFA) found problems it couldn't fix. Norton Disk Doctor fixed a few, then found others it couldn't touch. Norton's recommendation: erase, reformat and start over.

2. Running Norton Utilities from the CD I was able to use the UNERASE feature to begin recovery of files not clobbered by the failure. It takes a little playing with the options. Eventually, I got a list of the 1700 data files on my small partition and began to scroll through the list to choose those for recovery.

On request, Norton will place these files in a folder called, not surprisingly, Recovered Files. I suspect it will put that file on the desktop in the absence of other instruction. I put this file on my still extant RAM Disk, mostly out of fear.

3. From previous experience, one of the files I chose to recover was "Iomega Guest." After finishing the recovery operation with Norton, I launched this file from the RAM Disk. Iomega Guest installs a Zip disk driver that allows the simple operating system loaded by Disk Tools to recognize the previously unrecognizable Zip drive. I dragged the "Recovered Files" folder from the RAM disk to a waiting Zip disk. So far, every file that Norton UNERASE said was 100% recoverable was indeed so.



Lesson II—Keep the most recent version of Apple’s Drive Setup handy - the crash was only a thud.

1. Thinking I had all the stuff I really needed to recover from the hard drive, I went searching for diagnostics to determine its condition. All I had was Norton Utilities 3.5 and Disk Tools 8.1. It turns out that this failure was just a “thud,” but the lesson is to keep to most current version of Apple’s Drive Setup at hand. Cutting to the chase, Scott Hartwick was able to recover my hard drive for me because he had Drive Setup 1.8.5 on his home-made diagnostics CD.

2. I finished the recovery of files on Thursday evening of the week in question. Thinking I had done some damage, I sent an e-mail to Scott Hartwick describing the events and asking about his stock of 2 GB hard drives. I contacted Scott because I had purchased my drive from him at the June 98 Garage Sale. He wrote back that he did have replacements and suggested that I first try Disk Warrior before pulling the drive out of my machine.

3. On Friday evening I tried his advice. First problem was that I do not own Disk Warrior. But, I had more than a year’s worth of MacAddict CDs on which, hopefully, to find a demo version. Searching File Area 23 on the TCS from my laptop gave me a few diagnostic utilities, but none of any more use than TechTool 1.1.9, which was not effective. Now, how do you access CDs when all you have for bootable systems comes on Disk Tools and the Mac OS8 CD?

4. Here’s where I got lucky. First, the designation of my RAM Disk survived all this turmoil. Also, some other items loaded into RAM must survive RESTART. The somewhat torturous sequence (Please, anybody, what’s the simpler way?) is as follows:

a. Start up the system from the disk tools disk. (I frequently took this opportunity to run DFA in hope of some miracle. By this time my hard drive

icons had disappeared. Disk Setup 1.3 said there was an unmounted SCSI 302 device out there, but refused the MOUNT instruction.)

b. At first I was startled by the system first wanting to eject or erase some untitled disk. After I realized that this was the RAM disk, I relaxed. No big deal. Be happy it’s there!

c. Open the CD drawer, put in the Mac OS8 CD, restart and hold down the “C” key. This action, of course, boots from the system files on the CD. I imagine they are a slightly souped up version of the Disk Tools disk files. But, this action must also load the 5-6 extensions necessary for recognizing CDs. They are not destroyed by a restart.

d. Open the CD drawer, remove OS8, restart and push in the Disk Tools disk again. Now, after the system comes up on Disk Tools, when you open the drawer and put in another CD, i.e., a MacAddict monthly CD, the CD’s icon appears on the screen.

e. Open the CD and go hunting for diagnostics. When you find one, like Tech Tool 1.1.9, the file will likely be an installer, rather than an application that can be run from the CD. Now, just like “Jim Dandy” in the song of yesterday, it’s “RAM Disk to the rescue”.

f. I installed several diagnostic tools on the RAM Disk and proceeded to execute them. Alas, nothing worked any better than Drive Setup 1.3, and there was no Disk Warrior demo to be found. (No matter-it didn’t work for Scott either.) If you keep around a copy of the latest Drive Setup, then all of these shenanigans should be just an academic curiosity. Still, the sequence (or something simpler) may be useful if the hard drive file and directory damage is not as severe as mine.

Lesson III—Don’t operate your computer with an unterminated SCSI chain

1. I really don’t know what caused this

“Problems: (1) My backup medium (Zip Disk) was not quite up-to-date at the time of the failure. (2) I wasn’t sure if this failure was a “crash-tinkle,” or just a “thud”? (3) What did I do to cause this?”

failure. But, I can speculate (and Scott agrees this is probable.) The drive had operated flawlessly for 18 months with a HFS partition of 500 MB and a HFS+ partition of 1500 MB. I usually operate my 7100/66 with a SCSI chain consisting of my Zip drive, followed by a SCSI transition cable, a terminator and the HDI-30 cable that plugs into the SCSI jack on the back of my Power Book 1400.

2. Just before Christmas, I disconnected the HD-30 and the terminator to take to a friend at work to use to connect his Power Book 540 to a CD ROM drive to upgrade his system for on-the-road e-mail. It never occurred to me to disconnect the cable from the Zip Drive and switch the terminator on the Zip drive to the “ON” position.

3. I think I paid the price. I’m really indebted to Scott Hartwick for responding so quickly to my request for help, for allowing me to make a week-end walk-in service call, and for running a “low level” formatting job on my hard drive to verify its condition. Thanks again, Scott! ■

About the author: Bob Whitesel has been a Pi member for about 5 years. Still very much the neophyte Mac user, he reads each issue of the Journal cover-to-cover and appreciates greatly this and other efforts of all the Pi’s volunteers.

washington **Apple Pi** general meetings

9-11 a m

July
Hardware Stars:
La Cie, Hewlett-Packard
July 22, 2000

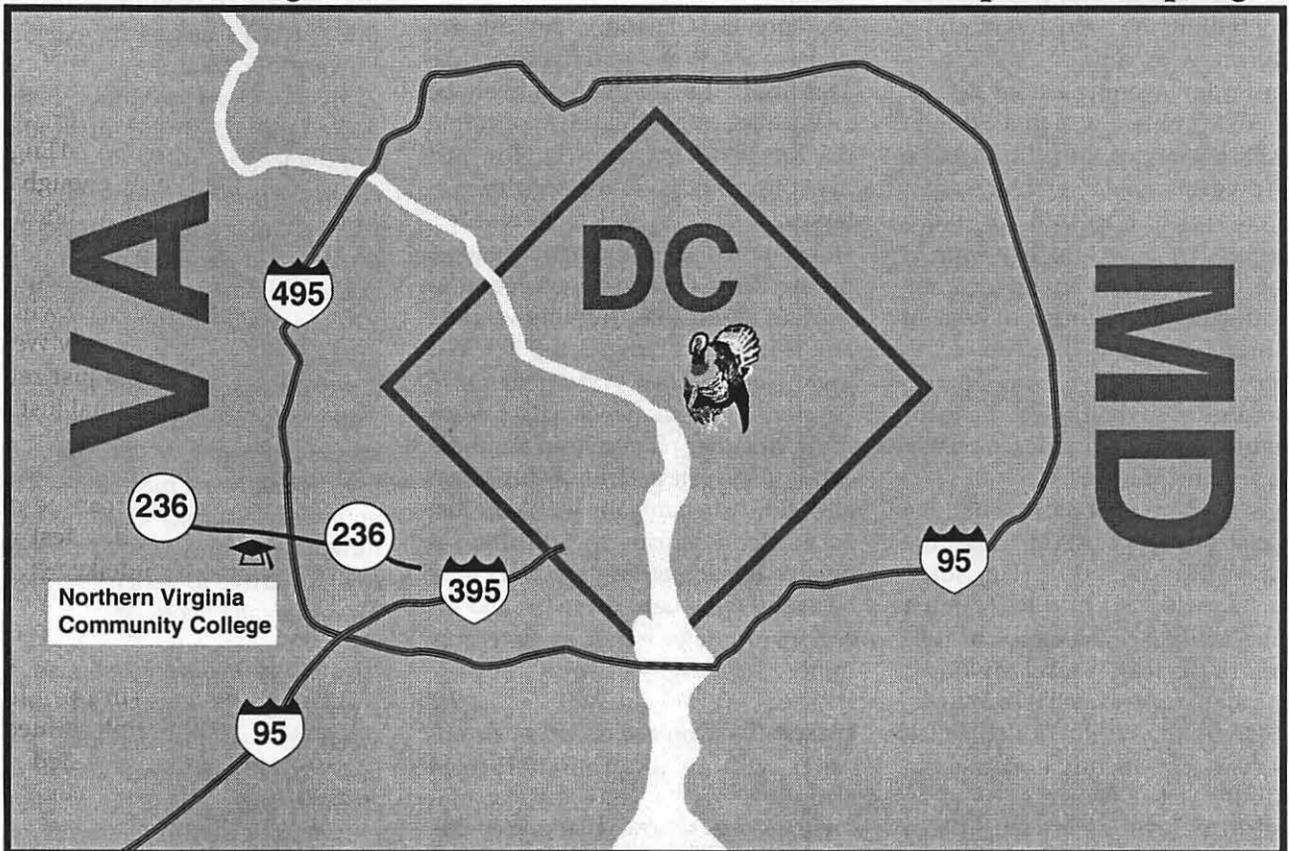
Northern Virginia Comm. College
Community & Cultural Center Aud.
8333 Little River Turnpike
Annandale, VA

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

August
QuickTime
Festival
August 26, 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/>





Don't Discard That Rotten Apple — Make It an Internet Server, Part II

by Richard S. Sternberg.

This article may be reprinted in whole or in part freely with or without attribution.

IN THE LAST issue of the Journal, after learning some essential terminology, we selected and set up an older Macintosh computer to handle single-line multihosting of Internet Protocol (IP) Addresses using Open Transport 1.3 on a computer running Mac OS 8.1. We discussed registering your own domain names and setting up your host computer to respond to calls for email and web services. We also discussed designing and creating your own web site using a common word processor, Microsoft Word '98, or a freeware product, Netscape Composer. If you're with me so far, you have an old Mac in front of you and you're ready to get it on line as an Internet server.

Little in this article will make sense without the background discussed in Part I. If you missed that, get your last Journal, or join me on my web server at <http://www.RSSsternberg.org/Multihost.html>, where the entire article is reprinted with active hyperlinks.

Let's go ahead and set up our new Internet servers!

Setting Up the Servers

The web server

Setting up more expensive web servers would be easy. You could wait for Apple's newest file server for a few thousand dollars, buying AppleShare IP or OS X for around \$1,399, and hook it to the web through a commer-

cial firewall for around \$450. You could use an older Power Mac and buy the well-reviewed, commercial product, WebSTAR for a mere \$599 more. WebSTAR needs a PowerPC chip, so that'd send my old reliable Centris on the road to the scrap heap. Alternatively, you could create a serviceable multihosted web server for between \$25 shareware fee and \$129 for a cheap commercial product.

The first part of this trick is performed by a piece of freeware named Quid Pro Quo 2.1.2 from Social Engineering. You can download it from <http://www.socialeng.com/>. The freeware version, QPQ, needs a small shareware product to perform multihosting. Even with that shareware, QPQ is limited to virtual multihosting. If you choose this route, you won't need the single-line multihosting abilities of Mac OS 8.1 or Open Transport 1.3, and you can probably use a much older computer than a Quadra or Centris. You will not be able to provide secure SSL connections, because reverse lookups of your virtual sites will get incorrect results.

Alternatively, the commercial version, Quid Pro Quo Plus 2.1.3 (QPQ Plus), does everything you need to finish this part of the project by itself for a cost of \$129. It's the "cheat" I used to get my "freeware" single-line multihosted server to work, but buying Quid Pro Quo Plus required a bit of an unexpected effort.

See the sidebar, "Hacking for the Sale." If you don't need any form of multihosting, or virtual multihosting is sufficient, the freeware version of Quid Pro Quo works fine, and it downloads without a whimper.

If you want multihosting, but you can't get a copy of Quid Pro Quo Plus, or are hesitant to buy a copy that comes with absolutely no technical support, you can use a wonderful \$25 shareware plug-in called Welcome. Welcome is written by a responsive and bright European named Andreas Pardeike who responded to my anonymous email inquiry within 12 hours with complete, honest, and accurate information. Not only is his plug-in simple to install, but it is remarkably cheap. It provides extensive functionality in providing server statistics and routing rules in addition to its principal purpose of providing single-line multihosting for web servers other than Quid Pro Quo and virtual multihosting for the rest. Best, you can put yourself on (and take yourself off of) a listserver of active webmasters running Welcome, and both Mr. Pardeike and they provide the kind of technical support that will not be available from Social Engineering — or anyone else. Though I have decided to single-line multihost using Quid Pro Quo Plus, which, in my opinion, undercuts the principal purpose for using Welcome, I will probably install Pardeike's new Welcome 3.0 and download his just released version 3.0 of his manual just to get the technical support and the access to extra statistics on my sites. Pardeike's Welcome can be downloaded for a seven day test run at <http://welcome.pardeike.net>.

Unfortunately, the freeware version of Quid Pro Quo is crippleware — not only is access to Open Transport's built-in single-line multihosting not implemented, but Social Engineering decided not to implement the type of plug-ins that would allow other software to access the multiple IP addresses arriving



Hacking for the Sale

While preparing my web server, I became quite confused about the multiple naming conventions for single-line multihosting, and Social Engineering's product descriptions didn't help. Promotional materials for the commercial version plainly indicated that Quid Pro Quo Plus 2.1.3 could perform the trick, but nothing clearly said that the freeware version couldn't. I was getting frustrated enough that I was willing to shell out the more than fair price of \$129, but I discovered that I couldn't get to the download site, because it was on a secure site and the security certificate for the site that interviewed me before sending me to a second secure site to take my money had an expired certificate. Emails and other explorations to all parts of the company failed to attract any attention or get any reply, and I concluded that Social Engineering was no longer available to provide the unlimited email support its manual promises to commercial users. Indeed, they lacked the ability to provide their product.

I was quite frustrated at spending weeks finally deciding to buy the product without testing. I refused to be deterred. My browser reported that the certificate at the site had expired in July 1999; it suggested that my computer's clock might need to be adjusted. I adjusted it: from February 2, 2000, to July 2, 1999. Netscape insisted that I quit and restart the application before it willingly agreed that, like Superman, I had twisted the world backwards half a year. Then, success! I was connected to the first secure site. I entered my information and clicked "Submit," only to learn that the next secure site — which would take my credit card — didn't understand why its current certificate wasn't in effect yet. It suggested that I check my Date & Time control panel again. Alas, how was I to convince Netscape to update its date without restarting again (which would keep me from traversing the first secure site).

The answer was to play in the Netscape Preferences commands long enough — a few minutes actually — to force the application to update other things. While no preference command I found seemed to relate to updating the clock, when I closed the Preferences box, ready to be disappointed, the cashier site, run by Certicom, happily welcomed me.

But I don't expect much technical support.

from the Internet. As a result, Welcome cannot provide single-line multihosting on Quid Pro Quo. Even if you use IPNetRouter to pass the secondary IP addresses through to the user interface, I could not find a way to make Quid Pro Quo recognize multiple addresses. Of course, one possibility is to run multiple copies of Quid Pro Quo, but that sounded too complex, and very likely to run into memory problems when hosting multiple domains, just to save \$129. For that amount, Quid Pro Quo Plus provides both single-line and virtual multihosting, as well, if you can manage to download it.

Welcome can provide virtual multihosting on Quid Pro Quo, Quid Pro Quo Plus, or, for that matter, WebSTAR, AppleShare IP, or any other WSAPI compliant web server. You cannot operate a secure site from a virtual multihost, since the SSL standard is inconsistent with a domain name that does not match a specific IP address in a reverse lookup. It would seem that you could assign a generic secure site domain name, such as "securecheck123.com" to be your primary site associated with the IP address, and put your regular, http sites in virtual hosts, but I haven't tried this.

While setting up virtual multihosting with Welcome is difficult, Andrew Pardeike's manual is so good that I won't try to repeat it here. The manual for Quid Pro Quo Plus is awful compared with Pardeike's manual, but setting up single-line multihosting with Quid Pro Quo Plus is so easy — once you have the hosts defined correctly in Open Transport — that I'll just leave the rest for your creativity.

The mail server

The mail server is even better news than the web server. There are two freeware products from which to choose, Apple's Internet Mail Server, AIMS, which has since been sold to Qualcomm and renamed Eudora Internet Mail Server, EIMS, and Stalker Internet Mail Server, SIMS. The pundits prefer SIMS for stability and other reasons, but I never tested AIMS. SIMS, which can be downloaded free along with its control application, CommuniGator, at <http://stalker.com>, are as easy as they are free, and their extensive manuals come in two versions: a downloaded short version, and extensive on-line documentation. Both manuals are written in HTML with hyperlinks and are designed to be read with your browser. You'll need the on-line manual to use the routing tables to set up multihosting, but once you discover the format for the routing table and follow it, the mail server will spring to life. SIMS is my hands-down, five mouse favorite without giving AIMS a fair test drive, because, in addition to the documentation, it has immense power and flexibility, particularly in controlling Spam and defining routing for email accounts.

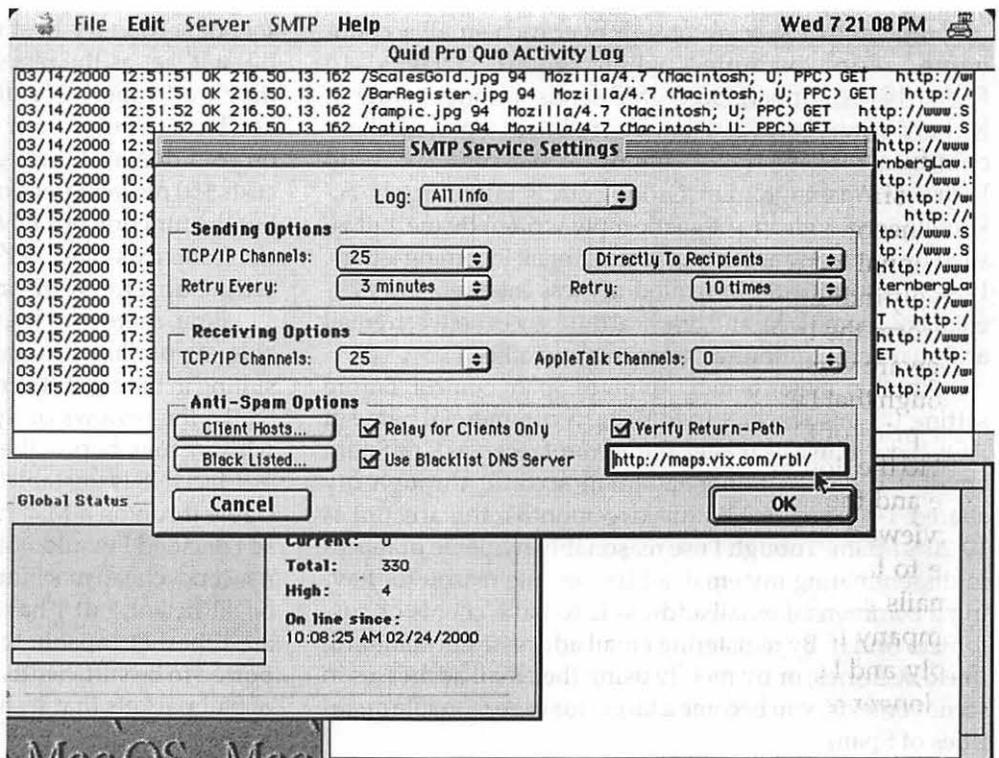
In order to understand what you are doing and why things are named as they are, it is important to correct another set of misnomers in Internet linguistics. You will fre-

quently hear and read references to POP and SMTP "servers," and it will often seem that ISPs have set up separate POP and SMTP servers to send and receive your mail at addresses like smtp.wap.org or mailroom.wap.org. Your internet server can act as host to multiple services, however, including POP and SMTP mail service and web page services, because these services are carried on different logical "ports" on the same host machine. Web pages are customarily found through port 80, and when your computer asks my web server for a page in <http://www.SternbergLaw.Net/index.html>, my domain name service knows that the host www.SternbergLaw.Net is located at the IP address

216.50.13.165 and sends the request to that address. My Web server is set by default to listen to web requests (http service) on port 80, and to look to the folder SternbergLaw. I've programmed the web server to answer requests for www.SternbergLaw.Net by selecting the folder SternbergLaw in the Folder preferences under Quid Pro Quo. The server looks for a file named index.html, and, sends the page back to you.

Your email inquiries are routed similarly. Sending or receiving email for Richard@DCMdVaLaw.com eventually sends a request to my domain name service, which associates the domain DCMdVaLaw.com with the host located at 216.50.13.167, and your email request, which is more accurately called Simple Mail Transfer Protocol (SMTP) request, is routed to the default ports 25 and 150. Because of multihosting, this is all actually occurring on the same host machine as requests for multiple other hosts and for multiple difference services provided on different ports.

Armed with this knowledge, you won't make the only major time consuming mistake I made — trying to understand how to name the servers. Quite simply, SIMS will be your Internet mail server, and, as long as you have correctly set up the multihosting in Open Transport, it will monitor the proper ports for each of the IP addresses coming into your machine. If you tell it in the routing table to which folder it should route mail coming into each account name in each active mail domain, it will happily route and deliver mail to those folders. There is no need to create separate host names like pop.domainname.com or



smtp.domainname.com, but you can use just your domainname.com.

Having control over your own mail server has some wonderful benefits. First, you can get a bit creative with the SIMS routing table. I have account names under multiple domains, so some people send me email at Richard@WashingtonLawGroup.com, others send email to me at Richard@SternbergLaw.Net; still others will use Richard@DCMdVaLaw.com, and my personal email will either continue arriving at my Washington Apple Pi account, or will use Richard@RSSternberg.org. I could, if I wished, route these to separate mailboxes, but I prefer to have my personal email placed in a separate folder, and all other emails checked together, with the account name of each identified by my mail reader. My routing table is therefore set to send all requests for "Richard" at any of the addresses, except RSSternberg.org, to the same folder named "Richard." And, when I want to use a separate box, mail to "Sternberg" and any of these (or other) multiple addresses goes to a folder named "Sternberg."

```
<*@RSSternberg.org<= Personal-*
<*@WashingtonLawGroup.com<= *
<*@SternbergLaw.Net<= *
<*@DCMdVaLaw.com<= *
<*@twlg.com<= *
<*@svg-law.com<= *
```

A partial routing table in SIMS.



SIMS allows special controls over each email account name. For example, when email arrives to Richard@RSSternberg.org, SIMS sends a notice to me at Richard@SternbergLaw.Net. To maintain optimal client communications, email sent to Richard@WashingtonLawGroup.com is immediately acknowledged with an automatic reply written by me, but issued by the server as a return receipt for all incoming letters. I use that form letter to remind my less Internet-savvy clients about some legal and practical differences between email and snail mail communications in a law office.

Another major benefit involves Spam control. Before setting up this server, I tried using a commercial name at AOL. Less than a year later, the account receives 90% Spam email. I tried a commercial email account through my shared T-1 provider. Within two months, the account is 10-20% Spam. Though I use reasonably hygienic practices in disseminating my email addresses, the reason for having a commercial email address is to have clients or customers find it. By registering email addresses in standard, free directories, or by merely using the email addresses in some contexts, you become a target for unreasonable quantities of Spam.

With the SIMS mail server, you can control or eliminate Spam to the extent appropriate to your business or personal use. The SMTP services settings in SIMS, as shown in the manual:

To prevent use of your mail server as a launching point for foreign Spam, you'll want to prevent the server from relaying mail. Failure to do so will get your IP address identified as a Spam source and may block your access to other protected sites. But, you can also list privileged IP addresses which will be allowed to use your server to relay mail under your hosted account names. I find the verify return path option particularly attractive as a Spam preventative, since most of my Spam comes from anonymous or masquerading sources, and one quick click has eliminated all of them. Finally, not only can you manually black-list spammers or other hackers whose IP addresses show up too frequently in your logs without suitable explanation, but you can use a published list of spammers to screen your email. The list used by both the Pi and me, frequently called a "reliable" or "rbl" server, is located at <http://maps.vix.com/rbl/>.

SIMS SMTP settings running on top of the Quid Pro Quo Plus web server.

Do you want a domain name server?

The last part of my project is, sadly, not complete as of this writing. You will need to run a DNS if you wish to be your own responsible party reporting your domain to the InterNIC. Without this, you will continue to require some

sort of secondary hosting service from an ISP, and your ISP will act as the responsible party for your site. While they are "responsible" for almost nothing, this means that you have to put in your requests to create new host names on your domains through the ISP, and, for me, this service costs \$50 per year per domain. It's not an overly large sum, but the function of a DNS would seem too easy to be omitted from my server. Let's review what I know so far about setting up a freeware or cheap shareware DNS.

First, there is at least one freeware DNS widely available. Apple has produced four versions of MacDNS resulting in the current version 1.0.4 revised in February 1999. Sadly, the reviews of the freeware by network managers who are members of the Washington Apple Pi are uniform — MacDNS is unstable. It is alleged to be particularly unstable if run on a Mac running any other Internet service, so I decided I would not take a run at this unless I did it on a second, cheap machine. Apparently, an old Mac SE might be sufficient, but I have no other scrap machines which are Ethernet capable to test this. Further, MacDNS is reported to be sufficiently at risk for collapsing under a load of bad packets that it should have a firewall to reject such packets.

I don't have another Ethernet-capable scrap Mac; I'm unwilling to put any publicly available service behind our secure office firewall; and I have no intention of learning how to program my Cisco router (bringing the T-1 service into the office) as a firewall. I therefore have no safe way to test MacDNS as a freeware DNS. Other low-end DNS products, like QuickDNS, seem to cost about \$290 to \$390, which is almost two years of the cost of secondary hosting services for all of my sites together. And the other freeware DNS which received much better reviews, QuickDNSLite, seems to have been pulled from the market.

I have an answer for my office, but the answer is beyond the scope of this article. On a Linux platform, a freeware DNS named BIND will run just fine, receives good reviews, and is reputed to be tolerable to set up. We have our firewall and our main file server both running Linux, and one will, before the annual renewal of my secondary hosting services, be running BIND and providing DNS service for my Internet servers. I hope, before then, to find a Macintosh solution, and you can follow any discussions about this, or ask your own follow-up questions, on the Pi's TeleCommunications System bulletin board on Conference 3, Board 21, "Bithead." To a lesser extent, I'll answer email about this directed to Richard@SternbergLaw.Net.

There are a number of DNS solutions, but, even absent a good Macintosh solution for domain name service, running your own small office or personal shareware web and mail servers on a multihomed Mac may be a fun, environmentally friendly, and a sensible project for you. ■



Melody Assistant

review by Brian G. Mason

I HAVE BEEN looking for a music sequencer ever since I moved off of *Music Studio* on my Apple IIgs onto the Mac platform. However, I really did not want to spend \$400 for a program since music is a hobby with me, not a profession. (For those of you who haven't done any music on the computer, a **sequencer** is a program that tells the computer or computer-driven devices in what order to play sounds. A **synthesizer** is a program that tells the computer or other sound-producing device how to create sounds.)

After looking on the Internet and searching on Delphi and other sources of shareware, I ran across *Melody Assistant*. This is the most incredible program for working with music on the Mac! It is so full-featured, it is really hard to believe it is only \$18 (paid through Kagi. It's \$15 if paid directly to Myriad.) It is much more than a sequencer. In fact, it does so much so well, I have had a hard time trying to figure out how to tell you about it. That is why I've included so many screen shots with this article.

Sources of Music

Where to start? I guess I'll start with the various methods of getting music into the program. First of all, you can enter the music onto a staff. Its power as a sequencer is superb! The program comes with several templates or sample staves that you can use to get started for a variety of music styles. These are divided into 3 folders: choirs, orchestra, and solo. Under choirs there are samples, for example, of quartets, quintets, and

even of Gregorian choirs. Under orchestra you will find folders of samples called brass, classical, jazz, miscellaneous, and modern. Under solo you will find folders of samples called banjo, dulcimer, bass, drum set, guitar, harmonica, keyboard, and lute. Each of these samples brings up the default staff and set of musical instruments for that particular kind of music. For example, to begin working on a string quartet, you can go under orchestra and find the classical folder. In that folder is a string quartet sample. When you double click on the sample, you are presented with four staves, one each for first and second violins, the viola and the cello.

Once you have your staves on the screen, you can then begin entering your score using all of the tools and palettes *Melody Assistant* makes available to you. You can place the notes one at a time on the staff using the mouse. You may use the mouse to select the notes using

the on-screen keyboard. You may also define the keys on your computer keyboard to place notes on the staff or to do any number of other actions within the program (see Figure 1). The problem with using the computer keyboard is that the notes do not sound when you press the key. If you use the on-screen keyboard and mouse, however, the notes do sound.

You can set up your computer to accept input from MIDI (Musical Instrument Digital Interface) devices. *Melody Assistant* uses the Open Music System (OMS) from Opcode to interface with MIDI devices. Since I now have a PowerMac G4 which has no serial port, I have not been able to connect my MIDI keyboard to my Mac. I spotted a hardware interface in a catalog, but haven't bought that yet. So I haven't been able to fully test the MIDI capability of *Melody Assistant*.

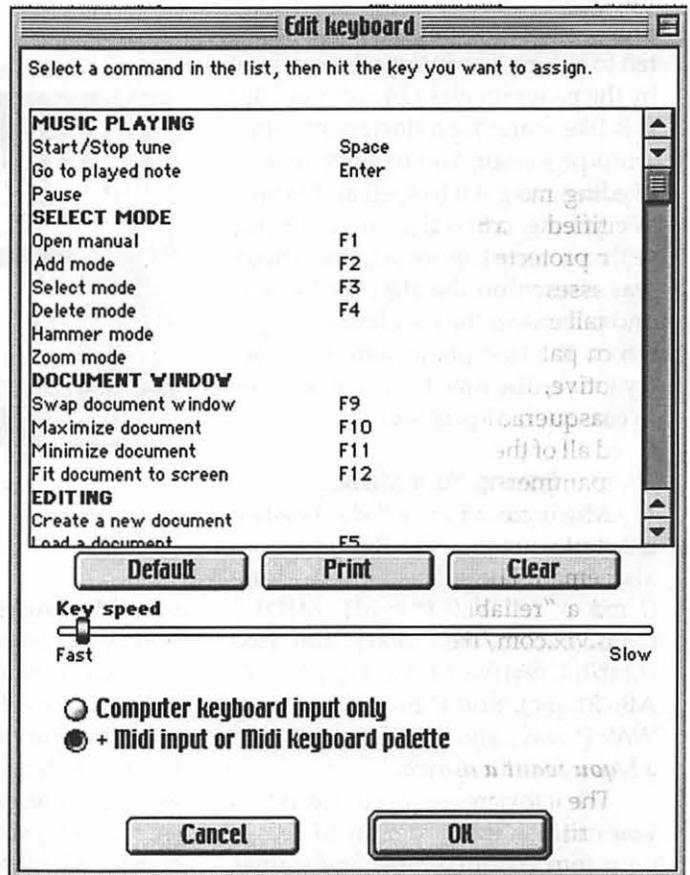


Figure 1.



You can also bring music in from a wide variety of computer application formats. These include .aiff, .wav, mp3, and even a Mac sound resource. All of these types are brought in as digital sound files. That is, they are not translated into notes on a staff. You can, however, combine this digital input with written music in a score to create your total musical experience.

On the other hand, with other types of formats the attempt is made to translate the music into notes on staves. These include Stand-alone (*.mux), MIDI (*.mid), Karaoke (*.kar), Creative Music File (*.cmf), Band-in-a-Box (*.sty), MOD (*.mod), S3M (*.s3m), Tab Text (*.txt, *.tab), OMER File (*.msf), ABC (*.abc), and Backup copy (*.bak). I was only able to test the MIDI and MOD formats in these formats. It was amazing to see the notes appear on the staves for music that I had only been able to listen to before. The interpretation done by the program was not accurate. But it is like scanning a document into a word processor. You have to do a lot of editing to get it to spell and format everything correctly. For example, with one song I imported, the melody was written on the staff for the second piano and the bass line was written on the first piano staff. I did not try to take the time to figure out how to correct this "problem."

Saving Your Music

Music saved in *Melody Assistant* is saved as a *.mus file. But music can also be exported as Stand-alone (*.mux), MIDI 0 (*.mid), MIDI 1 (*.mid), Karaoke (*.kar), Tab Text (*.tab), Creative Music File (*.cmf), ABC (*.abc), Brut (*.brt), AIFF (*.aif), WAV (*.wav), and MPEG (*.mp3), and a Macintosh Resource.

What this means, of course, is that you can use this program to record your music from almost any source, including the microphone input on

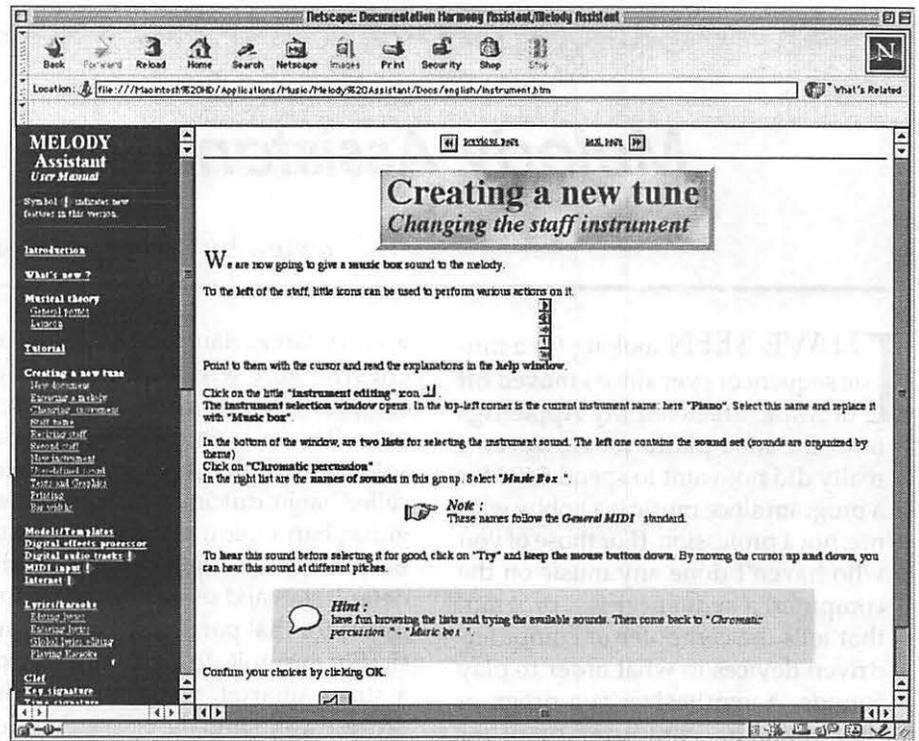


Figure 2.

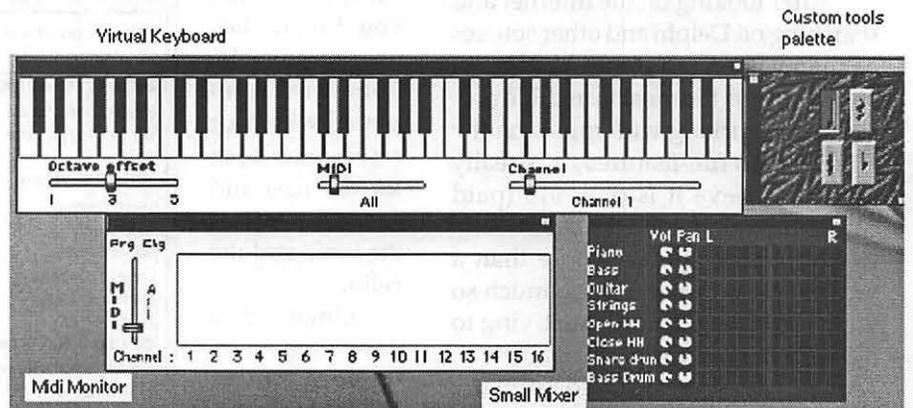


Figure 3

your Mac, and save it as an MP3 file. Thus you can even use this program to preserve your old vinyl records and 8-track tapes. Of course, this takes some memory resources, but that is to be expected with digital audio. For example, I recorded 1 minute and 19 seconds of a song off of a cassette. It consumed 19MB of RAM, and when saved to disk in native *Melody Assis-*

tant format (.mus), it took 12.8 MB of disk space. When *Melody Assistant* converted it to the MP3 format, the same snippet of music took 1.2 MB on disk. If you have a CD recorder, you will want to save your music as AIFF files and then use a program like Toast to create your own audio CD's. The possibilities are endless.

The User Manual

The User Manual is done in hypertext markup language, which means that you use it within an Internet browser. This makes it very user-friendly. Double click on the file index.htm. The manual opens up in your default browser. Double click on the flag for the language you chose when you installed the program, English, French, German, Spanish, Italian, or Japanese, and you are ready to go. The table of contents appears in a frame on the left, and the manual appears in the right-hand frame. Throughout the manual there are hyperlinks so you can move quickly within the documentation. (See Figure 2.)

The major topics in the manual include the Introduction, a What's New, a section on musical theory and a very complete lexicon. The manual includes a tutorial, information about the models / templates that come with the program, information on the digital effects processor, how to work with digital audio tracks, working with MIDI, how to use the vendor's resources on the Internet, how to work with lyrics within the program, how to use the Karaoke features. There is a How To section, a FAQ section, and two appendices, one dealing with using *Melody Assistant* with the Yamaha S-YXG50, the other explaining how to make an audio CD. Finally, there is the index, in which every single reference is hyperlinked back to the manual. If you ever have the need, a printable version is also

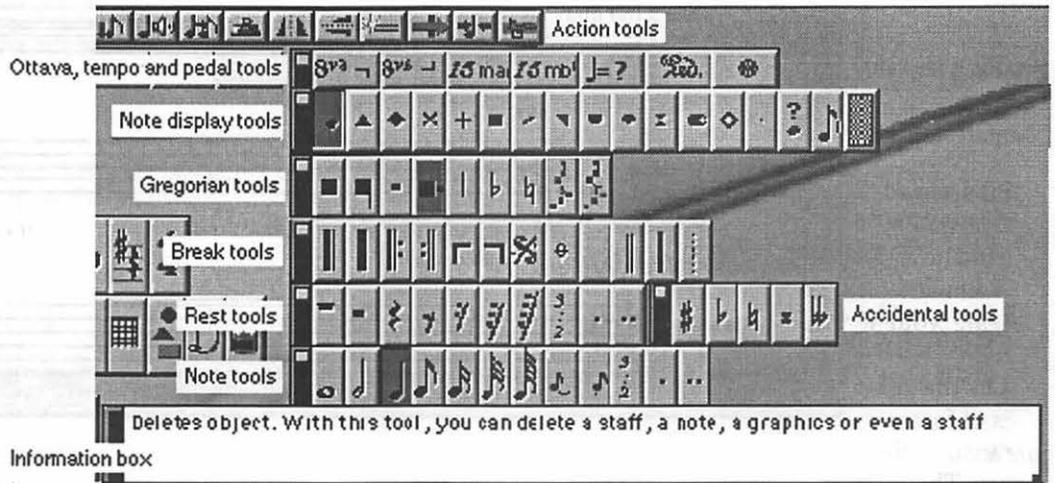


Figure 4

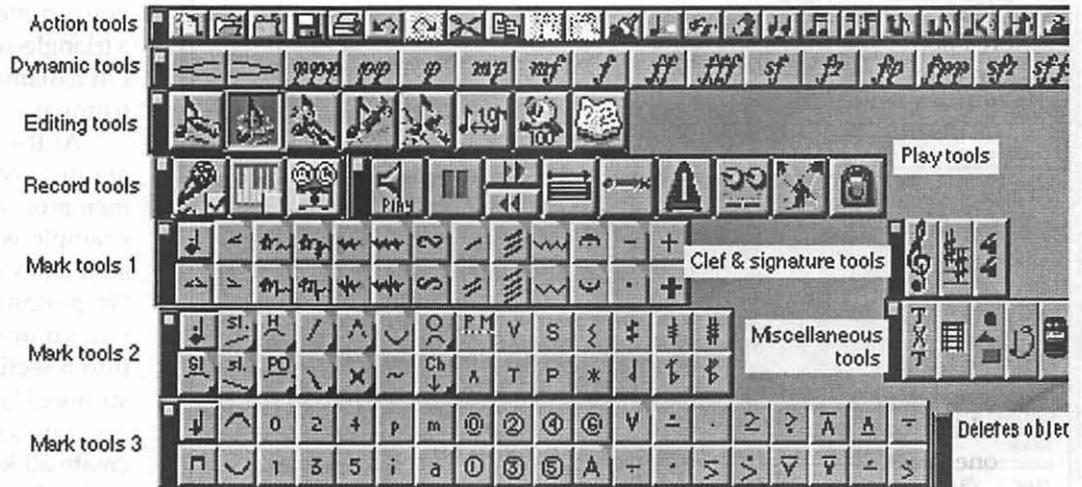


Figure 5

provided for printing from within your browser.

The Tools

There are a total of 17 palettes of tools. In the latest version, there is an 18th palette, a master palette which lists all of the other palettes and windows you can place on your desktop. Using the master palette, you don't have to keep all of the other palettes open in order to select a tool from a particular palette.

In addition, there are 5 windows that can be accessed from the master palette or under Windows on the

menu bar. The windows include a custom palette. Here you can place all of the individual tools you want to use most frequently. You can also have a full-size mixer, a small mixer, the virtual keyboard, and a MIDI monitor. (See Figure 3.)

All of the palettes are floating palettes. You can put them anywhere on the desktop your heart desires. You can have as many open or as few as you like. On all except the master palette, you can double click on the blue end bar, and the palette will switch from vertical to horizontal or vice versa.

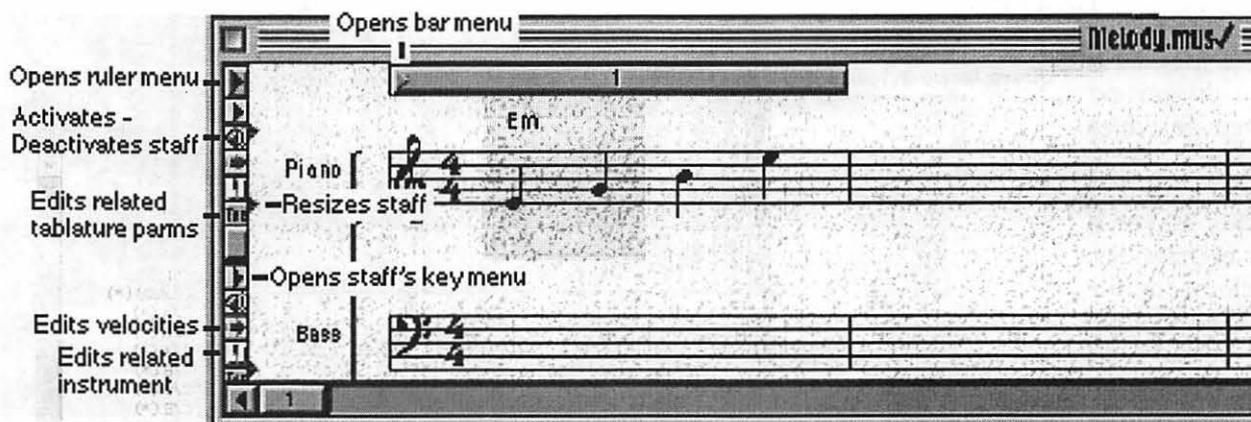


Figure 6.

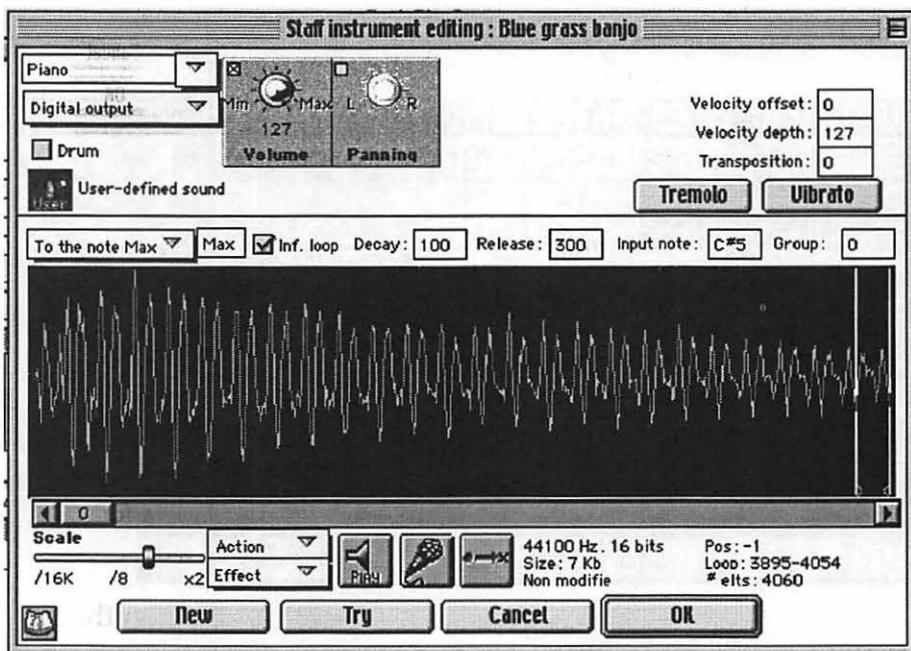


Figure 7.

Then there is the information box. No matter where you are on the screen or what you are doing, the information box provides information about the item you are rolling over or pointing at with your mouse. This is an extremely helpful feature when you are learning the program. (See Figure 4.)

The 3 mark tool palettes contain an amazing variety of tools to create a large number of effects including trills, tremolo, slurs, etc. If there is a purple corner on the tool icon button,

it has an effect on what is played. If it has a blue corner, it applies to tablatures. Otherwise it is placed on the score for information. All of the dynamic tools affect how loud the music is played. (See Figure 5.)

The Staff

I could not take the time to calculate the number of instruments available to the program. Just for example, there are 11 different types of pianos including three regular pianos, two electric pianos, a honkytonk piano, a

harpichord and a clavichord. You can assign one staff to each instrument, you can have multi-voiced staves, or you can even establish rules such that a triangle-shaped note will be a piano, but a diamond-shaped note will be a trumpet.

At the left-hand end of the staff are tiny icons which open powerful menus or windows. (See Figure 6.) An example is the icon for opening the staff's key menu. By "key" is meant "important." This menu consists of two columns of selections divided into 5 sections. The "edit related instrument" icon opens a window to the program's synthesizer where you can create all kinds of mischief in trying to develop your own unique musical sounds. (See Figure 7.)

There's More

While you are creating your masterpiece, *Melody Assistant* is creating a record of its own, compiling statistics about your creation. If you View Document Info... under the File menu, you will see all the work that you and the program have done. (See Figure 8.)

The program is very friendly if you play a fretted instrument of any kind including cellos, lutes, ukeleles, or guitars. (You can even define your own fretted instrument.) Through the use of tablature, you can show on your score how your selected instrument should be fingered. And since

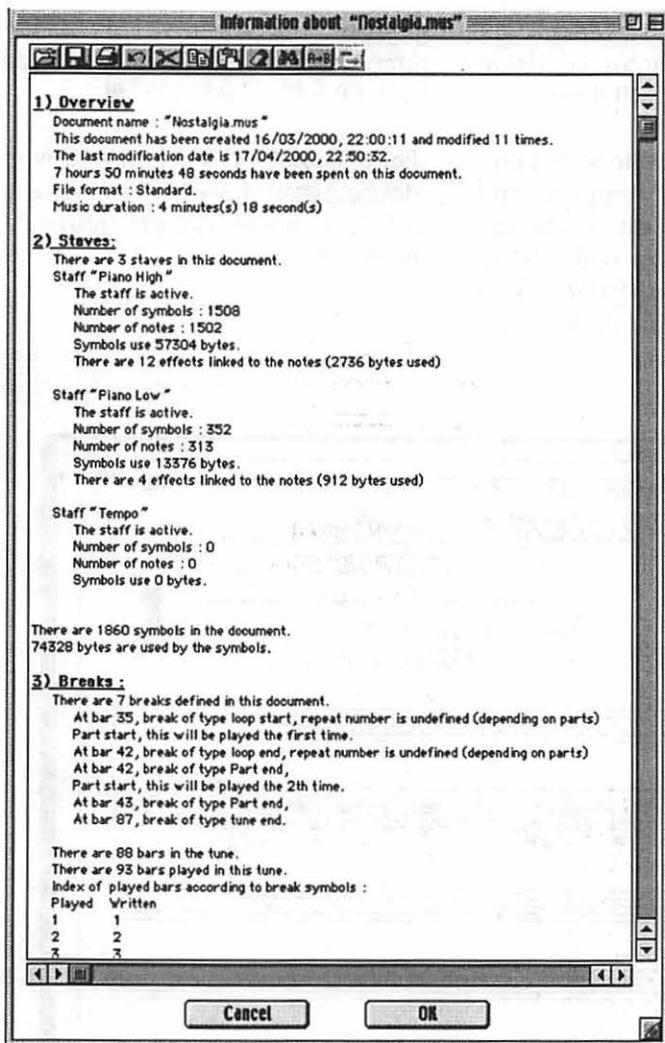


Figure 8.

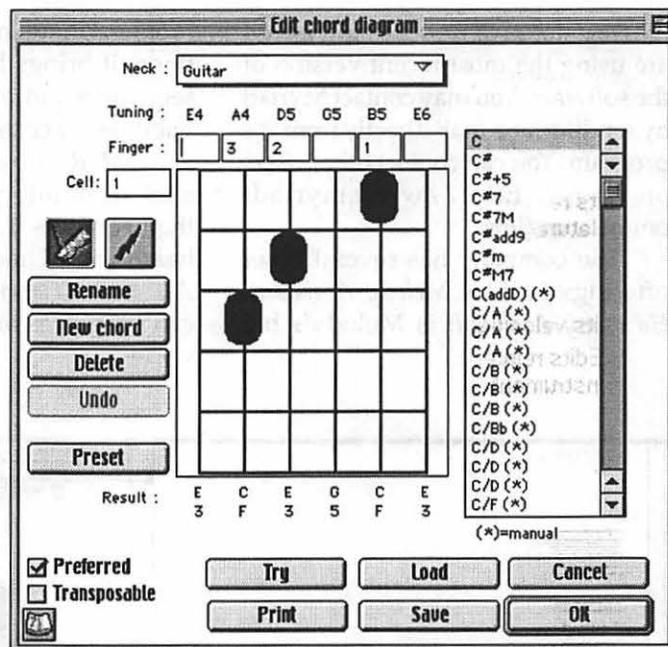


Figure 9.

there is more than one way to play the same chord, the Edit Chord Diagram window allows you to specify how the chord is played. (See Figure 9.)

Melody Assistant has a jukebox feature that allows you to develop lists of music which can be played in whatever order you set, including a random order. The jukebox allows you to automatically create an html file which can be posted on the Internet or run from a browser.

Finally, to end my brief overview of the program, printing is extremely flexible and capable. If your music appears on music staves, you can print your music. *Melody Assistant* allows you to position all of the ele-

ments of your score on the page so you get a very nice-looking printout. The print preview allows you to make adjustments to the margins, adjust the scale of the image, create headers and

How You Get It

footers, decide how to print instrument identifications next to the staves, decide which staves to print, etc. Then you can print to an EPS file or to your printer. (See Figure 10.)

I think you can tell from the tone of this review, that I am extremely excited about this program. I expect to have lots of fun with it for a very long time. I have placed my first completed effort on the WAP TCS. The name of the file is nostalgia.mp3.sit. This is a song by Yanni that I entered into *Melody Assistant* from some sheet music for piano that I happen to have and saved as an MP3 file.

Melody Assistant is currently up to version 5.1.1 and is available for download from Myriad at <http://www.myriad-online.com>. It runs on Macintosh (Mac/OS 7.5 to Mac/OS 9, 68020+ or PPC) and Windows (95,98,2000 or NT4). Again, it is only \$18 if paid through Kagi. It's \$15 if paid directly to Myriad.

E-mail support is free for all us-

“After looking on the Internet and searching on Delphi and other sources of shareware, I ran across *Melody Assistant*. This is the most incredible program for working with music on the Mac! It is so full-featured, it is really hard to believe it is only \$18 (paid through Kagi).”



ers (registered or not), but infers you are using the most recent version of the software. You may contact Myriad by sending an e-mail directly from the program. You can contact other users on <http://www.myriad-online.com/bbs>

The company has several other offerings besides *Melody Assistant*. *Harmony Assistant* is Melody's big

brother. On top of all the Melody options, it brings harmonizing, drum sequences and other MIDI input capabilities. It costs \$65

OMeR allows you to scan a musical score into your computer and then converts it into music you can hear, modify and print with *Melody Assistant* or *Harmony Assistant*. OMeR can be run as an independent pro-

gram, but you'll need Melody or Harmony to view documents generated by it. OMeR's cost is \$15. ■

(For a sample MP3 file created with *Melody Assistant*, see the Pi's Web site at <http://www.wap.org/journal/melodyassistant/>)

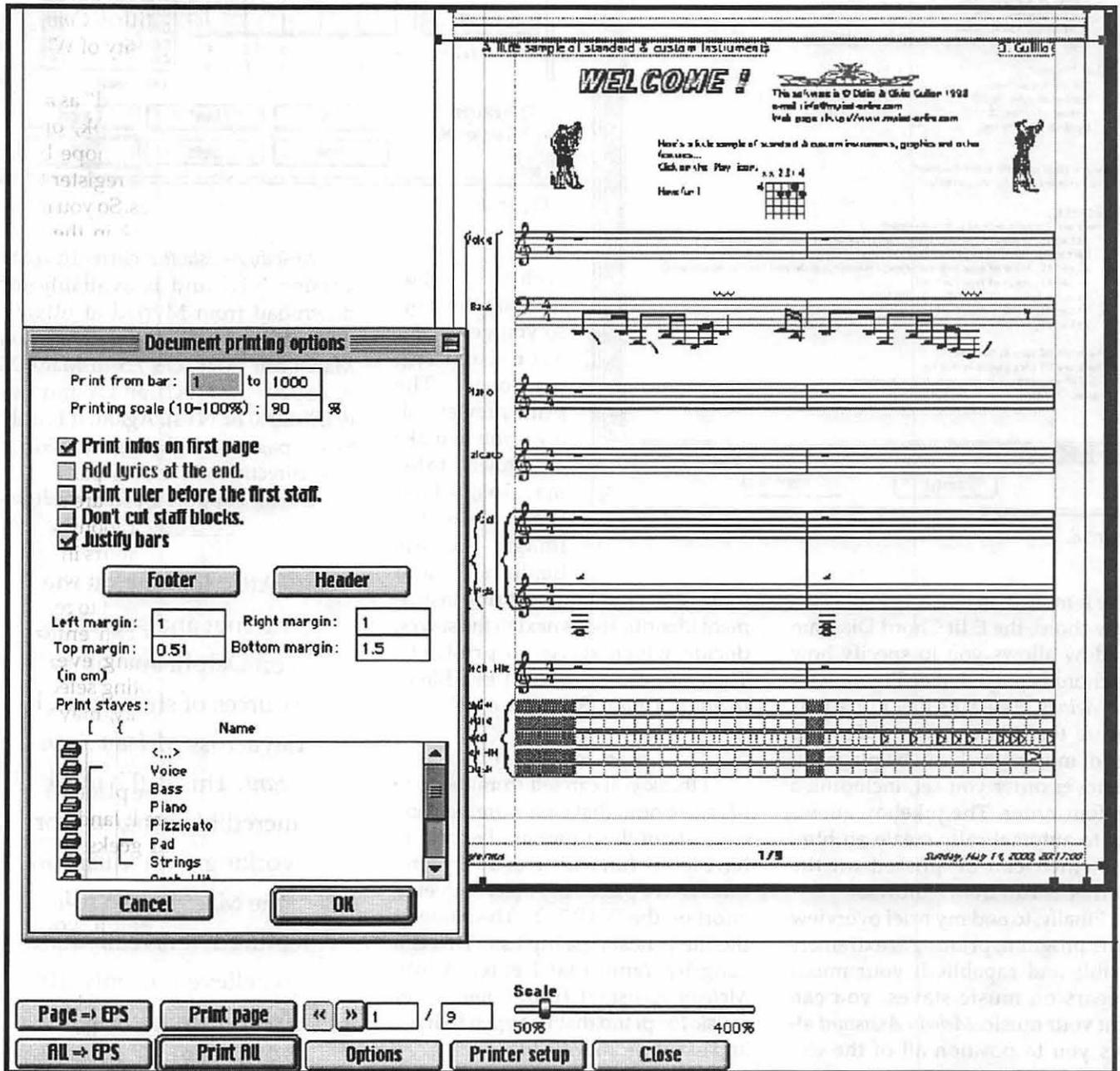


Figure 10.

The Geek Handbook: A Review and History

© 2000 Lawrence I. Charters

First, The History

SEVERAL YEARS ago, someone sent me a very funny document via E-mail, titled "A Girl's Guide to Geek Guys." Written by Mikki Halpin and Victoria Maat, the document was otherwise unattributed. This was fairly early in the history of the "commercial" Internet of today, and E-mail was just beginning to replace fax machines as the tool of choice for sharing samizdat* bits of humor and wisdom.**

After a fruitless search for the authors (I wanted to reprint it in the *Washington Apple Pi Journal*), I decided to post it on the Pi's Web site:

<http://www.wap.org/ifaq/sex/geekguide.html>

It has been up there since September 4, 1995, one of the oldest entries in the Pi's famously odd and unusual "Infrequently Asked Questions" archive.

Then, on April 10, 2000, the Pi Webmaster received an E-mail from Mikki Halpin:***

Hi!

I noticed you have an unauthorized copy of my and Victoria's article "A Girl's Guide to Geek Guys" up on your website..... it's fine—At this point I have given up on trying to deal with the republishing! but I would like to ask you to please put a sen-

tence or something somewhere that mentions I now have a book out based on the article. It's called The Geek Handbook. You can link to the Amazon page for the book, or to the book website www.thegeekhandbook.com. I can also send you a little gif of the logo if you like.

Naturally, we put a link on the Pi Web site to Mikki's Web site. Then we read the book.

Now, The Review

As far as user manuals go, it has some common similarities and some common flaws. Similarities include a decent table of contents, appropriate (if somewhat startling) illustrations, and no index. The biggest common flaw: no index. Does a 113 page book need an index? Yes: it makes it easier to look up quotes.

For example, in the "Geeks and History" section, it has this entry for 1884:

Nikola Telsa arrives in America. He goes on to pioneer innovations in radio, electric current, vacuum tubes, and many other areas. Germphobic and really geeky (at dinner parties he often calculated the cubic contents of his plate), Telsa set a standard for brilliance and eccentricity which still stands.

Isn't that well worth knowing? If the book had an index, you could easily use it to see that this entry is on p. 31. Without an index, you'd have to puzzle through several pages, and run the risk of getting confused when looking up critical information ("Was that Nikola Telsa or Robert J. Van de Graaff?"). Similarly, without an index, it is harder to discover when the first Radio Shack catalog was published (1939) or the name of the first computer manual (Fred Gruenberger wrote the cleverly titled *Computer Manual* for the University of Wisconsin Press in 1952).

The book is "packaged" as a POP (Point-Of-Purchase) book, one of those things publishers hope bookstores will put near the register to attract impulse purchases. So you might find *The Geek Handbook* in the computer section of a bookstore, or you might find it in with the "Juggling for the Complete Klutz" books and other POP offerings.****

Though not without controversy (see the two accompanying articles), I can say this is almost perfect reading fare for taking long, trans-Pacific flights. True, your fellow passengers may look at you as if you are a loony but, let's face it, only a loony would be willing to spend 19 hours in the air during a 24-hour period. It will take only a fraction of the flight to read the book, and then you can entertain yourself by tormenting everyone within earshot by quoting select passages. (This, by the way, may result in an added bonus: your travelling companions may offer, even insist, that you be first off the plane when it lands. Or even before it lands.)

Learning about geeks is also a good survival skill. As one bit of Internet graffiti recently noted, "Treat geeks with respect. You'll work for one someday."

* Samizdat is a Russian word meaning "self publishing." It originally referred to the

underground press in the Soviet Union, duplicating and distributing banned books. In recent years the meaning has expanded to cover the ability of individuals to use laser printers, E-mail and the Web to publish material without benefit of formal publishing channels.

** Prior to fax machines, of course, people used bumper stickers. As almost everyone knows, bumper stickers lack the bandwidth of fax machines, and are not a safe medium for messages longer than, say, three to five words. And fax machines have but a fraction of the bandwidth of E-mail. If you want to get rich, find the next great medium for bumper sticker wisdom, something that will eclipse even E-mail. Then find a geek to create it, and make billions.

*** The E-mail said it was sent with "Microsoft Outlook Express Macintosh Edition - 4.5." We considered this a good sign, though she should probably upgrade to 5.0.

**** A sick bookstore employee with a sense of history might place it in the cookbook section. "But that would be wrong," as Richard Nixon said.

Mikki Halprin, *The Geek Handbook: User Guide and Documentation for the Geek in Your Life*. Pocket Books, 2000. \$9.95. ISBN 0-671-03686-6 ■

I Am Not A Geek. Honest

© 2000 Lawrence I. Charters

DESPITE THE claims of A Certain Individual (see the review by Kathleen G. Charters on following page), I am not a geek. I have two degrees in the humanities, and none in the sciences. (The Certain Individual, by comparison, has four degrees in the sciences, including a Ph.D.) For fun, I read novels by Tom Clancey, John Grisham and Eiji Yoshikawa, not manuals on C++, CORBA and TCP/IP.

The Certain Individual, it should be noted, has been known to carry two cell phones, three pagers and a Palm V portable digital assistant — at the same time. It has been suggested that this Certain Individual should wear a bandolier, only instead of several hundred rounds of ammo,

the bandolier could carry the various "absolutely essential" electronic devices necessary to get through a routine work day. This Certain Individual has been known to remove an umbrella, a draft manual on minimum datasets for health care, a notebook hole punch, and tickets to Wolf Trap for Tchaikovsky's "1812 Overture" (with cannon) from her purse — in succession.

True, at one time or another I have written programs in FORTRAN, BASIC, COBOL, APL, SNOBOL, Spitol, Icon, and a few other languages. But, to be honest, hasn't everyone?

Then, while reading *The Geek Handbook*, I came across this passage:

If you want to talk to your geek, or spend some quiet off-line time with her, consider providing a low-intensity activity for her during these sessions. A jigsaw puzzle or some Legos can be very helpful. Remember to monitor your geek carefully for obsessiveness: if she begins building a robot with the Legos, take them away and substitute a more organic project. Sorting things or washing dishes both work well.



Are you a Mac Junkie? This gentleman was selling T-shirts that allowed you to proclaim your addiction to the entire world. (Photo by Lawrence I. Charters)

I felt a cold chill. This sounded vaguely familiar...

For as long as I can remember, I've had the habit of playing with things at the dinner table. My mother and grandmothers used to complain about this, my spouse complains about this, and my daughter tends to follow my example (and my spouse, very unfairly, complains, to me, about that, too). Occasionally, this has proven embarrassing, such as a quiet, romantic evening once upon a time at the Lumberjack Café in Troy, Idaho.

The Lumberjack Café had a rustic outer appearance, but featured a nine course meal at prices almost within the reach of college kids. The service was also pleasant, and a bit slow, offering ample opportunities for quiet conversation. The restaurant also had some really neat salt and pepper shakers, an unusual, heavy ceramic tray for holding packets of sugar, some table decorations held together with elastic bands, and some extra-long stainless steel dinnerware.

I have long been fascinated with ballistas, catapults and trebuchets. Using nothing more than a round salt shaker and a spoon, it is fairly easy to construct a trebuchet capable of hurling a packet of sugar the length of a restaurant (and it is, theoretically, possible that I may have done that once or twice). Ballistas and catapults, however, require more resources.

And so it happened that, over the next half hour or so, while we talked and ate a few preliminary dinner courses, something between a ballista and a catapult slowly took shape on the table. At a casual glance, it still seemed like a sugar tray, salt and pepper shakers, and dinnerware. But angles were measured, trajectories plotted, and plans were made.

Finally, when the waitress wasn't around, the elastic bands came off the table decoration and were quickly attached to the other pre-positioned elements. The ballista/catapult was cocked. The path to the next table, the projected target, was clear. The lever was released.

And a stainless steel fork (extra long) rocketed across the room, 30 feet beyond the target table. Finding a crack in a barely opened window, the fork zipped out of sight. The romantic glow in the eyes of my dinner guest flared up, but the message was not one of gentle love and understanding. I received a clear telepathic message: "I'm going to murder you after dinner. Now stop playing."

Taking a "restroom break," I casually strolled by the window, seeing if I could recover the fork. It was buried in a tree, about 20 feet off the ground. (Given the growth rate of this kind of tree, it could well be 100 feet off the ground today.)

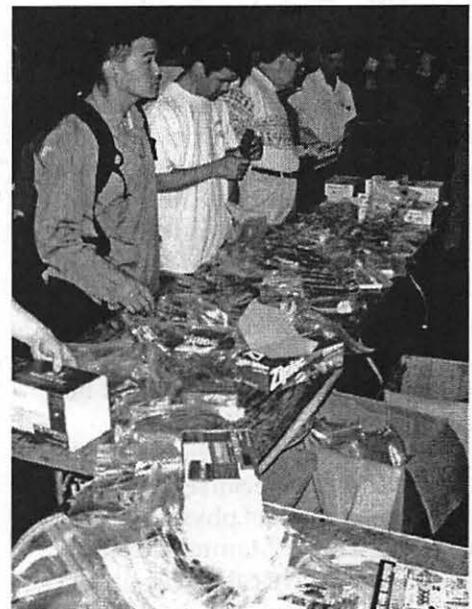
I did, somehow, manage to live through the evening. Furthermore, while I admit this does look bad on my record, I am not a geek.

Honest. Though I do like Legos. ■

The Geek Handbook: A Review

© 2000 Kathleen G. Charters

THIS SLIM volume (113 pages) is packed with insight and practical suggestions. I am part geek, married to a pure geek, and mother of a nongeek. I recognize myself at times, my spouse is described on every page, and my daughters' strategies are apparent in *The Geek Handbook: User Guide and Documentation for the Geek in Your Life*. Mikki Halpin does a wonderful job capturing the essence of geek in a format familiar to those who read computer manuals. She cleverly addresses the fact that a geek may be either male or female by alternating between paragraphs the pronouns used to describe the geek. An owner is anyone who has a relationship with a geek, which could be a boss, parent, child, co-worker, lover, or friend. This book provides geek owners with the necessary skills to help their geek grow and thrive. *The Geek Handbook* covers the basics of communicating with your geek, geek features, maintenance, and troubleshooting. Using this information, owners may help their geeks lead happy, healthy, and productive lives.



You could sell almost anything, it seems, if you first packaged it up in a Ziploc bag. (Photo by Lawrence I. Charters)

"Chapter One: Getting Started" provides a frame of reference, explaining 'your' geek isn't really yours since geeks are their own people. A fun geek diagnostic test uses the Y2K bug, *Star Trek*, and Scrabble to distinguish between geeks and nongeeks. Variations of the basic geek model (co-worker, boss, spouse or lover, parent, child, and neighbor) are addressed, with features, known bugs, and tips for each geek type.

"Chapter Two: Basics" warns you of the dangers of comparing your relationship with your geek with the relationship between your geek and her machine. The advice is "Stop yourself right there. This way lies madness, or as your geek might put it, a nonproductive feedback loop." According to Halpin, the most important lesson of *The Geek Handbook* is to:

"make sure your geek understands that when you encourage him to spend time away from the computer, it is...in order to help your geek feel more productive and happy when he is back at the computer."

A humorous geek history helps owners recognize the continuum of geek culture, starting with 3000 BCE and ending with 1991 as the beginning of The Geek Age. Examples of conversations you hope will happen between you and your geek and how those conversations actually turn out is worth the price of the book. Encouraging your geek to perform more complicated tasks results in upgrading your geek (not a conversation, since your geek "may be lost when you expect intuitive responses.") Halpin shows how tailoring your side of the conversation so that your geek understands what is expected of her will get the results you want.

Keeping your geek in top condition is difficult because geeks are proud of their lack of physical health. "Chapter Three: Maintenance" addresses preventive care, geek dietary

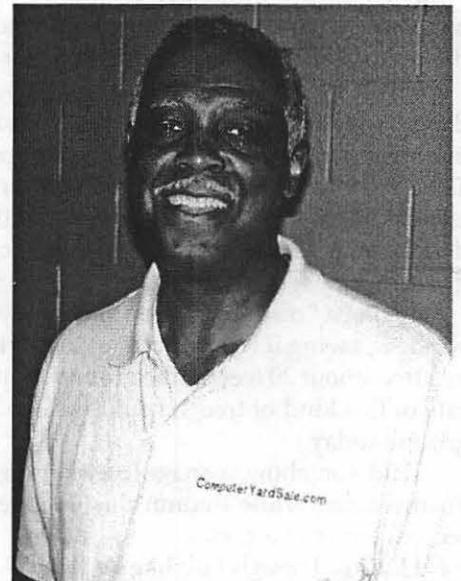
needs, the way geeks perceive time, geek physical fitness, and common geek bugs. The advice is sound for altering your geek's nutritional program, and presenting opportunities for a more efficient body. I particularly like the program to train your geek to eat an entire meal in a separate room without leaping up to check something on the computer. The description of geeks in a dormant state is very insightful. Halpin's advice for gently training your geek to monitor his own health and to take a few simple proactive steps to ensure longevity is valuable. After all, your geek is the only geek you have, and you want her around for a long time.

"Chapter Four: Living in a Geek World" discusses the proclivities of "a geek who has seen the predictive value of science fiction proven over and over again." There are several factors contributing to geek longevity, including reluctance to do basic upkeep on her current body, low nutrition geek lifestyle, and lack of sleep.

Halpin's advice is to "discuss risk management with your geek and attempt to keep her as safe as possible." Geeks play a significant role in the new economy. This may be a source of stress and make your geek a target of "geeksploitation." Conversely, geek culture and values increasingly influence the world. Halpin speculates this will affect regulation, electronic copyright legislation and enforcement. For your geek, life is a matter of solving as many mysteries and puzzles as possible before death. Therefore, "geek values will push our culture to better itself and to rethink its goals and assumptions. Each day will provide new quests, upgrade opportunities, and problems to solve." This is the reason to love and honor all geeks for what they bring to our lives. ■

Mikki Halpin, *The Geek Handbook: User Guide and Documentation for the Geek in Your Life*. Pocket Books, 2000. \$9.95. ISBN 0-671-03686-6

Adding your Web address to your polo shirt is an excellent marketing strategy. Somewhat unclear is the answer: do you click once or twice to go to that site? (Photo by Lawrence I. Charters)





Pi Toppings: Tips from the Tutorials

Setting Up Stuffit Expander

by Pat Fauquet (pat.fauquet@tcs.wap.org)

Pi Toppings will be a regular part of the Journal, offering tips taken from Washington Apple Pi's classroom materials.

Using Stuffit Expander

LOCATE Stuffit Expander and make an alias of it to keep on the desktop. (See figures this page for steps a-e.)

a) Double click on the "Macintosh HD" icon to open your hard drive.

b) Double click on the "Internet" folder to open it.

c) Double click on the "Internet Utilities" folder to open it.

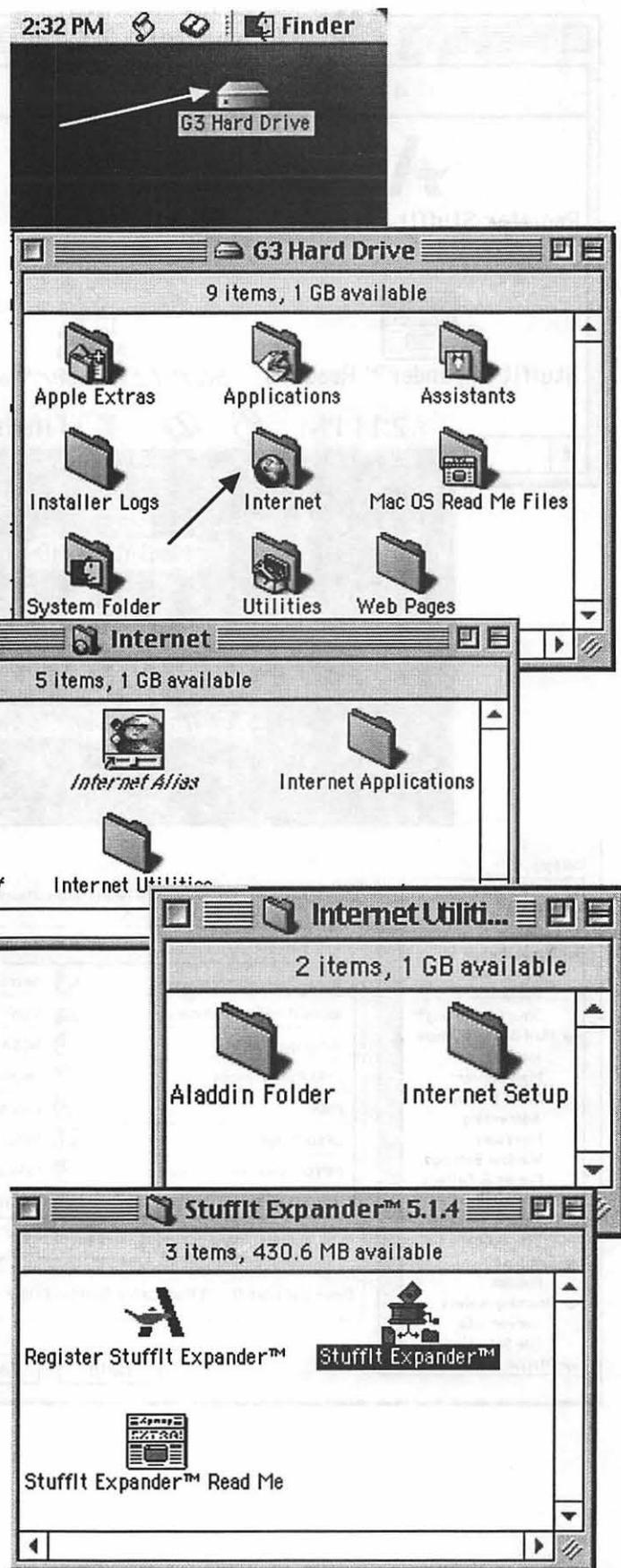
d) Double click on the "Aladdin Folder" to open it.

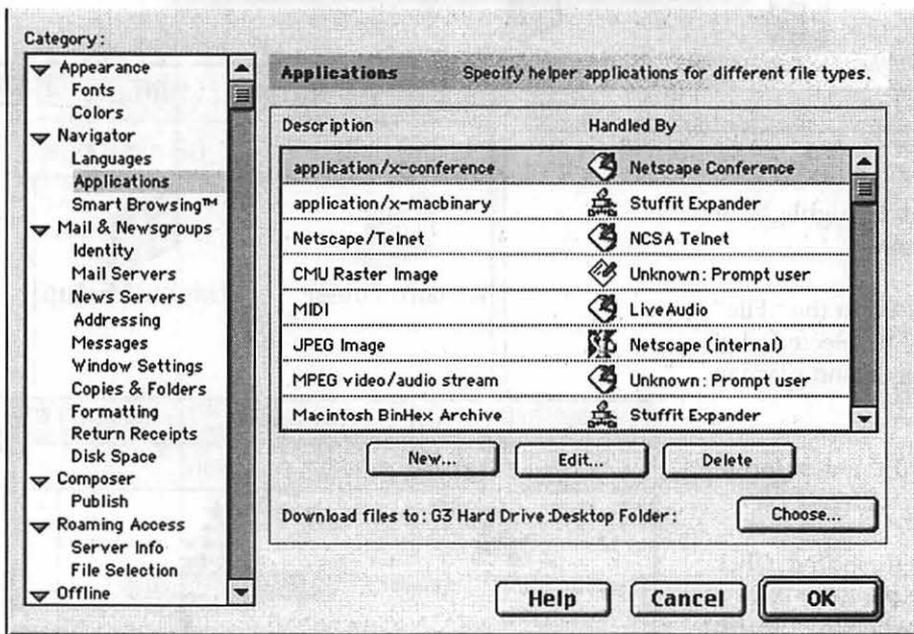
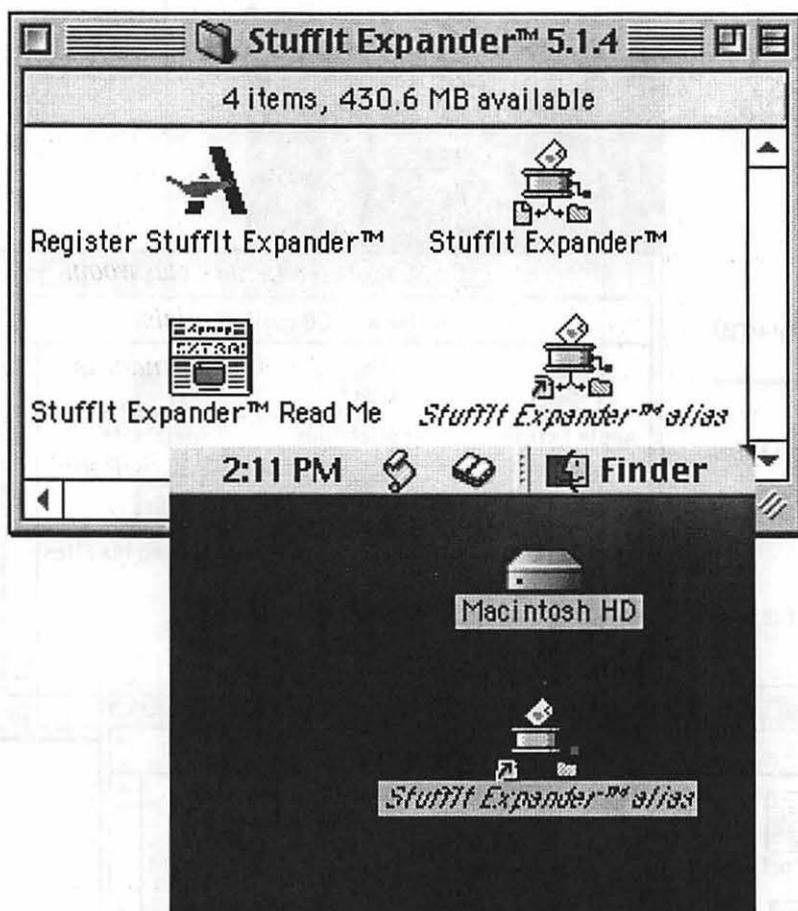
e) Click on the "Stuffit Expander™" icon to highlight or select it. DO NOT double click on this icon.

f) When the icon is selected (darkened), go to the "File" Menu and pull down until "Make Alias" is selected. Let go. This will make an alias of the Stuffit icon and place in in the same folder as Stuffit.

g) Drag the "Stuffit Expander™ alias" to the desktop of your computer.

h) When you have a file that needs to be unstuffed, Click on the icon and drag it to the Stuffit Expander alias on your desktop. Release the mouse button when the "Stuffit Expander" alias icon darkens.





Selecting a Place to Download Files

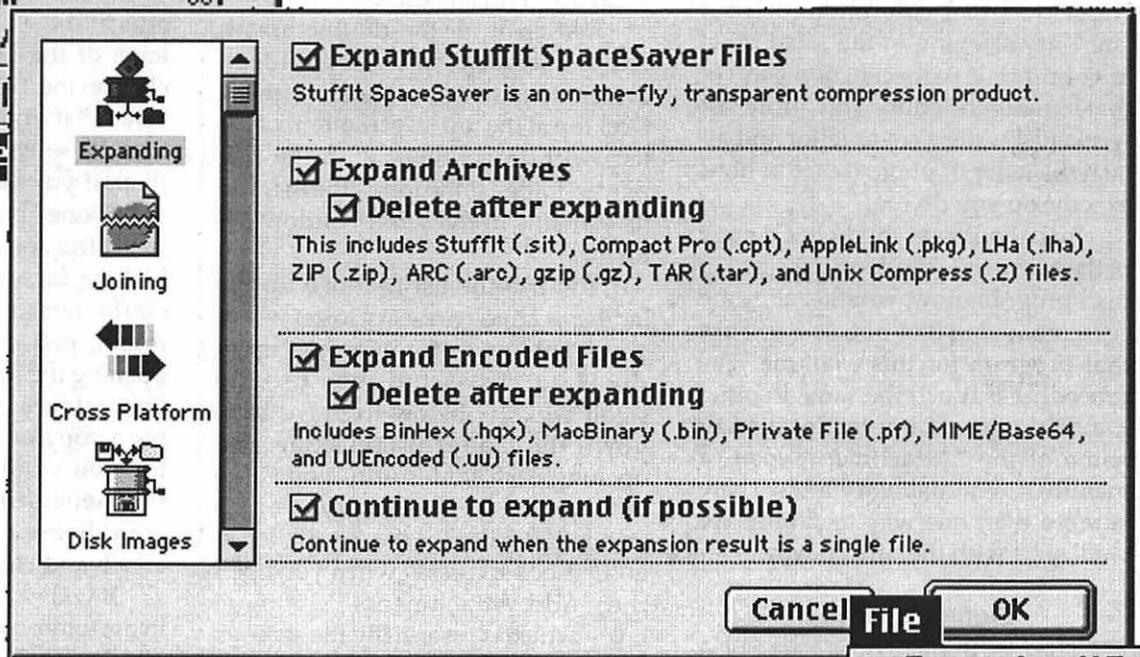
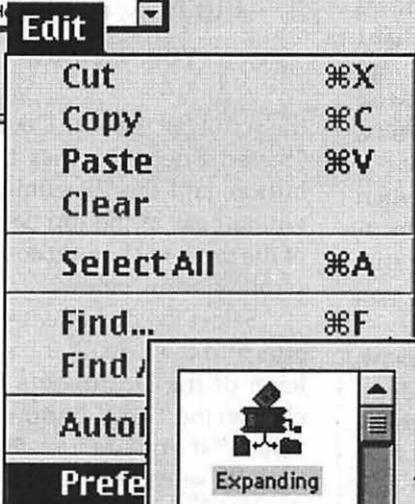
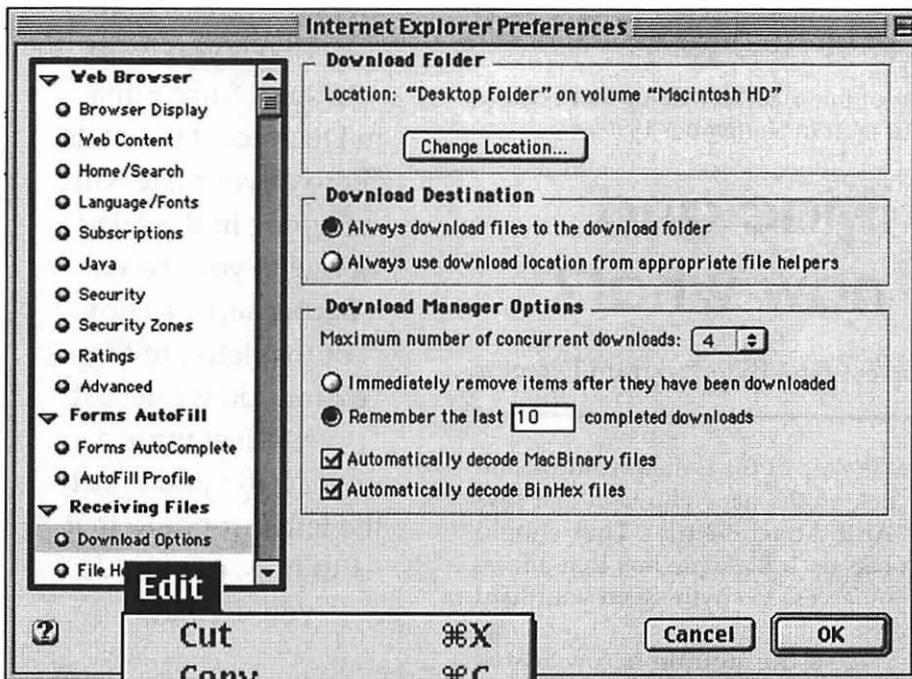
Launch your Internet browser. The "Preferences" dialog box can be accessed in both Netscape Communicator and Internet Explorer by selecting "Preferences" in the "Edit" menu. Note where the program is set to save downloaded files. Placing them on the desktop is a good location since you can see what you have downloaded and then put the files in folders or install the software.

Setting Stuffit Expander's Preferences

1. Double click on the Stuffit Expander alias on the desktop. This will start the program.
2. Select "Preferences" in the "File" Menu.
3. Put checks in the boxes in the preferences box to match those below if you would like to keep only the final product of your download. ■

Edit

Undo	⌘Z
Cut	⌘X
Copy	⌘C
Paste	⌘V
Clear	
Select All	⌘A
Get Info	⌘I
Find...	⌘F
Find Again	⌘G
Search Messages...	⇧⌘F
Search Internet	
Message Filters...	
Preferences...	



Pi Toppings will be a regular part of the Journal, offering tips taken from Washington Apple Pi's classroom materials.

Stuffit Expander is explained with screenshots to help you with each step.



A series from *MacWest Memo*, newsletter of the MacWest Computer Society (British Columbia, Canada). This part four is from September 1999.

I bought an iMac and plugged it in, now what?

by Terry Lawrence, MacWest First Byte Program Director

Getting Started #4: E-mail attachments

Attaching photos, documents, and folders to E-mail.

ONE OF THE best features about E-mail is that you can attach existing files, folders, documents, photos, and so forth—just about anything on your hard disk, in fact—to an E-mail, and send them anywhere in the world at no cost. So if you want to send Aunt Edna in Düsseldorf that cute photo of your late Kitty sleeping in the salad bowl at your recent Barbecue, or a copy of that letter to the editor you wrote last week, just write a cover letter and attach the letter or photo to it. But how, exactly, do you do that?

Just about everybody has a copy of the Microsoft "Outlook Express" E-mail program now, whether they are currently using it or not, so I will use that program for this example. The procedure is much the same in other E-mail programs, but the location or name of the "Attachment" icon or menubar item may vary a bit. There is more than one way to do this, so we'll start with the official way.

Getting started.

The first thing to do is start a new E-mail by clicking on the "New" icon, or reply to an existing E-mail from Aunt Edna or whoever, by clicking on "Reply." When you have the cover letter written, look at the little icons

at the top of the E-mail window, and click on the paperclip icon that says "Add Attachments." That should open up a dialogue box that allows you access to anything on your hard disk.

Use the double arrow in the header at the top of the dialogue box, which will probably say "Documents" or "Outlook Express" when you first open it, to find the Documents folder, if it isn't the one displayed above the scroll list when you open the "Attach" dialogue box.

Just click on the double arrow, and a hierarchical list of folders, drives, documents, or photos with the Desktop at the top level (bottom of the list) will drop down, with the displayed folder at the top of the list, and its contents in the scroll window below it.

You use the list to move up the ladder as far as necessary to get where you want to go—for example, up to the Hard Disk—and then use the scroll window below to move back down the ladder by selecting and opening each folder until you come to what you are looking for. For instance, if the item at the top of the list is "Outlook Express" when you open the "Add Attachments" dialogue box—which is essentially the same as any "Save" or "Open" dialogue box—you would click on the double arrow, choose your Hard Disk by highlighting it, and a list of the top level folders in the Hard Disk will appear in

"So if you want to send Aunt Edna in Düsseldorf that cute photo of your late Kitty sleeping in the salad bowl at your recent Barbecue, or a copy of that letter to the editor you wrote last week, just write a cover letter and attach the letter or photo to it. But how, exactly, do you do that?"

the scroll list. Select "Documents" or "Saved Photos," press the "Open" button, and the "Documents" folder will appear in the top bar with a list of the top level items it contains in the scroll window below.

Select the document you want to attach to the E-mail, if it's at that top level of the Documents folder, and click on the "Add" button. Then press "Done" if you are just attaching one item, or select further items and add them if you want to, before pressing the "Done" button.

If the document or photo you are looking for is buried one or two levels (folders) deeper in the Documents folder, just continue selecting and opening the folders until you reach it. For instance, if you wanted to send me a copy of your Letter to the Editor, you would just select and open the "Letters to the Editor" folder, and then choose the letter you wished to attach and click the "add" button.

If you wanted to add all the items in the folder, you would click the "add all" button. If you change your mind and don't want to attach anything, just click the "cancel" button. Photos, Clip Art, Folders, and so forth work just the same way.



In any Save, Open, or Attach dialogue box, you can always come back up the hierarchical list as far as you want at any time by clicking on the double arrow in the list header, and selecting the level you wish to return to. When you are done adding documents, photos, or whatever, just click the "Done" button, and you will return to the E-mail window you were writing in, with a new list of added attachment icons at the bottom of the window. Finish your letter, hit send, and Aunt Edna will have a copy of the last picture ever taken of the late Fluffy snoozing in the salad.

Opening E-mail Attachments

To open any attachments you may receive in your E-mail, just click on the paperclip icon at the right side of the E-mail window, select the attachment, and the computer should do the rest, figuring out which program to open it in, and opening the program and attachment. Sometimes the attachment may be written in a program, or compressed or saved in

a format you don't have, which none of your existing programs can translate or open. In that case, you will be unable to open the attachment.

Warning! If you don't know who sent you the letter, do not open any attachments, as they could contain a virus. Instead, if you have a current anti-virus program, open the E-mail by double clicking on it in the "Inbox" window, and then drag the attachment icon out of the E-mail window and drop it onto the Virex or Norton Anti-Virus icon on your Desktop. That should cause your anti-virus program to scan the attachments before opening them. If you want to be on the safe side, just drag the attachment icon straight into the trash can and empty it without opening the attachment.

Drag 'n Drop attaching and opening

The other way to attach a document, photo, or whatever to your E-mail is to open the E-mail program and start a new letter or reply, so that

you have an open E-mail window. Resize the window so you can see the Hard Disk Icon.

Open the Hard Disk folder window alongside or on top of the E-mail window, so you can scroll through the contents of the Hard Disk. This is easier if you have a larger monitor. I usually have my Hard Disk window sized so it occupies the left hand third of the display when open. Find the item you wish to attach in the Hard Disk window, and drag its icon onto the open E-mail window and drop it. A copy of the document, photo, or folder will attach itself to the E-mail.

Conversely, if you open up a received letter in your E-mail program by double clicking on it in the list, you will see the icons of any attachments in a secondary window at the bottom of the letter. Double clicking these icons will cause the attachment to open, if it is in a format your computer can read. You can also simply drag it out of the E-mail window into any other folder or external drive disk you wish to copy it to. ■

A series from *MacWest Memo*, newsletter of the MacWest Computer Society (British Columbia, Canada). This part five is from September 1999.

I bought an iMac and plugged it in, now what?

by Terry Lawrence, MacWest First Byte Program Director

Getting started #5: Setting up an Internet account

Finding an Internet Service Provider (ISP) and opening an account.

MOST PEOPLE who buy a computer today intend to use Email and "surf the net," and

many people with an older computer who were not previously connected are connecting now. Since this series is aimed at new users purchasing a contemporary computer, particularly iMacs or iBooks, I am going to assume you are using Macintosh Operating System (Mac OS) 8.5, 8.5.1, or 8.6, which are the versions installed on

iMacs, and describe how to configure your Internet and Email settings in those OS versions. These recent systems provide an "Internet Setup Assistant" to facilitate configuring your settings so your computer can access an ISP, send and receive Email, and "Surf the Net." Older versions of the Mac OS use various control panels such as TCP/IP, Internet Config,, Internet, Modem, and PPP to enter the settings. You can also use these Control Panels to set up, change, or edit an Internet account in OS 8.5x.

But, before you start entering your settings, you have to have some settings to enter. You need to set up an account with an Internet Service Provider (ISP), who, for about \$20.00 per month, will provide you with an Email address, access to the Internet, and maybe space for a Web Page of your own.



Different connection systems

There are three common types of ISP service. Regular service costs about \$20.00 per month and uses your existing analog phone line and the modem built into your iMac or iBook. This type of service is fine for most people, and does not require purchasing or installing any new equipment. Most ISP's now provide about 150 to 200 hours a month for the \$20.00, which is more than you are likely to use.

The downside of this type of service is that when you are connected (online), your regular phone is tied up and cannot be used. You can install a dedicated phone line for your computer, which will cost you another \$25.00 or so per month, but if you are going to spend \$45.00 or \$50.00 per month on your connection, you might want to consider the alternative services.

ISDN is a Digital, as opposed to Analog, data transfer system which uses your regular copper phone line, but requires a special adaptor, or modem. You can download files at several times the speed of a regular modem and phone connection, and you can still use your phone and or FAX while connected. It costs about \$55.00 per month, and you may have to pay extra for the special modem. If you intend to do a lot of file transfers, or spend a lot of time on the net, you might want to look into this option.

Cable connection uses the same cable as your Cablevision TV hookup. Like ISDN, it is much faster than a regular modem/phone line hookup, and can transfer files much faster. The price is similar to ISDN, and it also requires a special modem, which you usually have to pay for.

Your local free Computer Paper, or the newspaper, or the Yellow Pages in your phone book, all list lots of Internet Service Providers to choose from. The prices and service options are very similar, so your main consideration should be their Macintosh

tech support, and the number of available dial-in lines in relation to the number of clients/customer base. If, for example, your ISP has 10,000 customers and 200 lines available, then only one of every 50 customers (clients) can use the service at any given moment. This may mean difficulty in connecting to the 'net at peak usage hours. On the other hand, if the same ISP had 1000 lines available, then one in every ten clients could connect at any given moment. You would probably be able to get through on the first try most of the time. Ask the ISP's you are considering purchasing service from if they have dedicated Macintosh tech support, what their tech support hours are, and what their customer base to available lines/connections ratio is.

Getting started

Most ISP's will send you an Install Kit of some sort which contains various outdated Web Browsers and Email programs, and their settings. You do not need any of this, and if you install it, you will have to waste a lot of time and effort to get rid of all the outdated Extensions, Control Panels, and programs the installer will load onto your Hard Disk. All you really need is the settings (configurations) for the ISP you are going to connect to the Internet through. You should get those settings from the ISP when you sign up. If they didn't provide them, phone their Macintosh Tech Support number and get them.

The settings and information you need are:

- (1) Account Name. (The name you will use with the ISP for your account—e.g., bobg. or jsmith)
- (2) Account ID. (A verification password, usually something like your mother's maiden name)
- (3) User Name. (usually all lower case, and probably the same as your account name—e.g., bobg)
- (4) Email Account. (usually your

user name plus Email server—e.g., bobg@pop3.radianet)

(5) Email Password. (a password chosen by you and provided to your ISP to protect your mailbox)

(6) SMTP Server. (Simple Mail Transfer Protocol host—e.g., mail.radiant.net)

(7) Email Address. (The Email address you give to your friends—e.g., bobg@radiant.net)

(8) Internet Service Provider configuration. (usually PPP—Point to Point Protocol)

(9) Search Domains. (Your host's Internet address—e.g., radiant.net)

(10) Name Server Address. (This will be two sets of four numbers separated by dots such as:

2 0 1 . 3 3 4 . 1 7 2 . 3 5
201.334.165.17)

(11) ISP phone number. (the phone number your modem dials to connect to your ISP)

(12) Domain Name. (Usually the same as the Search Domains—e.g., radiant.net)

(13) Email Host. (Usually your ISP's name with "mail" in front of it—e.g., mail.radiant.net)

(14) NNTP Host. (Usually your ISP's name with "news" in front of it—e.g., news.radiant.net)

(15) POP Server. (Usually your ISP's name with "POP" in front of it—e.g., POP.radiant.net)

(16) Your ISP's tech support line. (The phone number for technical assistance from your ISP)

(17) Your ISP's office line. (The phone number for account and billing information from your ISP)

Entering the ISP and Modem settings into your computer

You can do the entire setup procedure through the Internet Setup Assistant which should be located in the Internet folder on your hard disk, and should also be accessible through the Apple Menu on the top left corner of your display screen. Just open the Internet Setup assistant and enter



the data supplied by your Internet Service Provider into the appropriate boxes as the Setup Assistant walks you step by step through the process.

You can also enter the information directly into the Control Panels where it will eventually reside. These Control Panels are accessible through the Apple Menu > Control Panels. They are:

Modem

Check this Control Panel to make sure you have the correct modem selected (probably iMac internal 56k modem), and that the modem port is selected (NOT THE IR (infrared) PORT)

TCP/IP

This is where you choose your connection protocol (usually PPP), enter your two sets of Name Server Address numbers—e.g., 201.123.456.55—and enter your Search Domains—e.g., radiant.net)

Internet

This is the general control panel where you enter your Email address

and account information, select or change your Email and Internet browsers, and enter most of your preferences.

Remote Access

This is the control panel where you enter your name, password, and the phone number your modem will use to dial up the Internet Service Provider's modem and establish your connection

Chooser

Make sure Appletalk is INACTIVE unless you are on an Appletalk network

PPP

On older versions of the Mac OS, you will have a PPP control panel where you will enter some of the settings which would be entered into the above listed control panels in Mac OS 8.5 and later.

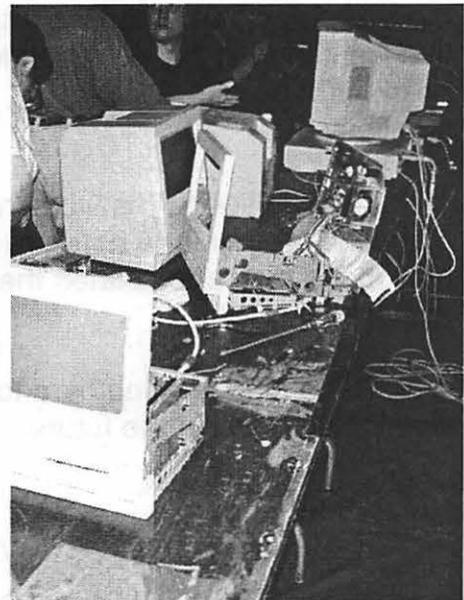
Setting your Internet Browser and Email preferences

This is a whole different topic for another day, but in general you set

your personal preferences such as font (type) size, whether to connect to the Internet when opening the program or only when told, when to delete or empty the cache, and so forth by choosing the EDIT menu from the menu bar across the top of your screen, and then selecting "Preferences." This will open the Preferences control panel for the particular program, and allow you to set your preferences to suit yourself. For example, if you are getting older and your vision isn't what it used to be, you might want to select a larger font size to make it easier to read your Email or Web Page text.

Remember, you can always change any of the settings you have entered by opening the appropriate Control Panel and typing in the new settings. You may need to do this, for example, if your ISP changes your local dial-in number or Name Server Address. OK. You're ready to connect to the Weird Wonderful Web. Off you go. ■

In the past, drawing tickets for prizes was left to gravity and fate: the tickets were placed in a container, shaken and extracted by hand. But in the year 2000, the Pi has gone electronic, with an automated ticket-drawing program. What will they think of next? (Photo by Lawrence I. Charters)



The Pi's computer check-up table saw a constant stream of business as people brought their tired, their old, their troubled computers by to have them checked out. Minor outpatient surgery was also performed. (Photo by Lawrence I. Charters)

π

Virginia Geoffrey
Refugee Family Advocate
129 North Irving Street
Arlington, VA 22201

(703) 243-7181

(800) 581-5947

(703) 243-0632 fax

email - jandefn@cals.com

April 6, 2000

Washington Apple Pi
12022 Parklawn Drive
Rockville, MD 20852

Dear Apple Pi Members:

Thank you so very much for the donation of 15 SE Macintoshes and printers. I am planning a workshop on April 18 with Pat Fauquet to help middle schoolers use the computers, and then we will send them home with the computer. We are doing this workshop at the Arlington Mill Community Center, in the Columbia Heights West neighborhood of Arlington, VA, that now houses many refugee and immigrant families.

In addition to the workshop planned, I have already shared three SE's with Maryland families and here are the pictures to prove it! You can see by their faces how much they appreciated their SE's -- and this was before we got the printers working!!

The Pi is working hard to be a good neighbor and it shows. I look forward to working with you in the future.

Sincerely,


Ginger Geoffrey



Computers donated by the Pi the Refugee Family Advocate are put to good use.

Pi Fillings—The CD, version 7

A list of contents

Mac System Updates : This folder contains updates to Mac OS system software. If you do not see a folder that addresses your needs, such as updates to Mac OS system software 7.6., 8.0, and 8.5, each can be found on Apple's web site at <<http://asu.info.apple.com/>>. If you do not own the basic Mac OS system software, each is available at 1+800/293-6617.

AirPort Config: is a Java-based configurator for the Apple AirPort BaseStation. Thus, this seemed a good place to put it. However, it is not an Apple product.

Apple DVD Player 2.2: is a software-only DVD player. It is not compatible with the DVD hardware in the G3/G4 or G-series PowerBooks.

Apple Server Updates: AppleShare Client 3.8.6; AppleShare IP 6.3.2; Macintosh Manager 1.3; MacMgrSecurityBypass; Network Assistant 8.5 and 8.6; Remote Access 3.0.2

AppleScript Update 1.4.3: fixes is interaction with CarbonLib 1.02 below.

ATI Video Update 1.0: improve 2D and 3D acceleration for machines with the ATI Rage 128 card or on-board ATI RAGE Pro chips.

CarbonLib 1.04: improves stability with Carbon-based applications and AppleWorks 6.x (which automatically installs it).

ColorSync 3.01: helps to maintain color consistency between monitors, printers, and scanners, etc.

Disk Tools 7.6 & 8.5: if you have lost yours, here are the replacements. 7.6 contains images for 6800 series and PPC series; 8.5 is PPC only.

DVD SW Update 2.0: is a software-only DVD player. It is not compatible with the DVD hardware found in a G3, PB G3, or PM G4 (PCI graphics) series machine.

Final Cut Pro 1.2.1: includes the application update, FireWire 2.2.2, QuickTime FireWired DV extensions and the latest ATI drivers. You even get the new .pdf users manual.

FireWire 2.2.3: replacement driver for those with an incompatibility that prevents serial devices, like digital cameras, from making an initial connection.

Game Spockets 1.7.4: includes the complete set of draw, input, net and sound sprockets.

GV 56K Updaters: supports the internal modem in a G3 (Desktop or Minitower, or PM 6500 series). It is NOT for the iMac or B&W G3. Study the ReadMe carefully.

iMovie 1.0.2 Updater: converts your installed iMovie 1.0 to the new and improved 1.0.1 version.

Indo Video 5: QuickTime 3 or 4 PowerMac users can compress and play back Intel Indo Video 5 in QuickTime files.

Modem Updater 1.3.5: updates the internal modem which came with the Powerbook G3 Series or iMac computer.

Multimedia Update 1.0: improves support for playing audio CD with VM turned on.

OpenGL 1.1.2: enables your computer to display 3D graphics using applications designed to take advantage of OpenGL.

OS 9 Enhancements: Open Transport Update 2.6: Open Transport 2.6 addresses DHCP issues in Mac OS 9.0 and prevents Macintosh computers from being used in certain types of Denial of Service (DoS) issues. Check the ReadMe to see if this update will work with your setup! Audio Update 1.2: improves USB audio support for Mac OS 9. Software Update 1.1.3: will make it faster for Apple to deliver software updates to you via the Internet.

PB G3 Series Updates:

Which PowerBook Do I Have? is a decision matrix for the perplexed.

Battery Reset 2.0: addresses a situation that may occur with some PowerBook G3 Series and iBook computers in which the battery, while in the system, doesn't show up in the Control Strip, or a red X appears over the battery icon in the menu bar.

PB G3 DVD-ROM Updater: eliminates a possible interruption during system startup of a CD/DVD disc is not in the drive and the drive tray is closed. For bronze keyboard models w/DVD.

PB G3 Series Modem 1.0.2: squashes lots of neat little features, you don't need.

Runtime for Java 2.2: fixes two severe bugs that affected Java applications, but not applets.

Sleep Memory Extension: NoDose™ for you iMac and PowerBook (FireWire).

System 7.5.5:

Mac System 7.5.3 plus updater 7.5.5.

OT 1.1.2, the network and communications system software for a Mac, and OT/PPP 1.0 which enables you to connect your computer to a remote TCP/IP network [such as the Internet]. IF you are told you need them, here they are.

Apple Telecom folder which includes two versions of Apple Telecom software: Apple Telecom for GeoPort/Express Modems; Apple Telecom for Serial Modems; AppleDisplay Software v1.7.1.

USB Updates:

USB Card Support 1.4.1: software extensions that provide support for USB adapters cards in PCI bus

or CardBus slots.

USB Mass Storage Support 1.3: supports devices that meet the USB Mass Storage Class specification.

See the ReadMe for details.

Video Extension 1.0: restores access to all available resolutions on NuBus systems only.

Third Party Updates Applications: is a single source for all the major applications updaters released to date. AppleWorks 6.0.3; DiskWarrior 2.0.2; FileMaker Pro 5.0v4; Norton Anti-Virus Updater 1.0 & 1.6; Norton Utilities Updater 5.0.2; Palm Pilot 2.6.1 Hot Sync Updater; Mac Palm Doc 2.0.5; Quicken 98, 2000 R3; SoundJam MP Updater 2.0.2; Stuffit Deluxe 5.5.1; TechTools Pro 2.5.4; Toast Updater 4.1 For OEM and Deluxe; ViaVoice Update 1.0.2

Driver Updates: All Sorts of Drivers contains new versions of the drivers needed to run your peripherals. Sometimes you gain access to new features. Typically you need to update a driver when you update your operating system. Oftentimes, the drivers on this CD are newer than the ones included with the new device you just took out of the box.

Driver Adaptors: Adaptec G-series Drivers; Grappler SCSI Updater 1.4.5; Griffin; Keyspan; Newer FireWire 2 Go; OrangeMicro Updater 1.4.2

Cameras: Apple; Cameraid; Kodak; MicroTech; Minolta; Nikon; Olympus; VideoCamWorks

Input Devices: iMate 2.0b7; iMate Installer 1.9; Kensington MouseWorkd 5.4; MacAlly iMouse & Point Device; Microsoft IntelliPoint 1.0; USB Manager v2.2; USB Overdrive 1.3.5; Wacom 4.5.2

Printers: AdobePS 8.7; Alps; Apple; Cannon; Epson; Hewlett-Packard; Lexmark; EpsonShare Printer Sharing 1.6.2

Scanners: Agfa; Apple; Epson; Hewlett-Packard; Microtek; UMAX

Storage: Imation SuperDisk Drive 3.3a & b w/Pace Anti-Piracy 2.0; Iomega v5.5.1 & IomegaWare 1.1.3; ORB 1.42; SyQuest; VST 2.1.5; ORB

USB TelePort Modem 1.0.2

Essential Utilities contains the current version of the most requested general purpose utilities.

Adobe Acrobat Reader 4.0.5 & 4.05 Updater 1: gives you access to documents in their original forms, independent of computer platform. You can view, navigate, print any Portable Document Format (PDF) file.

Also included is the new Reader+Search engine.

Adobe Type Mgr 4.5.2

Apple Disk Copy 6.3.3: will mount disk images on your desktop, make exact copies of floppies from a disk image, convert one format to another, and create a disk image from a mounted volume or folder.

Apple System Profiler 2.1.2, by Apple Computer: learn what is inside your Macintosh.

“Driver Updates: All Sorts of Drivers contains new versions of the drivers needed to run your peripherals. Sometimes you gain access to new features. Typically you need to update a driver when you update your operating system.”

BBEdit Lite 4.6: the popular plain text and HTML editor. Freeware.

Clean-install Assistant: a useful utility which helps you identify extensions and control panels from third parties so that you can move them to a ‘clean install’ System folder. Freeware.

MIME Decoder: contains YA-Decoder 2.4.1 and YA-Decoder 3.0.1: no long will messages encoded in MIME Base64 be a mystery. Drop that pesky file on the decoder and voila. Shareware fee \$15.00.

Stuffit Drag and Drop (5.5 Series), by Aladdin Systems: contains the two tools you need to compress (stuff) a file you wish to send to someone or open (expand) a compressed file sent to you. If you own Stuffit Deluxe, update 5.15 is here as well. Freeware.

TechTool 1.2.1, by Micromat: is a handy utility which can rebuild the desktop on your computer, zap the parameter RAM, and test for damaged system files. Freeware.

Virus Protection: contains Disinfectant 3.7.1, by John Norstad, the anti-virus utility for your Macintosh; Agax 1.3; and WormScanner 2.3, a utility

which scans for and deletes known Autostart worm files, which will also alert you to suspicious files. These three cover most problems a Mac person might encounter. If you feel you need more comprehensive protection, look into the commercial alternatives. Freeware.

PowerMac Emergency Handbook, by Apple Computer: It is in PDF format.

Redux(PPC), by Redux Software: is software which will enable you to backup your Mac to tape, a CD or a different hard drive. No More Excuses! Shareware fee: an honest donation.

Not So Essential Stuff

Apple Memory Guide, (05-00) by Apple Computer: contains memory upgrade information for all Macintosh computers and LaserWriter printers. It is in PDF format.

DragThing 2.8, by James Thomson: is an application designed to tidy up the icons littering your desktop. Shareware fee \$20.00.

File Smiler 1.6.1: turns your files and folders into Self-mounting Image files using Apple's Disk Copy 6.3. Freeware.

Finder Pop 1.8.6: is a control panel which extends the Mac OS 8 Finder's contextual menus. It greatly simplifies navigating around your hard drive. Shareware fee: \$8.00.

Greg's Browser 2.6.1: an alternate way to view files on your hard drive. Consider a hint of some aspects of what OS X will be like. Shareware fee \$20.00.

GURU 2.8, by Newer Technologies: is an application which provides you with information concerning memory upgrades for every model of Macintosh computer, LaserWriter printer and many Macintosh clones. There is a memory integrity test to

check your RAM, a comprehensive glossary, and other neat stuff. Freeware.

HandyMan 2.0.6: allows for quick and easy access to applications, Control Panels, etc. via the Control Strip. Sure beats navigating through a bunch of folders. Shareware fee \$15.00.

Installer Jihad 1.5: helps you select files to remove or move from one System Folder to another. Freeware.

iSearch 1.21: lets you run literal text searches thru files, folder, disks, and CDs. Shareware fee \$10.00.

KeyStrokes 1.2: if you are unable to use a normal keyboard, this extension puts a fully functioning on-screen keyboard on your monitor screen which you access via your mouse. Shareware fee: free if you register this copy.

KeySwapper 1.1.1: missing any keys on your new iMac, G3, G4, PowerBook or iBook keyboard such as the Forward Delete key, End key or the function keys F13-F15? Wishing you had these keys? Well, now you can have those keys with KeySwapper! Shareware fee is \$5.00.

MacArmyKnife 1.7.2: It is meant to be a "catch all" for mini-utilities and things that other apps don't do. Give it a try; you might find something that one of its utilities helps you. Shareware fee \$20.00.

MagicBullets, by Bill Karsh: is an e-mail quoting and text styling tool. Building this CD would be a pill without it! Shareware fee is \$5.00.

Network Watching Tools: examine your connection to either an AppleTalk or Ethernet network. TRAWL for AppleTalk; MacTCP Watcher; MacTCP Tracer; IPNetMonitor; and Net Tools for Ethernet networks. Shareware.

Prestissimo 1.5.1: is a Control Panel for controlling all of the Mac OS 8.5

new features such as applications palette, keyboard shortcuts, and scroll bar appearance. Freeware.

PrintToPDF 1.5.2: PrintToPDF is a shareware Macintosh printer driver that creates PDF (Adobe Acrobat™) files from within your application programs. You can create PDF bookmarks to your section and subsection headings, and URLs will become hot links. Shareware fee \$20.

ramBunctions 1.5: lets you create a 'safe' RAM disk. Shareware fee: \$25.00.

TapGuard 2.0: trackpads are handy, but if you tap it by accident, the insertion point moves somewhere else. TapGuard fixes that problem. Shareware fee \$5.00.

Internet Essentials contains the current version of the tools you need to get on line, speciality applications which make it possible for you to use some neat new offerings on the web once you are on-line, and the utilities you need to use the items you bring home from a day surfing. The collection is divided into three parts so that we do not abuse the word essential. Be adventurous: try some of the new speciality tools in the Fun To Have folder.

Kidsafe: We offer you some wisdom from professional Internet travelers to help you and your kids have a pleasant journey out there. The Internet can be a safe place; we offer you some good advice to make it so. There is a new, free, 'kids safe', advertisement free, way for your kids to search the Internet. It is a service of AOL called AOL@School. You do not need to be a subscriber to AOL or use their software to access the site. Go to <<http://www.school.aol.com>> and try it.

Basic Applications

America Online 5.0: is the latest update to their online software. Just follow their easy instructions.

Anarchie Pro 3.7: is the only Internet

engine that is truly native to the Macintosh platform. It will give you faster, easier and more powerful access to web & ftp sites than your regular web browser.

Eudora Light 3.1.3: is a stand-alone electronic mail (e-mail) program. If you use Netscape Navigator, which does not do e-mail, you need Eudora Light. If you use Netscape Communicator, e-mail is built-into the program. A .pdf manual is included.

Fetch 3.0.3: is another File Transfer Protocol (FTP) application.

iCab 2.0: is the sweetest, neatest, little browser out there. Still in beta, but fun to try nevertheless.

Net-Print 8.2: allows you to print any highlighted text; from your screen, from the web, from any source. You can even take multiple chunks of text and print them on one sheet of paper. Shareware fee: \$10.00.

Netscape: Navigator 3.0.4 Gold [browser and e-mail for Mac OS 7.6.1 or older]; **Navigator 4.0.8 PPC** [no built-in e-mail program]; **Communicator 4.7.3 PPC** [has built-in e-mail]; **Fortify 2.2.6** [adds 128-bit encryption to Netscape]

NiftyTelnet 1.1: is a fast telnet client for the Internet. Freeware.

MT-NewsWatcher 3.0: is an on line (Internet) news reader. Freeware.

Internet Utilities

Cyberviewer 1.4: keeps a history of the web pages that you've recently visited in a floating thumbnail format. Entries don't disappear when you quit, aren't removed when you go "back" in a browser window and will be around next week (if you want them to). Shareware fee: \$15.00.

EURL 1.3: is an easy URL utility for managing your bookmarks. Freeware, but donations are appreciated.

Graphic Utilities: Graphic Converter 3.8.2; JPEGView 3.3.1

Internet Config 2.0.2: is designed to make your life easier by reducing the number of times which you need to enter your Internet preferences into the various preferences dialogs of all your Internet applications. It is here for folks with older operating systems.

Keep Connection Alive: ever experienced the annoyance of being disconnected from the Internet by your ISP when you've left your computer for a moment? Not any more! Freeware.

MacWasher™ 2.0 Demo: is a very useful program for cleaning up the history of your activities on your computer. MacWasher will automatically run in the background and clean up whatever tracks you want removed, whenever you want; cache, cookies, you decide. Shareware fee \$30.00.

Magic Cookie Monster: allows you to selectively inspect and delete cookies from your browser. Emailware; send the author a thank you.

Mail Siphon 1.5.1: is a tool to manage your mailbox. It makes it possible for you to junk mail you don't want without having to download the rest of your mail. Great way to rid of unsolicited mail. Shareware fee is a thank you note, money, or chocolate. Well worth it.

Netscape History 3.0: is a utility that allows you to view off-line the last web pages visited. Images will be correct as last seen on the web. Shareware fee: \$10.00.

Netscape Mail Changer 1.0.1: will tell Netscape to use your favorite e-mail program anytime you click on an e-mail link. Thus, you can use the latest version of Netscape (which contains a built-in e-mailer) and keep using your favorite e-mail program. Freeware.

"Kidsafe: We offer you some wisdom from professional Internet travelers to help you and your kids have a pleasant journey out there. The Internet can be a safe place; we offer you some good advice to make it so."

PageSucker 2.2.2: makes it possible for you to download entire pages from the web automatically and modify them in such a way that they can be viewed later, when off line. Shareware fee: \$10.00.

URL Manager Pro 2.6: is a heavy duty web address manager. If you are a serious web crawler, check this one out. Shareware fee: \$30.00.

ViaHTTP 1.7.6: lets you start an HTTP download, stop for some reason, and resume it at another time. This is slick and cheap. Save time and line charges. Shareware fee \$5.00.

Web Devil 4.6.1: Web Devil is a tool for downloading web pages and their associated images, textures, and links quickly and easily. Give it a URL and it will download all the items on the web page. It has an easy to use interface, is scriptable and recordable, and is fully multi-threaded so it won't hog the CPU. Version 4.6.1 is free; the full featured version is \$35.00.

Fun to Have

Auction Action Tracker 2.7.8: helps you organize and monitor your bidding on eBay auctions. Shareware fee: \$10.00.

Connexcellent 1.2: allows you to automatically launch up to four applications (like a browser, e-mail, radio, or other web-based application) when you PPP connection is made. Shareware fee: \$8.00.

MacDICT 1.3.8: makes it possible for you to access websites that have online dictionaries, or other online databases. Shareware fee: \$5.00, cheap.

MacHeadlines 1.9.1: is a specialized application that gathers and displays news, sports and more from websites you select. This is the "lite" version; a full featured one is available for a fee.

Package Tracker: helps you track your letters or packages you ship on any of the world's top carriers. This will help you lots, if you are a serious package junkie. Shareware fee: \$15.00.

Snapper Head: is an application that sends a screenshot to people who enter your IP address in their web browser, like Netscape. You must be connected to the Internet for this to work. Duh! Shareware fee: \$5.00.

StockWatcher 1.2: MacHeadlines for the stock junkie. You enter the stocks, it tracks them. 3 for free. Shareware fee: \$25.00.

Weather Grok: just does one thing well: grabs the latest weather conditions from NOAA. You even get to pick the city. Freeware.

Radio & Music Tools

AMP Radio 1.6.5: is the most fully-featured and easy to use Internet Audio Receiver and MP3 player available on any computer platform existing today. That's what they asked me to write. Shareware fee: \$10.00

Ampcaster 2.0: is a real time (streaming) MP3 tracker. Shareware fee: \$5.00.

BayTex Party 2.5: turns you into a

disk jockey and your Mac into a audio mixer. Shareware fee: \$60.00.

Joliet Volume Access 1.1: allows you to display the long file names found on Windows CDs. Freeware.

Liquid Player: makes it possible for you to download and listen to the leading digital music formats.

quickList MP3 1.0: is an MP3 playlist program that plays MP3s using QuickTime. No fancy interface; just drop a song on the start button. Freeware.

RealPlayer 7.0: download from the web and listen to music in real time. Freeware.

XMedia 1.1: is a HyperCard stack that can open and edit images, movies and audio tracks. It can read all QuickTime-compatible formats.

Apple @ The Flicks

Sit back with a bag of popcorn and remember again why you use a Macintosh! The G4 commercial on this CD is a spoof created by the design team of Karl Larsen and James Doh.

Fun Diversions is just what is needed when the job is done, or the task seems too arduous.

Goofy Golf Deluxe, v1.0.1: Finally a simple putt-putt game for the Mac with neat graphics, fun course layouts and a handicap you can brag about. Shareware fee is \$24.95 plus \$4.75 P&H.

Gravité 2.0: Strictly speaking this is a Control Panel. It makes Drag & Drop look and feel like the real thing. Finally your icons will be affected by gravity, inertia and friction. Just what you always wanted, right? Tell your kids about it. After all, it's free.

Nanosaur 1.3.2 Updater: If you have the original, here are the pieces you need to update it. If you don't, and

want it, you at least have the second half. Go to <www.pangeasoft.net> for the basic application.

Bugdom 1.1.1 Updater: This is the latest update to the dazzling 3D game from the makers of Nanosaur.

Quarters: Here is a game in which the person who picks up the last item loses. In England, the game is called "Last Match", probably because they don't use quarters. Give it a try; you will lose a lot - trust me. Freeware (unless you want to learn the secret of winning). PLEASE NOTE: This is a new version that is 'suppose' to work with Mac OS 8.6 and above. If you have problems getting it to run, please contact Tedd, the author, at <tedd@spirling.com>.

Virtual Hamster 1.7.1: VirtualHamster is a fun program that simulates a pet hamster. You can name it, feed it, pet it, squeeze it, refill its water bottle, and clean up its poops. Since this hamster does not smell, you should not mind that too much. Shareware fee is \$10.00. That's a lot cheaper than a vet bill!

Other than the Apple system software and commercial updates from various vendors, the programs in this collection are Shareware. Shareware is a means of distributing software that lets you use the software before committing your money. It eliminates middlemen, so you get quality software at a good price. With a shareware program, you have the opportunity to try it for short period of time to see if it fulfills your needs. After trying it, you are on your honor to either send the registration fee to the author or stop using the program.

Please support the authors' requests for shareware fees if you decide to add these programs to your software library. It is important to encourage authors to use this channel by paying them for their efforts. ■

Timeline for the End Game

(referred to at end of Redmond on the Potomac III)

Ruling

Restrictions, or conduct remedies, on Microsoft's business practices will go into effect 90 days from the date of the ruling. Breakup proceedings will be put on hold as Microsoft appeals the ruling.

Preliminary Appeal

Microsoft is expected to appeal conduct remedies to the U.S. Court of Appeals for the District of Columbia circuit. That court will hear the case sitting as a whole (en banc) rather than a three judge panel. The court decided to do this because of the exceptional importance of the case and the fact that a number of judges have disqualified themselves.

The court would have to address the petition in the 90-day time frame. The court has several choices. It can:

- accept some or all of the government's conduct remedies. Microsoft would then likely appeal to the Supreme Court, which could take another year or more to hear the case.

- questions facets of the Final Judgment or choose to impose no restrictions. Either event could send the case back to Judge Jackson's court..

Appeal Directly To The Supreme Court
An appeal from the Final Judgment may be sent directly to the Supreme Court, if, Justice files a notice of appeal, and Judge Jackson enters an order stating that immediate consideration of the appeal by the Supreme Court is of general public importance in the administration of justice. The solicitor general has already authorized the Justice Department to seek direct review by the Supreme Court, a step that bypasses the appeals court. Asking is one thing; having it granted is another.

The Supreme Court can:

- accept the case. It could reach the docket as early as October. The review could take up to six months.

- decided not to hear the case. The petition is sent to the District of Columbia appeals court for consideration. ■

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.

Services

Law Office of

Richard S. Sternberg

A General Practice of Law
since 1984

General Civil & Criminal Litigation
Employment, Labor & Civil Rights
Personal Injury & Auto Accidents
Business and Corporate Practice
Domestic Relations
Wills & Probate
Admitted DC, MD, VA &
Fed. Courts

First consultation free and discount
rates with valid Pi membership
(202) 638-2300

For Sale

—Computers on Demand

Used Macs, Powerbooks & Peripherals.
We Buy, Sell, Trade, Repair & Upgrade all
Mac Equipment. Call for Quotes. All
Major Credit Cards Accepted (301) 718-
0822

—ClarisWorks Users Group Discount.

Loyal WAP members receive a \$5 a year
discount on their CWUG (ClarisWorks
User Group) membership and renewals as
a benefit of their WAP membership. WAP
Members must identify themselves as
such and then deduct \$5 from the regular
\$39 (printed ClarisWorks Journal) or \$34
(electronic ClarisWorks Journal) member-
ship dues when they join or renew. Con-
tact the ClarisWorks Users Group directly
at Box 701010, Plymouth, MI 48170; toll-
free at (888) 781-CWUG; Fax: (734) 454-
1965; Email: <membership@cwug.org>
or web site <http://www.cwug.org>.

Help Wanted

—**Senior Software Engineer:** V-ONE Cor-
poration 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 profes-
sional Mac lovers as we serve the technol-
ogy needs of businesses throughout met-
ropolitan Washington, DC. Send us an e-
mail describing yourself and what you
WANT to do every day. Then tell us about
your professional qualifications, specifi-
cally your experience helping people with
technology and troubleshooting Macs in
a networked environment. Send your re-
sume 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 Friend-
ship 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 Lau-
rel 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. ■

Membership Application

Please print or type:

Name _____ Company _____
 Address _____
 City _____ State _____ Zip _____ Email _____
 Home Phone _____ Work Phone _____
 (Must have for the TCS) Occupation _____

Please answer a few questions for us regarding your computer use. Check the computers/equipment that you use on a regular basis.

- | | |
|--|--|
| <input type="checkbox"/> Apple II | <input type="checkbox"/> IBM, PC clone |
| <input type="checkbox"/> Apple II GS | <input type="checkbox"/> PowerBook |
| <input type="checkbox"/> Apple III (SARA) | <input type="checkbox"/> Centris (all) |
| <input type="checkbox"/> Mac Plus, SE | <input type="checkbox"/> Quadra (all) |
| <input type="checkbox"/> Mac SE30, Mac IIX | <input type="checkbox"/> Power PC/Mac |
| <input type="checkbox"/> Mac LC (series) | <input type="checkbox"/> G3 |
| <input type="checkbox"/> Mac II | <input type="checkbox"/> iMac |
| <input type="checkbox"/> Performa (all) | |
| <input type="checkbox"/> Other _____ | |

WAP has many Special Interest Groups (SIGs) and Regional Groups (SLICES). Please check each group you would be interested in.

- | | |
|---|---|
| <input type="checkbox"/> Annapolis Slice | <input type="checkbox"/> Graphic SIG |
| <input type="checkbox"/> Columbia Slice | <input type="checkbox"/> NOVA/Educators SIG |
| <input type="checkbox"/> Delmarva Slice | <input type="checkbox"/> Game SIG |
| <input type="checkbox"/> Frederick Slice | <input type="checkbox"/> QuickTime SIG |
| <input type="checkbox"/> Disabled SIG | <input type="checkbox"/> Retired SIG |
| <input type="checkbox"/> Excel SIG | <input type="checkbox"/> Stock SIG |
| <input type="checkbox"/> FileMaker SIG | <input type="checkbox"/> Women's SIG |
| <input type="checkbox"/> Genealogy SIG | |
| <input type="checkbox"/> I can serve as a Hotline contact for _____ | |

Enclose check or money order payable to Washington Apple Pi, Ltd. If you are using a credit card please remember that we only accept VISA and MasterCard.

Check/Money Order VISA MasterCard
 Card Number _____
 Exp. Date _____ Signature _____

- (Required)
- Basic Membership—1 year \$49
 Student rate* for 1 year \$42

For other options please add correct amounts

- WAP Bulletin Board System (TCS)**with e-mail \$ 20
 WAP Bulletin Board System (TCS)**with Internet \$ 171
 1st class mail (U.S.) \$17
 Airmail to Canada, Mexico, West Indies or Cental America \$20
 Airmail to Europe & South America \$38
 Airmail to Asia & elsewhere \$48
 Surface to Europe, Asia & elsewhere \$18

Total enclosed \$ _____

*Please enclose photocopy of current student ID.
 ** Access to the TCS is contingent on WAP having a current home telephone number for the member.

Indicate desired New Member Kit (1 only)

- Mac 400k
 Mac 800 k
 Mac 1.44 k
 Mac CD

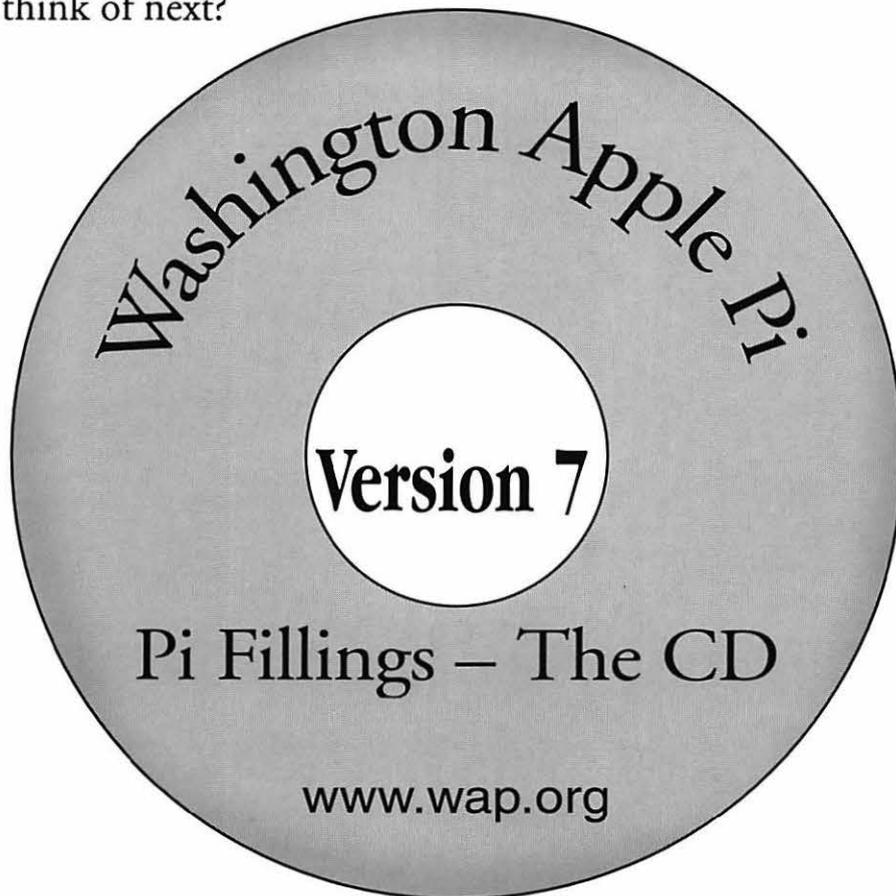
Please circle Yes or No for the 2 items below.

- Please leave my name on the Pi mailing list. (The list never leaves the office and all mailings are supervised by the Pi staff.)
 Yes No
- My name, address & phone number may be published in the membership director.
 Yes No.

Applicant signature and date

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>

PICK YOUR OWN APPLES



Apple Specialist

"...in nearby Bethesda & now **Gaithersburg, Maryland**"

The perfect place for picking the latest Macintosh products is now open in Gaithersburg. It's the largest store of its kind on the east coast. Visit our spacious showroom and browse aisle after aisle of state-of-the-art hardware, peripherals and software...

macUpgrades

fly the revolutionary new Apple Power Macintosh® G4 with now up to 500 Mhz and a G4 processors Velocity Engine™, the first desktop to achieve supercomputer levels of speed; try it before you buy it...something you'll never do ordering online or through the mail.



© 2000 MacUpgrades; all rights reserved

›Gaithersburg—Festival at Muddy Branch Shopping Center, 283 Muddy Branch Rd.: 301.417.0300 ›Bethesda—6931 Arlington Rd.: 301.907.0300 (free validated parking) visit us on the web at: www.macupgrades.com (Apple, the Apple Logo, Macintosh and Power Macintosh are registered trademarks of Apple Computer, Inc.; Velocity Engine is a trademark of Apple Computer, Inc.)

Washington Apple Pi, Ltd

12022 Parklawn Drive
Rockville, MD 20852

July / August 2000

Periodical
Postage rates
paid at
Rockville, MD