

The Journal of Washington Apple Pi, Ltd.

# WASHINGTON APPLE PI

Volume 20, Number 5

Summertime, and the Living  
is Easy—5

MacWorld Expo NY—20

Interview with Jeff Gates—30

Where Have All the Stars  
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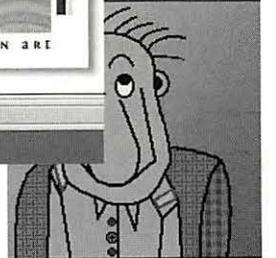
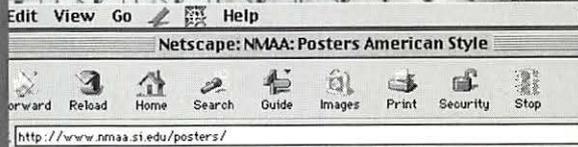
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**General Meetings**  
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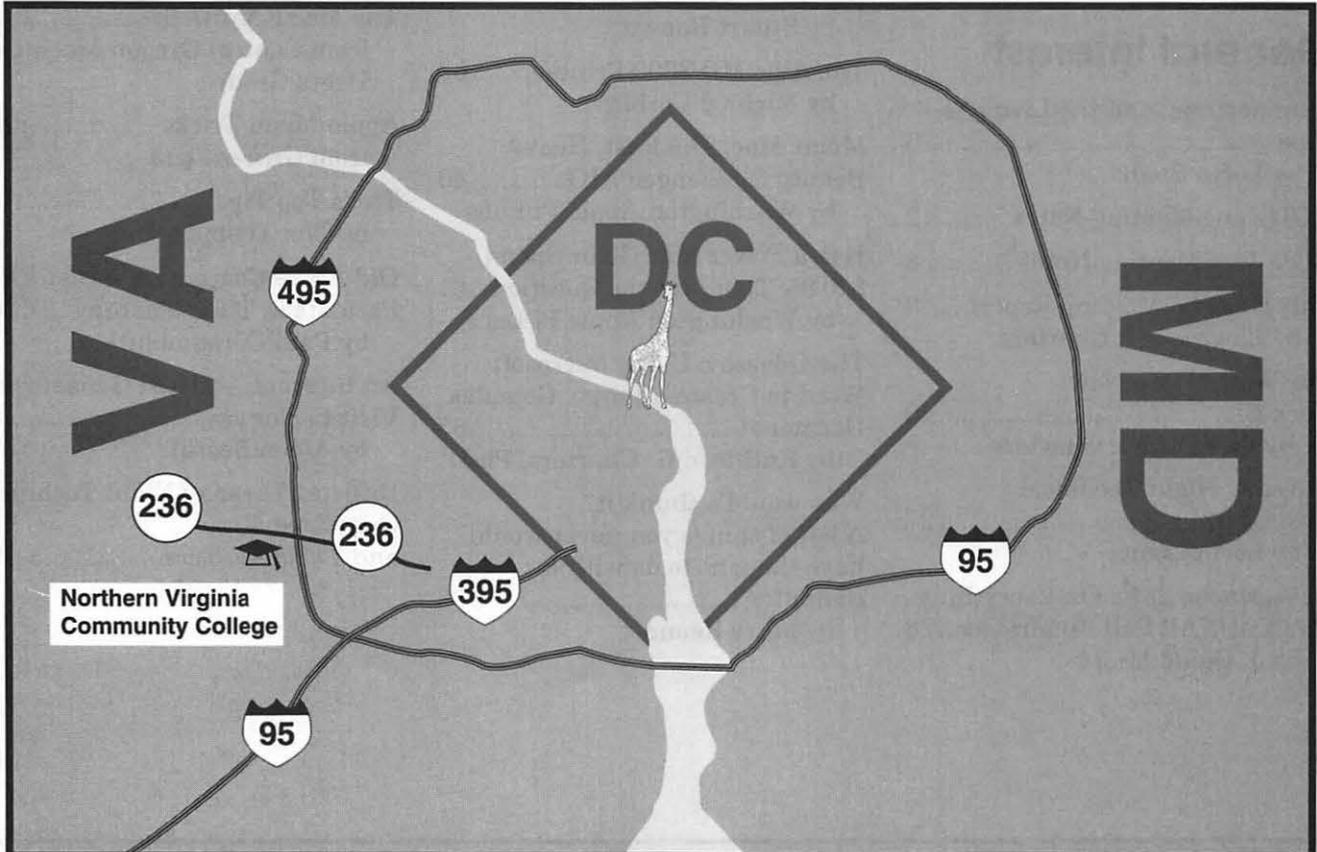
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For schedule changes check the TCS or the Pi's Website at <http://www.wap.org/>



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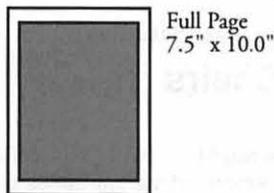
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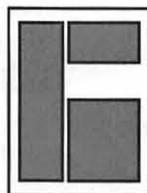
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# Advertising in the Journal

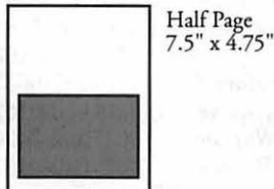
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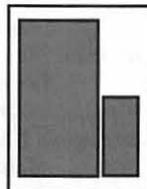
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Sixth Page	\$125	\$106	\$93	\$75

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

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

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<b>Art Editor</b>	
Blake Lange	(301) 942-9180
Volunteer needed	
<b>Calendar Editor</b>	
Bill Wydro	(301) 299-5267

## Deadlines

### Writers' submissions

Nov./Dec. .... Sept. 18  
Jan./Feb. .... Nov. 18

### Editors' submissions

Nov./Dec. .... Sept. 22  
Jan./Feb. .... Nov. 22

### Ad space reservations

Nov./Dec. .... Sept. 18  
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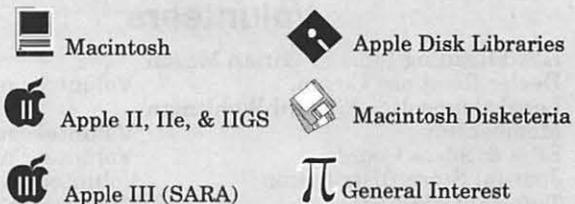
# Washington Apple Pi

This issue of the Washington Apple Pi Journal was created on a PowerMac, proofed on an LaserWriter IINT, and produced by electronic typesetting at McArdle Printing.

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.

## Icon Guide



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# Summertime, and The Living is Easy

**E**ACH SUMMER I get a chance to admire my computer handiwork. No, I don't do graphics or web pages. In the spring, I design curricula for schools that want to use computers as part of a summer camp program, or overnight camps that are looking for something other than an arcade room. When summer arrives, I get graded by some of the toughest evaluators out there — your kids. Being critiqued by my adult peers from the American Camping Associations, as part of the accreditation process for each of the camps where I have a program, is a piece of cake compared with the reception I receive from the primary and middle school terrorists you drop off at camp each day. When people find out that I do this, I am asked to

explain how one goes about developing a computer program for a camp. Well, you are in luck. This is not that story; maybe some other time.

Let me state up front that I do not see a classic cross-section of Americana. Camps, even day camps, are not inexpensive. Each of the camps I deal with has a scholarship program of some kind; but bell-curve Americana I don't see. If a family is astute enough to search for fee assistance. . . , you get the picture. My comments are based on random visits to different labs, observations of campers interacting with programs, and chats with counselors and campers. Most of the packages I assemble are designed to get the natural juices in a camper flowing. Occasionally I hit a dry hole. You can read about them later.

A one word summary from my experiences this summer would be "savvy." "Jaded" fits in a few of cases; and "burned-out" unfortunately cannot be left out. Keep in mind that a computer is not like duplo™ blocks that one outgrows. Burn your kids out on computers and you may find yourself relearning cursive. Let's do the numbers.

## Keyboard Cowpersons

I came across some of the most computer aware, cross-platform savvy kids I have ever encountered. Most have moms or dads using PC machines at home or work, while the kids use Mac's in school. Kids with Mac experience seem to have an easier time working on PCs than vice versa. PC kids know a routine but get lost when a detour is required or something goes awry from the normal state of affairs. First graders through fourth/fifth graders have nice flow control, moving between programs and within programs with the assurance that comes from the common interface between the user and the machine typical of Mac programs.

Middle and upper school Mac campers are, well, Mac savvy. They



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understand how to move between programs, work around glitches and lurch into programs they have never seen. The middle school program had camper using scanners, electronic cameras, HyperStudio, ClarisWorks 5, dedicated web creation software, and imagination to construct vanity pages, on-line routines, and, with a dash of Resourcerer, some electronic mayhem. Scared of letting your kids near the Internet? Well the ones I worked with this summer were more interested in <SouthPark.com> than <WhiteHouse.com>.

### Help Me, Help Me

This year saw much more collaborative work among campers than I have witnessed in the past. Usually I see one-on-one computing with the camper and his/her machine bonded in isolation from the rest of the group. You see that happen when kids put on headphones and turn up their tape or CD player. You also see it in the lack of awareness of ones surroundings when someone is engrossed in a hand-held electronic game. I saw it less this year because I have more applications to choose from where kids need to ask for assistance in order to complete the program.

We instruct counselors not to 'do it' for them, but to talk to the kids to help them discover the answer. We are beginning to see large network applications that require multiple players each with a specific role to assume. In other cases, we put campers together in teams so that each person assigned to the group has to finish the program. Only together do they win. We construct teams with a blend of strong and weak players, having observed their individual skills at the beginning of each camp session. Some kids are better at picking up verbal clues, others seemed intuitive as they maneuver within a program, while still others are very methodical, amassing tools and points that were bypassed by the more aggressive

members of the team.

Give me an LD kid and a computer, and I will show you a camper who can knock the socks off a mainstream academic student. The various coping skills acquired by the LD to make it through school — at least the ones I saw — help them shine in a computer environment. What a reversal of roles for those kids. Finally other campers are asking them for help. Wow!

---

“Let them work a program for a while before introducing another. Sit at the keyboard with them and work together — you know, that quality time thing. You are hearing a pitch to make your kids a bit less jaded and my life a little easier next year.”

---

### Little Know-It-Alls

Ah, the jaded ones. Seen it; therefore done it; therefore know it. What's next? We found some number of campers for whom sampling was equated with knowing. It is sort of the adult equivalent of "seeing" Europe after a five day bus ride around the continent and being ready to move on to Asia or the Antarctic. Blasting through a Mac application must roll the eyes of the program's designers. We tried, not always successfully, to reintroduce those mavens to the subtlety inherent in a program. We would require kids to travel the Oregon Trail with the meager resources

of a teacher or farmer rather than the additional dollars allowed a banker or doctor. The message here is that it is not a good idea to inundate kids with new software. Let them work a program for a while before introducing another. Sit at the keyboard with them and work together — you know, that quality time thing. You are hearing a pitch to make your kids a bit less jaded and my life a little easier next year.

### Danger Zone

This one is scary: academically burned-out kids. Sorry, it's not an anomaly. They are out there and I got to meet a few this summer. I don't mean some kid who is tired of doing Yukon Trail or SuperMunchers. I mean no, nothing, zip, zero interest in anything in my bag of goodies. None of my design work this year was for campers to gain academic credits; none was for arcade either. Anything that could be remotely related to academics turned them off. Some of these kids just sat on the floor each day. One-on-one conversations brought out interesting stories of being pushed by family or school. Some eventually picked the simplest stuff I carry and dream-walked through their time with me. It is hard to put a sign on the lab door, "No Grades Given In Here."

### As Good As It Gets

But, I sometimes gave as good as I got. During the last week of camp, there are lots of nothing prizes one can win for anything from being last to first, to at least trying. There was a series of prizes for completing the Oregon Trail — as a farmer, banker, carpenter, etc. One camper challenged me as to the value of the prize he might win. Well, said I, if you don't like it, you can always go back to St. Louis where you started. Turns out, he need not have been concerned; he didn't make it.

—Lorin

# Washington Apple Pi

## Board of Directors Notes June 10, 1998

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

**Directors Present:** Lawrence Charters, Lou Dunham, Lorin Evans, Dale Smith, Pat Fauquet, David Harris, Blake Lange, Neil Laubenthal, Dave Weikert, Don Essick, Mary Keene, J. David Mudd

**Outgoing Directors Present:** Jon C. Thomason, Charles Froehlich

**Directors Absent:** Ellen Baniszewski, Dave Ottalini, Tom Witte

**Members Present:** Nancy Seferian, Steve Fink

### Old Business

**A** BRIEF review of the June Garage Sale was conducted. Turnout was very good for the beginning of summer, especially on a good day with lots of competing distractions. Ideas on how to improve the sale were offered, with the greatest need remaining: someone to direct the operation. No volunteers were forthcoming.

Steve Fink offered a report of the May 1998 Pi election. A very low 201 ballot envelopes were returned, with 200 valid ballots. There were no election challenges, and the results conformed to the Pi's Bylaws. The winning candidates for 1998-1999:

President: Lorin Evans  
Vice President, Macintosh: Don Essick  
Vice President, Apple II: Pat Fauquet

Secretary: Lawrence Charters

Treasurer: Dave Weikert

Directors:

Dave Ottalini  
Lou Dunham  
Dale Smith  
Ellen Baniszewski  
David Harris  
David Mudd  
Tom Witte  
Mary Keene  
Blake Lange  
Neil Laubenthal

The preliminary results were reported to the Pi membership on the TCS immediately following the count, and there were no objections. Lou Dunham moved that the Board accept the results, with a second by Dale Smith. The 1997-1998 Board approved the election results as submitted, and immediately adjourned at 7:54 p.m.

### New Business

The 1998-1999 Board of Directors convened at 7:55 p.m. Lorin Evans was nominated to chair the Board, and Lawrence Charters was nominated as vice chair. The motion passed.

The Board commended the Election Committee for its work.

President Lorin Evans offered a "State of the Pi" report. Using a hot dog stand analogy, Lorin stated that the Board's basic problem is one of how to collect money without going bankrupt. The Pi needs a constant influx of funds in order to pay a constant outflow of bills (lights, phones, rent, labor, etc.). On average, it takes a little more than \$15,000 per month,

every month, to keep the Pi in business. The bills are constant, the sources of income are sporadic and episodic, and have also changed over time.

Comparing the Pi in 1998 to the Pi at the start of the decade, by sources of income:

Membership fees: down  
TCS/Explorer income: up  
Advertising: down  
Mac disk sales: down  
Apple II disk sales: down  
Tutorial revenue: up  
Misc. revenue (garage sales, etc.): flat  
Tuesday Night Clinic, miscellaneous donations: up  
CD Sales: up

On the whole, Lorin stated that "We have a company that is doing weller [sic]." Given the current assets, how does the Board best grow the Pi?

Several non-elective positions were filled by the Board:

Membership Recruitment: contact past members - Neil Laubenthal  
Adopt-a-Store program: J. David Mudd, Mary Keene (with Pat Fauquet, Lou Dunham, Dave Weikert, Neil Laubenthal, Blake Lange)  
Mac Journal Editor: Lawrence Charters, Bonnie Ashbaugh  
Artist on Exhibit: Blake Lange  
Software Review Editor: Lawrence Charters  
Annual Index Editor: Don Essick  
Vice President Administration: Tom Witte  
New Member Benefits: David Mudd  
TCS Sysop: Nancy Seferian  
Webmaster: Lawrence Charters  
Tuesday Night Clinic: Lorin Evans, Lou Dunham  
Tutorial Coordinator: Pat Fauquet  
SIG and Slice Coordinator: David Harris  
Hotline Coordinator: Jim Ritz  
Publicity: Dave Ottalini  
Apple III Chair: Dave Ottalini

Mac Librarian: Dave Weikert  
Apple Librarian: John Ruffato  
Reading Librarian: Brian Mason  
Calendar Editor: Bill Wydro  
Meeting Transportation Manager:  
Bill Wydro

Several vacancies remain:  
New Member Welcome Coordinator  
New Member Calling  
Membership Recruitment  
Apple II/III Journal Editor  
Electronic Archives  
Garage Sale Coordinator  
Show/Expo Coordinator  
Tuesday Night Traffic Coordinator  
Tuesday Night Helpers  
Volunteer Coordinator  
Montgomery County Student Program  
Mac Library Archives  
Inventory Coordinator

Acting on a suggestion by Dave Ottalini, Blake Lange moved that the Board monthly meeting be held the third Wednesday of every month, beginning at 7:30 p.m. The motion was seconded by Lawrence Charters, and passed without dissent.

In response to a meandering

discussion on the Pi's 20<sup>th</sup> Anniversary, Steve Fink moved that December 1 be arbitrarily designated the anniversary, until some more knowledgeable party provides actual knowledge. The motion passed.

The meeting adjourned at 9:48 p.m.

# Washington Apple Pi

Board of Directors Notes  
July 15, 1998

[Note: these are preliminary, as the Board had not approved the minutes as of this writing. Also, these are not the full minutes; those may be found on the Washington Apple Pi bulletin board, the TCS, in File Transfer Area 5.]

a younger crowd with a larger percentage of women compared to earlier Expos. Vendors were unhappy with the costs in New York City and generally seemed happy to be going back to Boston next August. People were buying, which helped relieve vendors complaints.

**Directors Present:** Lou Dunham, Don Essick, Lorin Evans, Pat Fauquet, David Harris, Mary Keene, Blake Lange, Neil Laubenthal, Dave Ottalini, Dale Smith, Dave Weikert, Tom Witte  
**Directors Absent:** Lawrence Charters, Ellen Baniszewski, J. David Mudd  
**Members Present:** Henry Ware,

Digital cameras were hot, as were color printers. Connectix attracted lots of attention with SpeedDoubler 8 and, particularly, a Microsoft Office 98-compatible version of RAMDoubler 8. Casady and Greene, publishers of Conflict Catcher, attracted attention with a slick new version of this utility plus an "on the fly" grammar checker.

**T**HE MEETING was called to order at 7:35 by the president. No one heard him. A quorum being present and with no additional business, the meeting was adjourned. Dale moved and Neil seconded. Approved.

Multi-Ad Services, publisher of Creator 2, attracted lots of attention from design and layout professionals, who also bought lots of copies at a Mac Expo special price. Corel attracted similar attention with CorelDraw 8, though with more skepticism because of the poor performance of their first Mac effort, CorelDraw 6.

### Old Business

Members who attended the recent MacWorld Expo in New York City gave their impressions of the event. The general consensus was that although it appeared smaller than previous Expos in Boston, the mood was generally upbeat. It was

### New Business

The Pi is out of flyers. These are used to tell potential members what the Pi is all about, and also come in handy for introducing the Pi to vendors. Lorin wants to create not only a

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Computers

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paper flyer, but a PDF (Adobe Acrobat) version that can be posted on the TCS and on the Pi's Web page. He is also interested in simplifying the current flyer; Apple has produced so many different computers over the past twenty-odd years that the flyer has almost as many choices for member computers as the IRS has choices on an income tax form.

The Pi is also looking at different kinds of memberships, such as one that would include 3 CD-ROMs a year in a package deal. Another issue: should the flyer ask for email addresses so the Pi (not a commercial vendor) can send out messages to members alerting them to special events or offerings. The ensuing discussion centered around how to go about asking members for such information.

The latest Pi CD-ROM, Pi Fillings—Version 3, is sold out. The last set went to MacWorld for sale by NY Mug. There was a discussion about what we would like to have in Version 4, such as Control Strip plug-ins and Contextual Menu items, along with some disk and network utilities. Board members were urged to post their likes on the TCS.

The Board was also asked for direction on the Pi Journal cover price, currently set at \$2.95 and last adjusted in 1985. Since it costs far more than this to print and mail an issue, the question is: should we raise the price to better reflect the value of the magazine? Tom Witte moved, with a second by Dave Ottalini, that we let the office manager set the cover price. The motion was passed unanimously.

The Pi has been asked by other user groups to "trade" membership discounts; Pi members could join another group at a discount, and we could join theirs at a discount. Lorin discussed the possibility of creating a "universal member" CD-ROM to offer to new members. He is impressed with the number of User Groups using our CD-ROM to give to *their* new

members. If we created a "universal member" CD-ROM, each participating group could have their own folder with their own information. No decision on this issue was recorded.

The Pi's new financial software is up and running but still has to be tweaked to get the kind of reports we want. Examples of the old system reports and the new reports were shown.

There was a discussion on Slices. Dave Ottalini raised questions about

whether slice members should be Pi members. There was further discussion about the membership issue and the benefits Slices receive for being part of Washington Apple Pi. If these groups went their own separate ways, they would have to recharter with Apple as separate Apple user groups, and file with the state for separate tax status and incorporation.

Tom Witte moved to adjourn, with a second by Don Essick. The motion passed at 8:51p.m. ■

## July General Meeting Report

By Lawrence I. Charters

**S**TILL REELING a bit from the twin effects of MacWorld Expo New York, held earlier in July, and a string of blistering hot, humid days with bad air quality, a decent crowd of the semi-awake turned out for the July General Meeting. Fortunately for everyone, it was the first "cool" day in some time, with temperatures "only" in the high 80s. Some at the General Meeting actually complained about the "freezing" air conditioning in the auditorium.

Judging by the questions before, during and after the meeting, next month's release of the iMac will need no great amount of hype: the Mac enthusiasts are keenly interested in the stylish sea green (blue?) computer. Several people, in great seriousness, suggested the Pi actively promote itself as "iMac-compatible," since anything remotely connected with this machine gets attention, often at the expense of the more noteworthy.

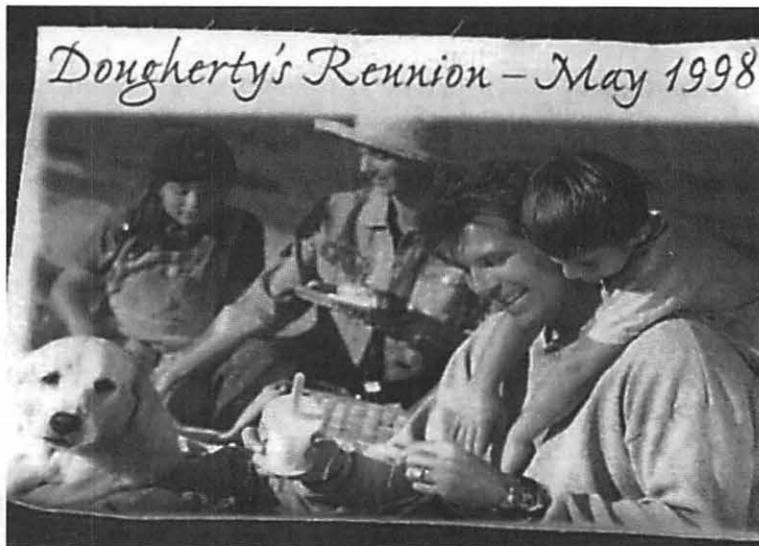
### Coming Together with Reunion

For the moment, however, the Pi is more concerned with the here and

now, as well as the there and then. Ed Jordan, chair of the Pi's Genealogy SIG (it meets at the Pi offices the second Tuesday of the month), talked a bit about his Special Interest Group and then introduced the first presenter for the meeting, Frank Leister of Leister Productions, Inc. (<http://www.leisterpro.com/>)

Frank demonstrated *Reunion 5.0*, a highly regarded genealogy program with an enthusiastic and loyal band of users. Frank has a low-key presentation style, sparked by a gently ironic wit. He never told an explicit joke the entire meeting, yet the audience

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 "Over the entire lengthly history of Washington Apple Pi, Michelle was probably the first vendor representative to apologize for not bringing a squirtgun."  
 —



This photograph was printed using Alps iron-on transfer cartridge, and then "ironed" on cloth.

found many occasions to laugh at his deadpan description of the absurd. Constructing a family history, he would offer such observations as, "If you make a mistake about the wife, just put her in the trash," or "you can remove an entire branch of a family tree by just selecting it and deleting it." The often-comatose Saturday morning crowd perked up to near wakefulness, a tribute to Frank's presentation skills on what could be a very dry topic.

*Reunion* is a Mac-only program, and makes superb use of the Macintosh interface. While there are keyboard shortcuts for almost everything, buttons and tabs make most activities "obvious," and it appears as if a user would have little difficulty creating a basic genealogy with little reference to the manual. Simple family trees, however, are just a beginning for *Reunion*, which has a vast capacity to accept virtually unlimited personal biographical information, photos, QuickTime clips and other material. Once the material is entered, it can be displayed (and printed) as graphic family trees, timelines, individual "person sheets," pedigree charts, and other types of reports. *Reunion* can also export information in

various word processing formats, as well as HTML format, for publishing on the World Wide Web.

The program can interact with information in several ways, depending on context. You can use a "stack of cards" metaphor for entering information on individual family members. Descendant Charts, on the other hand, are tree structures, with individuals in their own boxes, connected by lines to indicate marriages and offspring and color-coded to show generations; boxes, lines, colors, and other elements can be customized within the application, without resorting to other tools.

Extraordinary attention is paid to the often incomplete nature of most genealogy research. For example, you may know that cousin Fred was born on May 12, 1956, but all you know about his father's birth was that it was sometime in the summer of 1921. *Reunion* allows you to enter "fuzzy" dates, ranging from the precise May 12, 1956 to the vague "summer of 1921," or even "summer of 21." An automatic date calculator keeps track of the age of individuals at different milestones in their lives. If you entered your own birth date, and your wedding date, and the birth date of a

child, *Reunion* could display your age, in years, months, and days, at the time of the wedding and birth of your child.

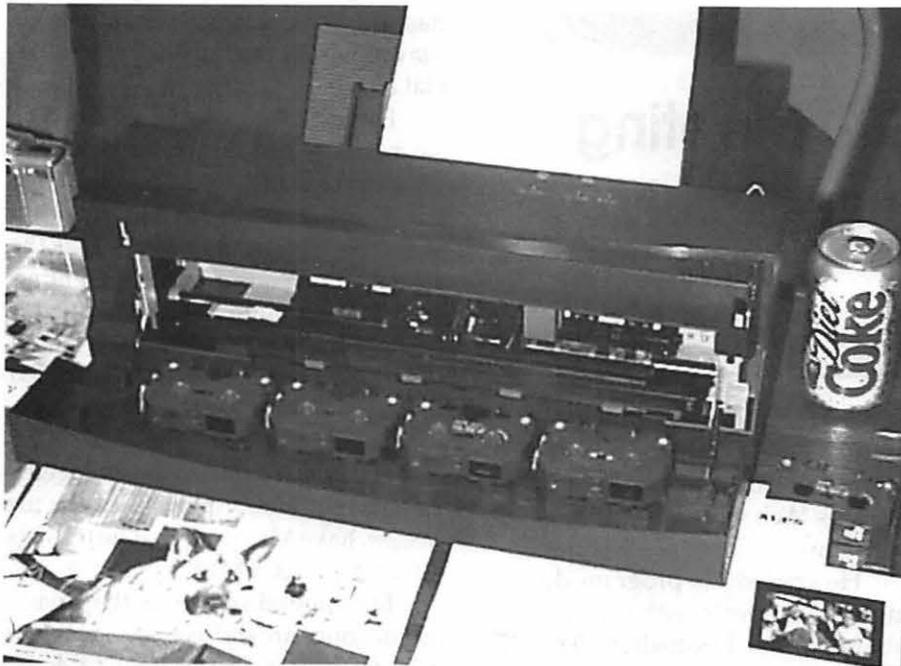
*Reunion* can also be used as a database. You can use it to search for all family members born in Missouri, or all males born before 1800, or all family members who have "Frank" as part of their names. The attention to detail, and the obvious focus on using it as a tool rather than incorporating features for the sake of features, is clearly evident.

Because of other events taking place in the auditorium, the stage was set up with an open orchestra pit, preventing Frank from demonstrating *Reunion* from the stage. Instead, he sat in one of the theatre chairs in the auditorium, with a PowerBook G3 series laptop and wireless microphone and his back to the audience. Aside from possibly dislocating his spinal cord (from trying to turn around to see those asking questions), he made this potentially awkward arrangement work well, and everyone was extremely impressed with his PowerBook. Sadly, he did not offer it as a drawing prize, despite several suggestions.

#### Alps Without Squirtguns

Michelle McNaught (mczero@erols.com), a regional representative for Alps Electric (<http://www.alpsusa.com/>), gave the second presentation. Trying to do a presentation on printers is difficult, since a printer isn't nearly as interactive as a software package. So Michelle used a different approach, a mixture of information on Alps and their printers and a seminar on printing.

Alps has a long history in the computer field, but is usually known for their components. Over the past 20 years, many Apple products have had keyboards, floppy drive components, or switches made by Alps, but to most people Alps is an unknown.



Michelle McNaught brought an Alps printer for display, and opened it up to show the arrangement of ribbons in the printer.

So Michelle's first task was to provide a brief history, and suggest that Alps printers are not those of some late entry in the field. Instead, they are a new direction: a product they've actually placed their name on, in a visible place.

Unlike laser printers, which use a dry powder, or inkjet printers, which use a wet ink, Alps printers use a dry-process printing. In other words, they use ribbons. Michelle explained that this was not a throwback to typewriters, but a "better idea:" injet printing isn't waterproof, and smears, and dry powder printing such as that used in laser printers just doesn't have the same richness as Alps dry-process printing.

Over the entire lengthy history of Washington Apple Pi, Michelle was probably the first vendor representative to apologize for not bringing a squirtgun. She explained that, normally, she'd use the squirtgun to spray water on various print samples, which would then be passed around for the audience to examine (and try to smear). Lacking the squirtgun, she

used a cup of water to illustrate this point, in some cases thoroughly soaking her samples but without smearing the ink.

Because it is a dry-process printing, Alps printers don't need special paper; a 24 pound laser paper is preferred, but photocopy paper works almost as well. The dry-process printing also allows the user to print on both sides; in many printers, this will cause printed images to smear, or sometimes gum up the printer, causing jams.

Alps is pushing the outer edge with this technology: they've developed special ribbons for creating iron-on transfers (for T-shirts), as well as metallic ribbons for printing in gold and silver notoriously difficult to do. A special white cartridge was created for producing neutral backgrounds, useful when printing on colored paper. Soon to come: a water transfer cartridge for creating temporary tattoos.

For a presentation that didn't use a computer she stood in front of the crowd and talked, and passed out print samples Michelle ranks as one of the

better Pi speakers over the past year.

**Next month:**

In August: be sure and attend on August 22 as Multi-Ad Services (<http://www.multi-ad.com/>), the company with a terrible name, demonstrates something with a much-better name and an amazing set of features: Creator2. This elegant design tool is a nice mixture of PageMaker and Quark Xpress with elements of Adobe Illustrator, all in one nice, neat package. It will give you a whole new perspective on what a "page layout" and "design" software package can do.

Ah, yes: what happened to Don Essick, the Macintosh Vice President? His kind and thoughtful employer sent him to Dallas in late July to enjoy the record-setting string of 100-plus-degree days. The Pi leadership coolly offered to try and fill his shoes for the month, lacking any desire to join him. He will be back in August, without the Dallas heat (we hope).

**Drawing winners:**

- Alps MD-2300 printer: Robert Wilbur
- Leister Reunion T-shirt: Jim Diamond
- Leister Reunion T-shirt: Pat Fauquet
- Leister Reunion T-shirt: Bob Hewitt
- Leister Reunion T-shirt: George Hogeman
- Leister Reunion T-shirt: Sue Ware
- Microsoft puzzle: Georgia Sadler
- Microsoft puzzle: Harvey Bresler
- Apple T-shirt: Ed Kely
- Apple T-shirt: Al Lubarsky
- Apple T-shirt: John McDonnell
- Mouse pad, Guru disk: Etelka Horvath
- Cyberian flying saucer: Brigitte MacLaren
- Alps Glideport: Maria Zenaida L. Guanio
- Alps Glideport keypad: Ralph B. Lingeman ■

See page 38 for a review of the Alps 2300 printer.

## Graphic Arts SIG Meeting Reports for June & July

by Blake Lange  
Blake.Lange@tcs.wap.org

has to be rasterized before it can be played with using the Photoshop special effects.

Discussing the WACOM tablet he said that while larger tablets were good for tracing, smaller ones were great. He mentioned that working with the tablet while looking at the screen helped one develop the important skill of "blind contour" which is being able to draw shapes without looking at ones hand. He encouraged us just to jump in and start working, that the skills would come.

Harry is a bit of a Mac evangelist saying that ninety percent of the art houses have Macs and that he tells his students, "Get a Mac!"

He pointed out to us that many applications are stylus aware. One can add programs to the WACOM list enabling a different set of attributes depending on the program in use. The newer tablets have a two function button. Harry sets the front of his button to "double-click" and the back to "undo." Tip pressure can also be adjusted along with the eraser tool.

Even though Ansel Adams was supportive of the move towards digitalization, Harry told us, most photographers have been dragged kicking and screaming into the digital age. But getting beyond the use of so many hazardous materials by graphic artists isn't a bad thing, he said.

Harry took some time to show us the use of Channels in Photoshop explaining he normally teaches this last to his students. He showed us some of the filters and mentioned that there were over 100 filters in Photoshop, and that playing with them all the time was important.

Those who attended the meeting were glad they did, and everyone left feeling that they had gained something from the experience. Attending were Mary Keene, Stuart Bonwit, Russell A. Kirsch, Chuck James, Cindy Sherwood, Harry St. Ours, Blake Lange, Arthur Hoiland, Harald Hoiland, Diana Buell, Ann Stein, Ed

**T**HE GRAPHICS ARTS SIG had two great programs at the June and July monthly meetings. In June, Harry St. Ours talked about the use of the graphics tablet and in July David Hartge discussed the T-shirt business. In addition to the regular monthly meetings, seven of us got together in late June to plan for producing CD-ROMs and creating a Web site.

The number of people expressing interest in the group continues to grow with the contact list totaling well over a hundred. Some of the email, however, has been returned as undeliverable, so about a half dozen names were recently dropped from the list. If you have signed up to receive announcements and for some reason are not getting them, drop me a line to be put back on the list with your current address. The group is open to everyone interested in the graphic arts.

The program for the June meeting was coordinated by Sonny Tohan of Mac Business Solutions, the host of the Graphic Arts SIG. He arranged for a program by Harry St. Ours who teaches high-level computer graphic arts at the Corcoran and Montgomery College. He

also teaches various seminars, some online. Those of you interested in finding out more about him should visit his Web site at <http://www.st-ours.com>.

He started his program discussing special effects with type using Illustrator and Photoshop. The new Photoshop version 5 has a type engine allowing one to edit type but the type



*Harry St. Ours captured the attention of the attendees with his dynamic presentation at the June Graphic Arts SIG meeting.*

Stein, Rob Kleinsteuber, Jean Koike, Marc Stein, Attila Horvath, John W. Laughlin, Linden Tucker, Ann Lesnik, Helen Dilley Barsalou, Virginia Sheard, Jennifer Williams, Kim Stark, Ernie Walker, Peggy Miller, and George L. Venable.

**July Meeting**

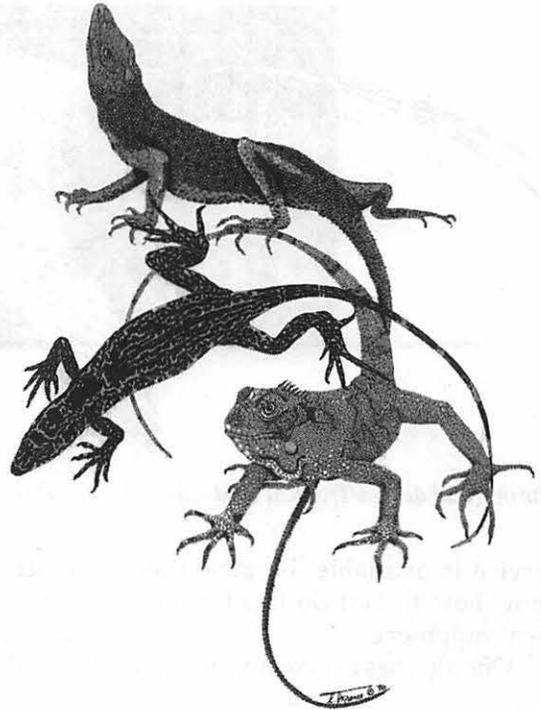
The July meeting featured David Hartge, owner of Chameleon Clothing Company, who talked about his work designing and producing T-shirts. He gave us background on how he starts creating hand painted clothing. He showed us a photograph in a book of an extremely beautiful kimono he had done. (He has found it easier and more profitable to produce 100 T-shirts than to produce one kimono.) His background as a fine artist really shows in his designs which he creates both for his own company and for larger companies. Much of his work is done using process color, but in the T-shirt business there are no standard inks for process color like there is in the printing industry. The colors depend on the company you are using.

So there was quite a bit of discussion of the proofing process. In the

early days screens were hand-cut from zipatone and inking was done with a rapidograph. With Photoshop it is a much less torturous process. Proofs are done on a cloth-like material called pellon.

Besides the issue of no standardized process inks another reason for checking proofs is to determine if moire, or patterns caused by the interaction of screens, is visible. Not only are the lines per inch (lpi) of the halftone dots a factor but also the screen frequency of the silks. He gave the example that one could end up with a moire with a 55 lpi halftone on a 150 lpi silk.

When creating for T-shirts it is very difficult to match what David called "reference colors" which are flesh tones and colors that are well known such as those used in certain logos. So, whenever possible, he avoids using those. The other rule he

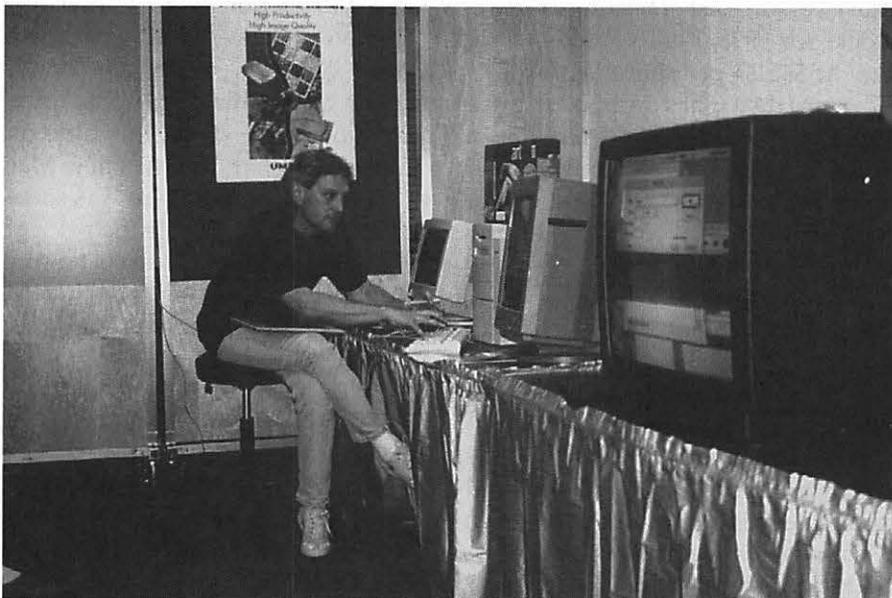


*The original design Three Lizards was used on a David Hartge T-shirt.*

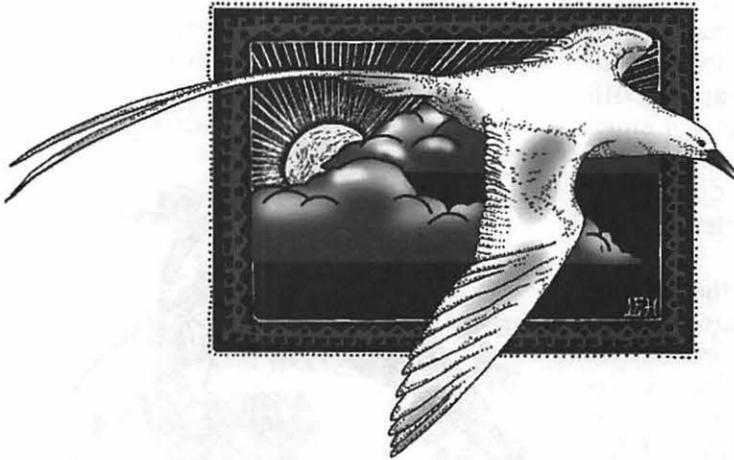
follows (especially for someone who is selling something) is the fifteen to twenty foot rule, which is that the design should have impact from that far away. The T-shirt is sometimes a bumper sticker.

One point David emphasized is that it is important to switch from RGB mode (Red, Green, Blue) to CMYK mode (Cyan, Magenta, Yellow, Black) when editing images. The RGB mode is based on colors being displayed on the computer screen and CMYK mode is based on the colors used for printing. As a rule the CMYK colors are not as bright. When one switches to CMYK one usually has to tweak the colors. The K channel or Black channel tends to muddy things more than anything else, especially with T-shirts. In Photoshop one uses Curves to adjust it.

If one is doing ones own trapping it is required to switch to CMYK because one cannot do trapping in RGB mode. It is best, however, to let a printer do their own trapping if that



*Harry St. Our showing his expertise in the use of graphic arts programs.*



*The original design Tropical Bird was used on a David Hartge T-shirt.*

service is available, because they know how to best do this for their own equipment.

One also has to take into account

the effect of dot gain which is a special problem in the production of T-shirts. The larger companies that use hydraulic presses have dot gain in the

## StockSIG June Meeting

by Morris Pelham

**YOU KNOW** about Bungee Jumping? Several people climb up high, tie themselves to something with a piece of elastic, then hurl themselves off the high spot. They hope to bounce back up, but they know that not all of them will. That's the thrill, to know that some will come back up but not know which ones.

Here at StockSIG we have been investing in Dow stocks for the last few years, and we have noticed that several of these Dow stocks, after getting up to high prices, have plunged like bungee jumpers. We also noticed that some of them came back up.

So I took a look at our portfolios of Dow stocks over the last few years and brought to our June meeting some giveaway charts of the ones that took the plunge. There was IBM in 1993, down to \$21 per share, now

back up to over \$120. There was Merck in 1994, down to \$29 per share, now back up to about \$130. There was Woolworth in 1995, down to \$9 per share in 1996 and later back up to \$26. There was AT&T in 1997, down to \$31 and then up above \$60.

And this year?

Well, Philip Morris is cheap. In Mark Pankin's list of Beating the Dow stocks for 1998, Philip Morris was a buy at \$45.25 per share last 12/31/97. Since then it has dropped in price at least 20%, so it could have been bought twice more, at about \$41 and again at about \$37. So that is the first half of the story. It has taken the plunge.

Now, the more interesting question is, will it come back up? Nobody knows.

We had a very interesting discussion, how people thought the mainframe was dead when IBM was cheap, how people thought socialized medicine was going to happen when Merck was cheap, and of course lawsuits and adverse legislation now when Philip Morris is cheap.

35 to 40 percent range.

Toward the end of the presentation there was a great round-table discussion on the use of Photoshop's features to create changes without locking into them.

Those in attendance at this meeting were wowed both by David's in-depth presentation on the techniques used to create artwork for T-shirt production, as well as his creative and artistic abilities. In attendance were Diana Buell, Cindy Sherwood, George L. Venable, Mary Keene, Esta Gladstone, Martha Jokovski, Blake Lange, Arthur Hiland, Harald Hoiland, John Laughlin, Valerie Burghardt, Joy Gwaltney, Linden Tucker, Gretchen Collins, Robert Allen, Marc Stein, Virginia Sheard, David Hartge, and Bob Russell. ■

None of us knows which among the bungee jumpers will come back up, but we do know that some of them will. If you buy them all, your chances are good.

Mark Pankin did pass out copies of his Beating the Dow Strategy Tracker for 1998. It shows our portfolio is up 10.8% for the year, but it was up 10.9% one month earlier.

Dave Weikert, also known around our table as "Brave Dave," told us about his additional purchases of Apple stock, this time on margin. He plans to buy a new Mac with his profits, and there was some talk about waiting while the price of the stock goes up and the cost of the computer goes down. If current trends continue Dave could buy a really high-end system pretty soon!

If you have any questions or comments on this column or others of mine, they are welcome on our TCS, on the StockSIG Online board.

StockSIG meets the 2nd Thursday of each month at 7:30 PM in the WAP office. ■

## StockSIG July Meeting

by Morris Pelham

AT OUR STOCKSIG meeting last October I passed out copies of my list of the 30 Dow stocks showing which ones were my picks to begin our 1998 portfolio and why. They were Philip Morris, AT&T, Union Carbide, DuPont and Eastman Kodak.

Then at our January meeting this year I handed out these same copies again, along with others showing additions to the portfolio and the results from October to January. We had a small profit, as we usually do when we buy early. By the time you read this it will be time to be thinking about buying the 1999 portfolio. Do think about it and come to our next StockSIG meeting if you would like to add some Dow stocks to your investments.

At our July StockSIG meeting I again handed out copies of that same page, showing the beginning of the 1998 portfolio, along with two other pages showing additions to the portfolio and the results from then to July, up 23.5%.

This 1998 portfolio now includes ten of the thirty Dow stocks and cost \$89,387.50 to buy. Those stocks are now worth \$110,432.25 and will pay dividends this year of \$2,376.

We moved on from this to talk about some of the individual stocks, particularly last year's cheap stock, AT&T, and this year's cheap stock, Philip Morris. We had several different opinions, as we usually do, and all were heard.

We moved on again to discuss general market conditions, including fears that the continuing turmoil in Asia and Russia could cause our markets to fall broadly later this year. We'll soon know.

The Washington Post reports that All Equity Funds are up by 9.79% in the first half of 1998, so we feel our portfolios are doing well. So far.

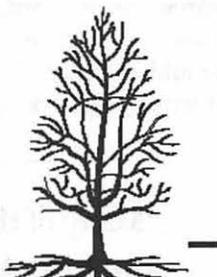
If you have any questions or comments on this column or others of

mine, they are welcome on our TCS, on the StockSIG Online board.

StockSIG meets the 2nd Thursday of each month at 7:30 PM in the WAP office. ■

## Genealogical SIG June Meeting

THE MEETING started around 10:05 AM in the tutorial room at the WAP office. Alden Bestul substituted as Chair in the absence of Ed Jordan (at a cousin's wedding in the Mid-West). Marie Bestul's trusty tape cassette recorder substituted as recording Secretary in Mary



Jordan's corresponding absence.

The following nine people, four of them first-timers, participated in the meeting: Clark Snead, Charlie Rice, May Inscoe, Marie Bestul, Alden Bestul, Alex Maish, Thomas O. Nichols, C J Dwinell, and Logan Ingram. The meeting ran in a very relaxed manner, with a correspondingly deep level of personal genealogical reflection.

A reminder was made that the SIG will take a summer vacation, and will not meet in July and August. Its next meeting will be in the tutorial room at 10:00 AM on Tuesday, September 8th, with an outside speaker to-be-announced. A member reminded us about an important summer event for SIG members, however,



Many cities have skyscrapers. Manhattan has great quantities of them, in almost every shape and size from big to really, really, really huge. During MacWorld Expo New York, large numbers of these skyscrapers housed large numbers of MacWorld visitors — and Manhattan barely noticed. Photo © 1998 Lawrence I. Charters

which will be the July 25 General Meeting of the entire Pi organization at which the highly reputed Mac genealogy software, *Reunion 5*, by Leister Productions, will be presented by the producer. The meeting will be at the Northern Virginia Community College (NOVA) at 10:00 AM.

Clark Snead called attention to the latest issue (June 1998) of the American Association of Retired Persons (AARP) "Bulletin", which contains an article on computer contributions to genealogy. It lists a number of useful genealogy web site addresses on the Internet. These are helpful for a wide range of genealogical purposes, ranging from general information, to orientation help, on to highly specific information.

Alden Bestul mentioned another approach to Internet genealogy web sites and other genealogical information. This is to use some search engine to search the Internet for family names. There are many Internet search engines, of which different people have different favorites. Alden uses Alta Vista, <<http://altavista.digital.com/>>, which happens to be the one provided directly on the TCS Explorer Home Page. Completely unexpected positive results have come from his searching this way. A variety of strategies for searching exist. The following examples are specifically from Alta Vista, but most Internet search engines have similar, if not identical or equivalent, capabilities.

Searching can be for a single word, which identifies all pages on the Internet containing that word. For common words, this can amount to many thousands of pages. But the number of pages identified for more uncommon words, or names, is reduced to more manageable figures. To get more specific, searching can be for two or more words, combined as the target of the search. In this case, searching can be for all pages that contain either, or any, of the words

searched for. This doesn't help much.

By connecting the words with plus signs (+), or negative signs (-), searching can be for pages that contain all of the searched for words within about 100 words of each other, or that contain all of the (+) words and none of the (-) words within about 100 words of text. If a multi-word phrase is enclosed in quotation marks (" "), Alta Vista searches for all pages that contain exactly that enclosed phrase. "Wild cards" can be used to search for variations on words. Eg, searching on "famil(x)", where (x) is the wild card, would identify all the pages on the Internet which contain the words "fam-

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"Many of these non-commercial foreign genealogists usually try to be as helpful as possible to US descendants trying to research their emigrant ancestors. But some US researchers are sometimes quite unrealistic about the amount of effort required in tracing family lines, and make correspondingly unrealistic heavy demands on the time and effort of the helpful non-commercial foreign genealogists."

---

ily", "families", "familial", "familiably", "familiar", "familiarize", etc.

Search engines are not only for genealogical searching, nor even particularly for genealogical searching. They are for searching in any and every conceivable subject area. The vari-

ous search engines carry online their own instructions for different strategies of searching, such as given above for Alta Vista. Examples of a few other search engines are: Yahoo <<http://www.yahoo.com/>>, Lycos <<http://www.lycos.com/>>, Web Crawler <<http://www.webcrawler.com/>>, and Info-Seek <<http://www.infoseek.com/>>.

May Inscoe asked about a telephone call she received from an unknown other person with her surname, about an Inscoe reunion. That person said they found May's telephone number "on the computer." May wondered how that could be, because she isn't aware of her number being anywhere on any computer. Many conjectures were made, including Switchboard, none conclusive. We neglected to ask May whether she had contacted all the at least 12 other families surnamed Inscoe in the Maryland-DC-Virginia area to inquire whether they had also been telephoned by the same person. It was determined later that if one searches for "May Inscoe, Maryland" on the Internet web site "Switchboard" <<http://www.switchboard.com/>>, it shows her exact name, address, and telephone number, as distinct from those of her husband, which are listed in the telephone directory.

Tom Nichols asked if he could transfer, to his Macintosh *Reunion* genealogy program, his cousin's write up of their family history, which is on a "Reunion for Windows" program. It was pointed out that this could be done through a GEDCOM file. A GEDCOM file is a universally common type of file, somewhat like a "text" file, that can be used to "export" to a disk genealogical data from any type of genealogical software that has GEDCOM capability, and "import" it from that disk into any type of genealogical software that also has GEDCOM capability. Almost all types of genealogical software created these days do include GEDCOM capability.

The question of the relative merits of the various genealogical software programs for Macintosh was raised. Pluses and minuses of several such programs were mentioned, including in addition to *Reunion 5*, *PAF 2.3.1*, *Family Tree 1.18*, *Heritage 3.11*, and *Gene 4.2*. Concerning a consensus opinion of this subject, it appeared that among the nine participants in the meeting there were at least, if not more than, nine positions.

Alden brought up the matter of the list of ancestral names, prepared last October, about which information was being sought by various members of the SIG. It was intended to post it on the Library of the Genealogy SIG Bulletin Board, Conference 2, Board 12, but that has not yet been done. It will be done soon, so now is the time to update that list with additional names that any current listee considers appropriate, and the names proposed by any older or newer SIG members not already on the list. To that end, copies of the October list were passed out, and it was agreed that any proposed additions to be included in the updating would be returned soon. The question was addressed as to how widespread one should be in listing such names. A wide variety of opinions was expressed, focusing on the balance between concentrating on a few closely related names, or casting a broader net for a larger number of names over a wider relationship.

Tom asked whether if one was any kind of a member of Pi, one had a TCS email address, and how one knew what it was. The answer is that if one has either of the classes of TCS Services beyond the "Limited", which is at no further cost beyond the general Pi membership fee, one does have a TCS email address. Service classes beyond "Limited" are "Classic" and "Explorer", at further fees. When one applies for and acquires such a further service class, one, at that time, is notified of one's email address. If that

notification becomes obscured to one, unless a different address is arranged, one's email address would normally be <firstname.surname@tcs.wap.org>.

May pointed out the great helpfulness, in using the TCS (TeleCommunications System), of the latest version (2.0) of "The Fine Print", Pi's guide to that system. It is available, at a modest charge, through the Pi office (301-984-0300) (open 10 AM - 6 PM, Mon, Wed, and Fri, and 10 AM - 2 PM, Sat, or by mail). Another great help in this regard is the TCS Bulletin Board "TCS Comments & Suggestions", Conference 1 Board 13. Once one reaches that board, it is the place to ask questions about problems or uncertainties concerning the use of TCS, and almost always receive help from one, or more, more knowledgeable TCS members returning diagnoses of troubles and suggestions for their elimination. It is also the place to post any comments or suggestions that one might develop that one thinks might be helpful to any other TCS user.

Alden passed out a five page write up "Helps for Researching in America One's Ancestors in Norway." Although it addresses specifically research on Norwegian ancestors, and some of its suggestions are specific to Norway, many parts of it are generally applicable to research on ancestors in any foreign country. It tries to make clear the many genealogical resources in the US which make it possible to do much research here on immigrant ancestors, without unnecessarily burdening noncommercial genealogists in the countries from which they emigrated.

Many of these noncommercial foreign genealogists usually try to be as helpful as possible to US descendants trying to research their emigrant ancestors. But some US researchers are sometimes quite unrealistic about the

amount of effort required in tracing family lines, and make correspondingly unrealistic heavy demands on the time and effort of the helpful non-commercial foreign genealogists. These heavy demands are reduced massively if the US researchers utilize the resources available to them in the US to advance their research as far as possible here, before asking for help from noncommercial foreign genealogists.

Tom asked if one can contact these noncommercial foreign genealogists online, and about the effectiveness of getting genealogical information right out of foreign countries. The answers are yes, and great. Contact is made, as mentioned earlier, either by identified web site addresses, or through search engines. Alden gave examples of some non-typical and some typical

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responses to such inquiries. A question was raised about language barriers. It turns out that most people, born, say, after World War II in most western countries have necessarily studied the English language in school, and had reasonable English language ability at the end of their youthful education. Some of these ex-students, especially in rural areas, lose that ability later through disuse, but in more urban areas, where English is used more, these people tend to retain their English language ability throughout life.

Someone commented that he had traveled professionally for 40 years in dozens of countries, and never, ever been in a place where English was not spoken. On the other hand, another participant mentioned that even versions of English spoken outside Great Britain, such as in Scotland, are often difficult to understand in speech. It was pointed out that online communication provides one advantage, over face-to-face conversation, in using non-native languages in which a person has only a limited ability. Instead of requiring an immediate response, which needs relatively rapid brain activity in receiving, processing, and transmitting information, as in face-to-face conversation, on line communication allows whatever time one needs for this turn-around process, so a person is much more likely to be able to do it in a language with which one has only a limited familiarity.

Tom spoke of his interest in a particular US city, and wondered how he could learn some preliminaries about it online before going there. Using a search engine was mentioned, to search the Internet on that city's name. The city's library was suggested, using a search engine to search the city's name combined with "library," and possibly combining "genealogy" with those two as a search target. For further specificity, a surname could be combined with the foregoing in a search target.

A member mentioned Jonesboro, Tennessee, where the library makes a specialty of genealogy, and has much data from a wide area around there, and is very eager to help researchers. He has been there only physically rather than on line.

C J Dwinell called attention to the bimonthly magazine called "Genealogical Helper", published by the Everton Publishers, Logan, Utah, which has much information and many facilities. It is carried in the Rockville branch of the Montgomery County Library. The magazine "Persis", which is particularly comprehensive, is published by the library in Allen County, Indiana. The Internet service provider Prodigy, before it discontinued, emphasized

genealogy, and the person concerned with that, Dick Eastman, now has his own web site.

May called attention to the list of genealogical Web sites "Gen-Surfing: A Genealogist's Guide to Exploring the Internet" and made copies of a copy of it she had, and passed them out. "Cindy's List" was mentioned as reputedly the most popular genea-



*Outside of a war zone, you can probably find more concertina in New York City than anywhere else in the world. Either the city is expecting an invasion or their cattle are just too rambunctious for normal barbed wire. Both invaders and cows were scarce during MacWorld Expo New York. Photo © 1998 Lawrence I. Charters*

logical web site, with allegedly thousands of links. Charles Rice added that many states now have their own genealogy Internet web sites and many U.S. counties have their own web sites as part of the USGenWeb Project <<http://www/usgenweb.com/index.html>>. This, and many others, are on Cyndi's List.

Alden passed out copies of "The

Coming Together and Separation of the Bestul Family," a five page write up of a six century saga of his ancestors in Norway and in America (see a write up of this in the second half of this journal).

C J Dwinell observed the impression that much genealogical information in the southern US had not been written down. Alden mentioned the January 1998 SIG presentation of Charles Spencer, who has meticulously researched his ancestry from the south. His talk was on military records, and he was favorably impressed by the careful preservation, by the Union (US) military, of the Confederate military records captured. He shared with that meeting two extremely valuable outlines, prepared by Mike Musick, a professional archivist, on "Elements of a Good Confederate (Union) Name Search."

Tom mentioned that he had searched church records for genealogical data, and wondered if any other religions had such records comparable with those of the LDS. No one was aware of any other religions which maintained records targeted on all people everywhere, as distinct from just the members of the maintaining religion. C J Dwinell observed that many people consider using the LDS records from abroad superior to trying to use the originals overseas.

Tom described detailed plans for a family reunion based on his cousin's family history. Alden spoke of a family reunion in South Dakota in 1993, attended by nine family members from abroad, partly as a result of which the data base for his family history of his mother's line increased from about 1,000 to about 1,800 on a visit abroad in 1997.

Alex Maish mentioned the Halbert and Whitney books. They consist mainly of universally applicable "boiler plate" with added listings of surname addresses such as can now be obtained from the "Switchboard" Web site. There is no more

specific family history in them than those lists, but before such sources as Switchboard were available, they were effective sources of widespread sources of family names - nothing more. Alex mentioned calling various people with the Maish surname to inquire how they came to have it. One lady replied, "It just seemed to me like such a lovely name." And it is.

Tom identified one good source of Scottish genealogical data as the formal Clan organizations; Clan Keith in his case. Many ethnic groups of descendants have formal organizations of this nature, organized on various criteria. Whereas the Scotch descendants are based on families (clans), the Norwegian and Irish descendants organize on the basis of ancestral location in the country of origin.

May mentioned that her husband's family had thought the surname Inscoc was of Scottish origin, but when she visited Scotland and made inquiries, no mention of the name could be found. A possible lead turned up later in a travel magazine where an Irish manor with the seemingly related name, Ennisoc, was mentioned. More recently, the possibility has surfaced that Inscoc ancestors left England because of religious persecution and went to Poland, whence they eventually came to this country. Obviously, more sleuthing needs to be done.

C J Dwinell called attention to the book "Lest We Forget", on genealogical resources in and around the District of Columbia. It is available at the Hearth Stone Bookstore in Alexandria.

The meeting ended around II:45 AM, and we proceeded on to even more informal conversation and shenanigans.

—submitted by Alden Bestul

#### 1998 Fall Plans

The last regular meeting of the Genealogy SIG was in June. This completed 10 consecutive months of

speakers, including outsiders, and member discussions for the Genealogy SIG which was newly formed in the Fall of 1997. The minutes for that meeting are printed above.

Because of travel and summer activities, the group will take a vacation from meetings for both July and August. However, regular meetings will resume in September on the second Tuesday, the 8th, with an outside speaker. The speaker will hopefully be someone connected with the DAR (Daughters of the American Revolution) Library which has unique resources for genealogy research. Definite information will be posted to the SIG's bulletin board on the TCS, C2B12.

#### Second Year Plans

As readers of the Pi Journal are aware, all meetings of the Genealogy SIG have been held on weekdays during the daytime. From the very beginning I have received numerous requests to hold meetings of the SIG in the evenings. At least three written requests have been received. I know we would lose many of the present members if the meetings were switched to evenings. I believe an alternative would be to start an evening Genealogy SIG if there is sufficient interest. The two Genealogy SIGs could then meet periodically on a Saturday for major programs. Another alternative would be to maintain one SIG but meet alternately in the daytime and in the evenings.

The point of raising this matter is that we need a volunteer to organize an evening meeting of the same or a separate SIG. If there is sufficient interest, I would be happy to assist anyone who wishes to learn about the mechanics of getting started. Therefore, I suggest that anyone interested should so indicate by posting a message on the SIG bulletin board or, if unfamiliar with the TCS, send me an E-mail. Let's see who is interested!

—Ed Jordan, *Chair, Genealogy SIG*



**"VAPORWARE SELLS"** should be the lesson learned from MacWorld Expo New York. For several years Apple has had a policy of not commenting on unannounced hardware and software, but a constant stream of leaks has undermined that policy. Then in May 1998, when Steve Jobs announced the iMac — something that hadn't been leaked prior to the announcement — Apple was suddenly talking, at length, about something that didn't exist yet. Even more amazing, people listened when Apple talked: for months the iMac has been the hottest topic in the computer industry that didn't involve the Justice Department.

MacWorld Expo New York was, in reality, the iMac Expo. Dozens of pre-production iMacs were scattered around among exhibitors, and the iMac had center stage at the opening keynote address. Almost everyone had "iMac compatible" products, ranging from the essential (various Universal Serial Bus peripherals, including scanners and floppy drives) to the silly (mouse pads). Almost all of Apple's oversize banners had iMac themes, as did all the parking lot and subway posters for the Expo.

And people loved it. While the iMac doesn't do anything new — it is still a Mac under the transparent Bondi Blue and Platinum plastic — the general feeling was that it was "revolutionary."

Revolutionary? Sure, why not? Revolutions are supposed to change things, and there was plenty of change, starting with the city. The towers and subways of New York

City, specifically Manhattan, served as center stage for the East Coast version of MacWorld, leaving the endless "Big Dig" construction and dual, distant exhibit halls of Boston behind. MacWorld New York visitors tended to be much better dressed than the usual Boston MacWorld crowd, with more of a tendency to spout tough-sounding business and finance blather; the Boston crowd tends more to towards obtuse technogeek. (Actually, most MacWorld visitors in both cities are polite and quiet; it is the loud minority that differs.)

### The Keynote

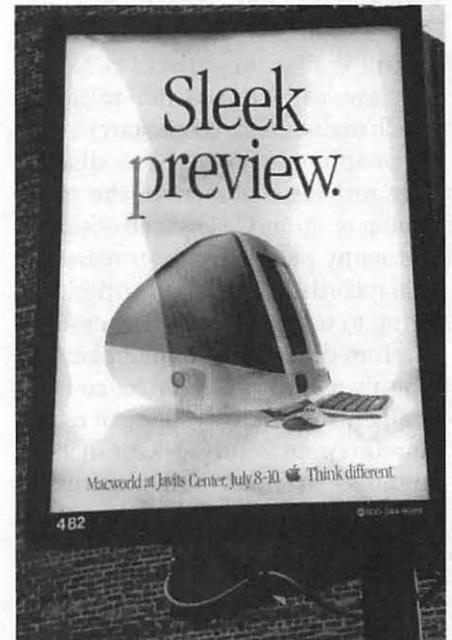
Interim Chairman Steve Jobs was *not* supposed to be at MacWorld, but he flew in, allegedly at the last moment. This had the ring of truth, rather than hype, as Steve, a consummate showman, took a rare miscue: he always appears after a video, but for *this* keynote, he started to walk on stage just as the video was starting, and beat a hasty retreat.

The videos were repeats of recent commercials, plus a new, fairly lengthy "commercial," *Shootout*, showing an elementary school kid (and his dog) racing an adult with a Stanford MBA to set up a computer and log onto the Internet. The kid (and his dog) unboxed and set up an iMac, and logged in without trouble, stopping for some doggy snacks and some dog-and-kid playing around. The MBA unboxed and set up a Hewlett-Packard Pentium II machine; needless to say, this took more than three times as long, and without any time for doggy snacks. A great video.

In addition to the now-routine demonstrations of blistering Power Mac G3 speeds, there was an excellent demonstration of *Internet Explorer 4.0.1* by a Microsoft bigwig, Ben Waldman, and a demonstration of a for-fee Disney Web site by Disney Online President Richard Wolpert. All the Apple people, including Jobs, stated that they used *Internet Explorer* "by choice," as did the Microsoft representative. But Wolpert brought the house down when he stopped his demo, turned to the audience and said, "I guess this is where I'm supposed to say, 'I use *Microsoft Internet Explorer* by choice.'" Jobs, off to the side, almost sprained his face trying not to join in the laughter.

### Parenthetical Vignette

By an accident of fate, I was sitting just a couple rows back from the keynote stage. It slowly dawned on



MacWorld was promoted at parking lots throughout the city through a series of signs such as this — all with iMac themes. There were also posters inside some subway cars to attract local residents. Many tourists saw the signs and, even though they were in New York City for other reasons, dropped by the Expo to look around.

me that the two people sitting directly in front were celebrities: the world-renown dancer Gregory Hines and the comedian David Adkins, better known as Sinbad. They chatted throughout the keynote and, without really *trying* to listen, it was apparent that Hines uses a Mac for one reason: he doesn't have to know a thing about it to do real work. Adkins, on the other had, is a *fanatic*.

At one point, for example, a still image from the famed *Steamroller* ad (showing a steamroller crushing Pentium laptops) sparked the audience to laughter. Hines clearly didn't know why this should be funny, so Adkins eagerly outlined the "plot" of the advertisement, complete with gestures. This pattern was repeated throughout the keynote, with quiet questions from Hines generating increasingly excited responses from Adkins. I was impressed: Adkins would make one heck of a computer jock if he ever decided to leave the entertainment field. He also has Hines beat on the earring front, three to one.

That evening, talking to my daughter on the phone, I mentioned that I sat right behind Gregory Hines and Sinbad. Her response: "You sat behind *Sinbad!* You sat behind *Sinbad!*" — with each repetition going at least one octave higher. I interrupted and said, "No, I sat next to Gregory Hines." She thought this irrelevant; I explained I wasn't even sure who Sinbad was. She pointed out that I'd even accompanied her to one of his movies, *First Kid*; I pointed out that she'd seen Gregory Hines in a much better movie, *White Nights*. She sniffed disdainfully, and suggested I was "out of it."

As for *why* Hines and Adkins were there, I assume it was to promote the AppleMasters program, where Apple showcases Real Famous People doing Real Things with their Macs (see <http://applemasters.apple.com/>). But I have a feeling Adkins would have



*The Jacob K. Javits Convention Center won high marks from almost everyone for being attractive and practical. It had plenty of room, plenty of places to eat (though food was priced more like fine jewelry), and was relatively easy to reach. But exhibitors dislike the cost of exhibiting, and the Expo owners revealed that next year's East Coast edition will return to Boston in August.*

been willing to pay the regular MacWorld Expo admission.

### MacWorld: The Show

Expo security was tight. I was informed that my camera would be seized and the film removed if I took any photos in the exhibit hall, so I didn't. (None of the vendors in the hall came looking for publicity, apparently.) Once, after stepping out of the exhibit hall for a quick, very expensive lunch (\$10.50 for a sandwich and drink), I was stopped going back in and told that my badge must be visible at all times. A strap from my camera partially obscured the badge and That Was Not Permitted. There were reports that Steve Jobs, following his keynote address, was stopped from entering the hall for lack of a badge, and ended up appropriating one from some flunky in order to penetrate the blockade.

There were far fewer full-fledged booths than past Expos, but there were more "mini-booths" and quite a few joint-occupancy booths. The

mini-booths, clustered together in "Developer Central" (software and hardware development tools and such), education, and games areas, usually consisted of a small counter staffed by one person, with one computer on the counter. This type of booth was ill suited for extended demonstrations (there just isn't enough space for spectators), and even interactive conversation is difficult, since the staffer is required to face away from the audience in order to demonstrate something on the computer.

Several large vendors who needed to be at MacWorld were not. Quark, for example, has severely damaged its reputation over the past year following the introduction of *Quark XPress 4.0*. Past users faced extraordinarily high upgrade prices — so many didn't. Those who did found themselves saddled with a bug-ridden, user-hostile page layout package that was not backward compatible with older plug-in tools, and had huge problems with file format compatibility and integrity. Given the

massive concentration of publishing and graphics firms in New York City, a large booth with plenty of informed, helpful staffers would have been a Good Idea. But Quark was nowhere to be found, even though there were lots of smaller vendors offering XPress plug-ins, enhancements, or packages aimed explicitly at driving Quark out of its publishing niche.

### iMacs, iMacs Everywhere

iMacs were prominently displayed throughout the Expo, in Apple's booth as well as at the booths of various hardware and software vendors and even some resellers. This was a splendid idea, since it gave anyone who wished a chance to play with an iMac, play with the mouse, evaluate the display, admire the uncluttered, relatively cable-free nature of the unit, and see it zip through whatever it was set up to do.

This also created some confusion, since not all the iMacs were equal. Some were very early prototypes, and various components — such as the power switch — were not functional. Few supported the usual CMD-Opt-Power reset function (I was repeatedly assured that yes, you would be able to reset the "real" iMacs), forcing users to unplug the machines in order to escape from a crash. On the other hand, the machines were hard to crash, even though skeptics were trying very hard to do just that.

A bigger problem was one of utility: many of the iMacs had nothing on them, so there was nothing to do but play with various Finder functions: opening windows, creating folders and such. Several vendors set the iMacs at their booths to doing nothing more than loop through QuickTime clips or Director presentations. Since any old Mac could do these tasks, they wasted an opportunity. Shame, shame.

At the keynote address, Steve Jobs mentioned that Apple did listen to customers, and the original proposal, to



*The glass walls (and roof) of the Jacob Javits Convention Center lobby gave the building an open, airy look, and the irregular shape masked the vast size of the hall, making it seem more intimate and friendly. Apple — and some other vendors — took advantage of the space to hoist huge banners.*

include a 33.6K modem, had been scrapped; all production iMacs would ship with 56K modems. He also showed a list of applications that would be bundled with the machine, and there was one glaring change: originally, *FileMaker Pro* was listed as part of the iMac bundle, but *FileMaker* had been dropped.

At this writing, these are the specifications of the iMac as it will be shipped in mid-August 1998:

- Apple part No. M6709LL/A
- 233 MHz PowerPC G3 processor (i.e., PowerPC 750 processor); 512K of backside level 2 cache running on a 117 MHz 64-bit bus
- 66 MHz system bus
- 15-inch (13.8-inch viewable) multi-scan display with 1024x768 resolution, .28 dot pitch
- 32 MB SDRAM (expandable to 128MB); two SO-DIMM slots
- 2 MB SGRAM (supports thousands of colors at 1024x768; expandable to 6 MB; with 4 MB supports millions of colors at 1024x768)
- ATI RAGE IIc accelerated 2D and 3D graphics

- 4 GB IDE Hard disk drive
- 24x CD-ROM drive
- 10/100Base-T Ethernet port (supports K56flex, V.90 standard)
- Built-in high-speed 56K modem
- Two built-in 12Mbps Universal Serial Bus (USB) ports and a two-port USB hub on the keyboard, usable for peripherals (floppy drives, scanners, input devices)
- 4Mbps infrared technology (IrDA) port
- Built-in stereo speakers with SRS sound
- Built-in microphone
- Two front stereo headphone jacks
- Minijacks for 16-bit stereo input/output at CD quality (44.1 kHz)
- Two-position Apple Universal Serial Bus (USB) Keyboard and Apple USB Mouse
- 200 watt, 100 to 240 volt, 50/60 Hz power supply
- 15.8 inches high, 15.2 inches wide, 17.6 inches deep, 38.1 pounds
- Mac OS 8.1
- *AppleWorks 5* (i.e., *Claris Works*)
- STF Technologies' *FaxSTF*
- Intuit's *Quicken Deluxe '98*

- MetaCreation's *Kai's Photo Soap*
- Interplay's *MDK*
- Pangea Software's *Nanosaur*
- Broderbund's *Williams-Sonoma Guide to Good Cooking*
- Microsoft's *Internet Explorer* and *Outlook Express 4.01*
- Netscape *Navigator*
- Earthlink's *Total Access 2.01* (commercial Internet trial package)

### Things Other Than iMac

One Apple Web site, the Macintosh Products Guide (<http://macsoftware.apple.com/>), was heavily promoted in Apple's exhibit area and at various locations throughout the exhibit hall. The site is not new, but large numbers of attendees claimed to be unaware of its existence, and spend hours searching the site for various specialty products.

Guitar Center, a California retailer specializing in music hardware and software, had a constant crowd at its booth, as they did last year in Boston. The array of specialized music (MIDI and acoustic) hardware and software was educational; there were programs, patches and plug-ins for doing things with music (and sound) that most people didn't even know needed to be done.

One music application that doesn't exist yet looked interesting: Musitek's *SmartScore*. This package allows you to scan in a music score and create a MIDI file directly from the scan. The scanned image is also turned into an editable score on the screen, so you can change things around. It also accepts input from a MIDI device, and will output to a MIDI device. Pricing wasn't mentioned, but if and when it is released this fall, musicians — especially those with scanners — should give *SmartScore* a careful look.

Digital cameras and digital video are no longer exotic: everyone seems to have a camera, or peripheral, or software program that "does digital." The Olympus D-600L, with its el-



"You are now entering a beige-free zone" was the greeting over one of the exhibit hall entrances. Since Apple, with the introduction of the Apple II in 1977, popularized beige computers to the world, this is not only ironic but also demonstrates a complete



Twin banners (the other was a mirror image) featuring giant iMacs festooned the lobby of the Convention Center. In typical Mac fashion, attendees critiqued the banners with comments such as "good use of white space" and "Geez, the picture must weigh as much as a dozen iMacs." But the banners did catch your attention.

egant, simple, SLR (Single Lens Reflex) styling and superb picture quality, is still the clear favorite at the "low end" of the market. In theory, digital cameras just don't have the quality to threaten traditional film cameras. Hewlett-Packard, however, had an

immense, panoramic, high-definition digital print of the Grand Canyon (shown in a unique spiral booth) that they claimed would shock the skeptics. It did. Created by Stephen Johnson and printed on a large-format Hewlett-Packard plotter, the hype

claimed it was "better than film," and it was impressive; a better print from film didn't seem likely.

Hewlett-Packard, of course, is far more interested in printers than cameras, and they promised the HP Printer Cable Kit for iMac, coming in August for \$69, will allow the iMac to use HP's popular DeskJet 670 and 690 series printers. What wasn't quite as clear: would HP start producing, again, Mac-compatible printers for the non-iMac users? While they once dominated the inkjet market for Macintosh users, Epson and Alps have recently completely taken over the market.

Imation doesn't normally attract much of a crowd at trade shows, but this show was an exception: their SuperDisk USB drive (in iMac colors) will give the iMac access to 720K and 1.4MB PC and 1.4 MB Mac floppy diskettes as well as Imation's own 120 MB SuperDisk diskettes. Pricing seemed a bit confused; prices mentioned at the keynote address and in Imation's own booth ranged from \$169 to \$189, but in any case the price seems quite reasonable.

Getting images printed on paper is only possible if you can first get the picture in the computer. Except for some PowerBooks, Macs aren't equipped to read the CompactFlash cards used in cameras, and must rely on slow, serial-cable transfers, but not for long. InterMart Systems was demonstrating a SCSI-based gizmo, the PCD-10, that allows a desktop Macintosh to read and write to PCMCIA cards and, using an adapter, CompactFlash cards. Microtech's Digital PhotoAlbum•p is an oddly-named SCSI device with essentially the same purpose.

In theory, both Iomega and Syquest are preparing USB-equipped versions of their mass storage devices. Iomega will allegedly have Zip and Jaz drives for the iMac (both in translucent plastic), but only Syquest had a booth at the Expo, and their bright-red, translucent plastic Sparq drive (with one gigabyte removable cartridges) is supposed to be available the day the iMac is released. (A USB-equipped Zip drive prototype was available at another vendor's booth.)

There were lots of charting pack-

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"New York is big, expensive, crowded, noisy, dangerous and full of New Yorkers. Right?"

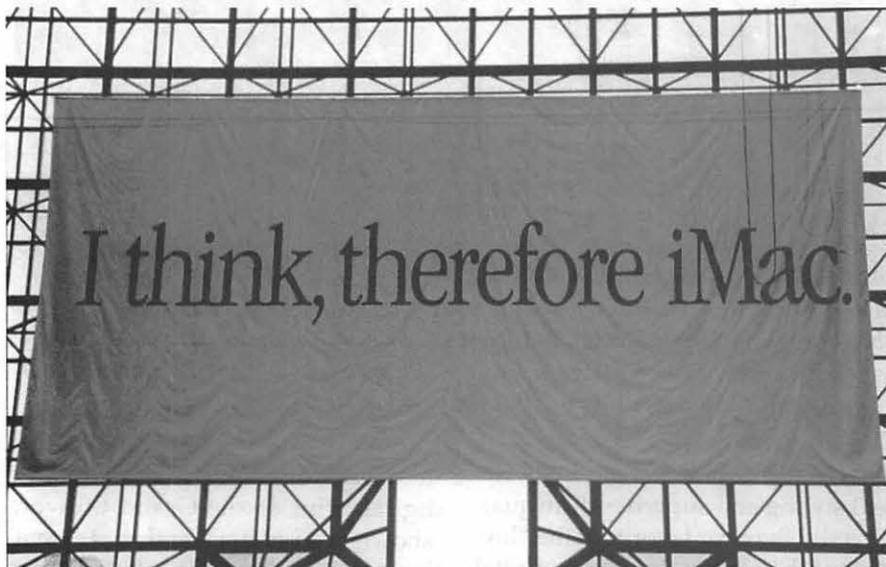
True. But this isn't the entire story. Among other things, it is surprisingly easy to get around, with an excellent public transportation network.

The subway cars are worn, but not covered in spray paint."

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ages shown, from the highly specialized *StatView* and *JMP* (which are, to be honest, far more than charting packages) to some simple packages that just aren't that interesting. One stirring exception: *Adrenaline Charts Pro 1.0*, an amazing 3D charting tool that can make even an Alan Greenspan presentation exciting. Adrenaline Software originally wrote the package for QuickDraw GX, which Apple then killed, but the current package requires nothing beyond a Power Mac and 32 MB of RAM. The package allows you to incorporate 3D objects, photos, textures, and QuickTime clips in a chart; even the national debt looks good in *Adrenaline Charts Pro*.

Corel attracted crowds at their booth, showing previews of *CorelDraw 8* for Macintosh and proclaiming a new slogan, Draw Different. When it ships in August or September, *CorelDraw 8* promises to support AppleScript, QuickTime, ColorSync, Macintosh drag and drop, and other common Apple technologies. They also promise it will be compatible with *CorelDraw 8* files from *Windows 95* and *Windows NT*



Would René Descartes approve? Nobody seemed to care: the phrase immediately caught on, promoted by posters, T-shirts and desktop artwork. Sadly, quite a few people had no idea what inspired the phrase.

machines, and be able to suck up files from *Adobe Photoshop* and *Adobe Illustrator*, as well as support PDF, EPS, TIFF, GIF, JPEG, PICT, and other graphics formats. One sour note: if you signed up at the show, you could get *CorelDraw 8/PhotoPaint 8* for \$99; when it actually ships, Corel says the upgrade price for existing Macintosh *CorelDraw* owners will be \$249.

Possibly the best toy at the show was CoolDVD, from Elecede Technologies (better known as E4). CoolDVD is an internal SCSI-based DVD drive that supports DVD 1.0, MPEG I and MPEG II, as well as various flavors of CD-ROM, CD-audio, PhotoCD, etc. Playing a DVD movie on a Power Mac may not be something you need to do, but it is slick. All you need is a PCI-based Power Mac or compatible with a free PCI slot, a 120 MHz or greater processor, and a space to put the drive; if nothing else, you can remove that old, creaky CD-ROM you may already have...

IBM, believe it or not, was showing a Macintosh package: *World Book 1999 Multimedia Encyclopedia*. Priced at \$50 (?), it is a very attractive, highly interactive reference tool, perfect for students or office work. While the depth of the entries isn't up to *Encyclopaedia Britannica* levels, navigating around the encyclopedia is very easy, and it employs some new 3D "bubble picture" technology that is perfect for illustrating remote people, places and things.

One vendor had an almost all-PC booth: Media4 Productions. Their product, *MacDrive98*, is a set of utilities that, once installed on a *Windows 95*, *Windows 98* or *Windows NT* machine, allow the PC to "transparently" use Mac formatted disks and Mac format files. Even the long Mac file names are handled well, and *MacDrive98* correctly assigned the proper icons to various files, too. If you need to get along with PCs in your office, installing *MacDrive98* may make this much easier.



A new "Think Different" poster featuring John and Yoko Lennon spanned one entrance to the exhibit hall. One woman looked at this huge banner and turned to her companion to say, "Can you stand it? Makes you want to turn around and leave." Others noted Apple's "Think Different" ad campaign features mostly dead celebrities (some of them obscure enough to puzzle the average user) with no known connection to computers. Yet others claim the catch phrase makes more sense, grammatically, if it read "Think Differently."

Things that might have been interesting if someone would have bothered to show them: NetObjects allegedly has an excellent Web site development tool in *Fusion 3.0*, but the staff in the booth was usually so busy talking to one another, or people from Apple, that this allegation could never be proved. Apple's own *WebObjects* software was on one machine in a mini-booth, but again, the staff seemed more interested in talking to one another; their *Rhapsody* group was similarly self-absorbed. Adobe claimed that *PageMill 3.0* would be out "soon" for the Macintosh (it has been out some time for Other Machines), but offered not one shred of evidence to support this claim. IBVA Systems was showing their *Interactive Brainwave Visual Analyzer*, a \$1,300 hardware and software package that allegedly allows the user to control a computer using nothing more than brain waves; demonstrations seemed to consist of staffers telling visitors

"no, no, that's not how it is supposed to work."

### Magazine Bins

MacWorld Expo New York had one very nice innovation: large bins in the lobbies filled with sample copies of various Mac-related publications. Among the most interesting: the old standby, *MacWorld* magazine, is still worthwhile, and the soon-to-die *MacWeek* will remain a weekly essential until it expires. There was a prototype issue of *eMediaweekly* (the successor to *MacWeek*) which shows some promise, despite the stupid title. *FileMaker Pro Advisor* is superb reference for *FileMaker* users, and *SciTech Journal* is an excellent magazine for Mac users in the science and engineering community. *Digital Camera* had their very first issue on display, and it has possibilities; *How*, a lush magazine for designers, is not new, but it was new to many attendees.

For professional computer

techies, *NetProfessional Magazine* is a gold mine of information on cutting-edge technology, and down-to-earth advice on how to connect Macs to things both exotic and mundane. *MacAddict* is rapidly becoming the most popular Mac magazine, combining an outrageous editorial style and highly developed sense of humor with short, useful articles and a CD-ROM in every issue. Possibly the most intriguing magazine was *The Mac Report*, a news weekly aimed squarely at the market *MacWeek* is abandoning. Working against it, however: all electronic subscriptions entered during MacWorld Expo were rejected because of configuration errors on their Web site.

### New York City as Host

MacWorld Expo/New York was not your regular MacWorld Expo. For one thing, this East Coast variant is usually held in Boston in August, not New York City in July. Veteran MacWorld attendees have learned where the cheap motels are in Boston, learned how to get around on the famed subway, and developed a resigned acceptance to the endless waits for "complimentary" buses between two Boston exhibit sites.

New York, in contrast, was an unknown: many attendees had never visited the Big Apple, and what little they knew about it suggested that "complimentary" buses, or simple compliments, would be impossible to find. New York is big, expensive, crowded, noisy, dangerous and full of New Yorkers. Right?

True. But this isn't the entire story. Among other things, it is surprisingly easy to get around, with an excellent public transportation network. The subway cars are worn, but not covered in spray paint. The fist day of the general Expo, July 8, there was a grisly death in downtown New York, but it was a woman rollerblader who ran under a tour bus, not a Mafia or gangland murder.

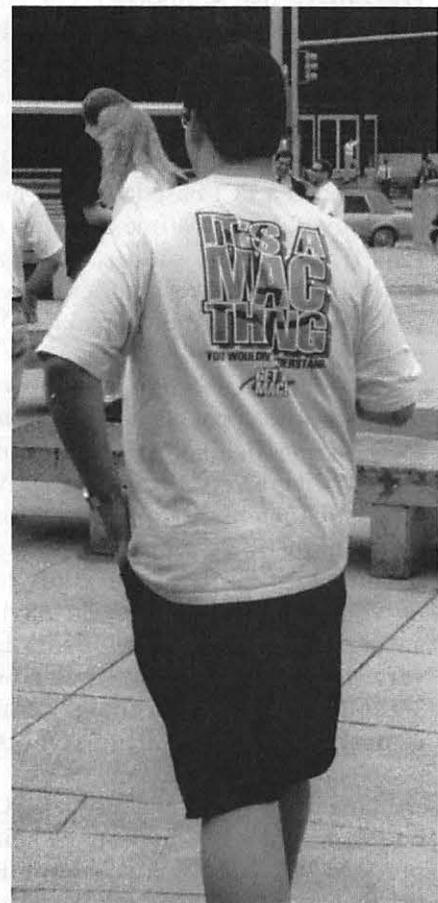
It is loud, and at times the smell is — ahem — not what you'd find in an alpine meadow. Hotel room rates are high, parking is outrageously high, but meal prices are decent. New Yorkers seemed, if not exactly charmingly polite, at least decent, if impatient. Tourists and out of towners seemed more obnoxious than most of the natives.

Next year, it will be back to Boston for MacWorld Expo. But, having broken the ice and actually visited the Big Bad Apple, I'll be going back to New York City, too.

### Links

Adobe: <http://www.adobe.com/>  
 Adrenaline Software:  
<http://www.adrenaline.ca/>  
 AppleMasters:  
<http://applemasters.apple.com/>  
 Corel: <http://www.corel.com/>  
 Digital Camera magazine:  
<http://www.digicamera.com/>  
 Elecede Technologies:  
<http://www.e4.com/>  
 FileMaker Pro Advisor magazine:  
<http://www.advisor.com/>  
 Guitar Center:  
<http://www.musician.com/>  
 Hewlett-Packard:  
<http://www.hp.com/>  
 IBVA Systems:  
<http://www.ibva.com/>  
 Imation: <http://www.imation.com/>  
 InterMart Systems:  
<http://www.intermartsys.com/>  
 JMP for Macintosh:  
<http://www.jmpdiscovery.com/>  
 The Mac Report magazine:  
<http://www.macreport.com/>  
 Macintosh Products Guide:  
<http://macsoftware.apple.com/>  
 MacWeek magazine:  
<http://www.macweek.com/>  
 MacWorld magazine:  
<http://www.macworld.com/>  
 Media4 Productions:  
<http://www.media4.com/>  
 Microtech International:  
<http://www.microtech.com/>  
 Musitek: <http://www.musitek.com/>

NetObjects:  
<http://www.netobjects.com/>  
 NetProfessional Magazine:  
<http://www.netprolive.com/>  
 Olympus:  
<http://www.olympus.com/>  
 SciTech Journal:  
<http://www.scitechcomp.org/>  
 StatView for Macintosh:  
<http://www.statview.com/>  
 Syquest: <http://www.syquest.com/>



*The T-shirt says, "It's a Mac Thing. You wouldn't understand." Which, of course, might be a good summary of Apple's market share problems. On the other hand, no other computer company, software or hardware, seems to have inspired such a huge variety of clothing.*



## Tuesday Night Technical Assistance at WAP

**WE KNOW IT** is hard to believe that the Tuesday Night crew has to turn to others for advice and assistance. While we try not to make it a habit, we are loath to “wing it” on your behalf. Thus, when the frequency of problems working with documents created in Adobe Acrobat Exchange (.pdf) increased, we began to wonder about our opprobrium solution, “blame you,” and decided to get a better answer. We asked our favorite techno-wizards at *MWJ, The Weekly Journal for Serious Macintosh® Users*, for a real answer. Read on; you won't be disappointed.

### It's Not Our Fault

So, you can't get your PDF issues to open properly, even in Acrobat Exchange 3.0. There's always some weird message. Sometimes it's a “parsing error;” other times it's “too few operands;” whatever that means; and still other times, it appears on your desktop as a text file. You have tried fiddling with everything in Acrobat you can find, to no avail. What are you doing wrong?

You're trusting that Adobe has Macintosh interests at heart, if you ask us, and you did.

### Some Basic Stuff

First, “too few operands” is a PostScript thing. PDF is a simplified version of PostScript, and graphic elements in the file are described in a command format. For example, to draw a line, a PDF file contains the coordinates of the two endpoints and the command to draw the line. If there was only one endpoint, the line

command would tell you that you didn't have enough operators. In other words, the file is damaged, something you'd probably already guessed.

But it's really not our fault. Every file on the Macintosh has a file type, and that file type is used to identify the generic contents of the file without requiring applications to actually open the file and do detective work. The same set of bytes can be a great recipe for fat-free mashed potatoes if you view them as a text file, and a really ugly bunch of random noise if you attempt to view them as pixels. The computer doesn't attach any intrinsic meaning to any collection of bytes—it's only the humans who use them that do.

To help avoid problems, we use meta-information like file types to guide our organization. Windows and DOS users stick three-letter file extensions on their file names, like “document.txt” to identify a text document. The Mac OS uses file types, which are invisible to you—you can't turn a file from a text file into a JPEG image just by renaming it. There are several standard file types on the Macintosh, like ‘TEXT’, ‘JPEG’, ‘PICT’, and others. Many programs can read the standard file types - SimpleText, for example, will try any ‘TEXT’ file without complaining.

### Cheating Abit

Here's where we find the problem. Adobe wants PDF to be a cross-platform file format, and they were apparently concerned that transferring PDF files to and from the Macintosh would result in some kind

of strange filename extension problems. To avoid the problem, instead of using a custom file type like most programs would (something like ‘PDF’, for example), Adobe chose to store PDF files on the Macintosh as type ‘TEXT’. Most file transfer programs can deal with ‘TEXT’ files without trying to stick a MacBinary header on them to preserve the file type and other meta-information, and that seems to have been Adobe's solution.

It backfired. In current versions of Acrobat, you can make file sizes smaller by allowing the inclusion of binary data. But including binary data means that the ‘TEXT’ file type is no longer accurate—the file is a standard data file with a mix of ASCII text and binary data, not a strictly ASCII text file. The “standard” file type for such things would be ‘BINA’ (for “binary”), but Acrobat still uses ‘TEXT’.

### The Fixer

Enter StuffIt Expander 4.5. For historical reasons, text files on other platforms don't end the lines the same way as text files on the Macintosh—our text files have an ASCII “return” character (ASCII value 13) at the end of each line, while UNIX files end each line with the “line feed” character (ASCII value 10), and DOS text files often have both (ASCII 13 followed by ASCII 10). SimpleText and other Macintosh text readers (excepting BBEdit) tend to display line feed characters with the “missing character” font glyph (the empty rectangle) — and if the file came from UNIX, the lack of any “return” characters may leave the thing on one giant line with no word-wrapping. Fixing line ending problems is a common task of file transfer software.

StuffIt Expander is no exception, and by default, it converts any non-Macintosh line endings to the standard “return” character—in ‘TEXT’ files. Now you may see the problem: Acrobat files with binary data have a file type of ‘TEXT’, leading StuffIt Ex-



pander to think they're real text files. Expander then replaces all line feed characters, or return and line feed combinations, with a single return character per occurrence. This corrupts the binary (non-text) data in the PDF file, which may have been compressed text or line art, and Acrobat Reader or Acrobat Exchange can't parse the resulting file or repair the damage.

The solution is simple: Launch Stuffit Expander 4.5 [1] by double-clicking on it and pick "Preferences" from the "File" menu. Select the "Cross-Platform" icon, and tell Expander to never "convert text files to Macintosh format." A file of type 'TEXT' is "known to contain text," and that's where the problem comes in.

### Closing Remarks

This is widely described as a bug in Stuffit Expander, but we think it's more Adobe's problem for using 'TEXT' files to contain non-text data. On other platforms that use three-letter extensions to identify file contents, ending a file name with ".pdf" is enough to identify a PDF file, and the lack of real file types doesn't come into play. On the Macintosh, file types are important, and programs that see 'TEXT' files rightfully assume they contain pure text. Acrobat uses non-text files with a 'TEXT' file type, and that's bound to cause problems with other programs. In school, they'd record this as "doesn't play well with others," but we do feel compelled to point out that otherwise, Acrobat seems to behave itself pretty well for being stuck with the baggage of a PostScript legacy.

©1998, by GCSF, Inc. All rights reserved. *MWJ, The Weekly Journal for Serious Macintosh® Users*, is published by GCSF, Incorporated. For subscription information and more of their informative writings send your browser to <<http://www.gcsf.com>>. [1] Stuffit Expander 4.5 can be found on the TCS in the "Files Download" area #21 Mac Essentials; can be downloaded from our website; and is found on editions 3 and 4 of "Pi Fillings - The CD".

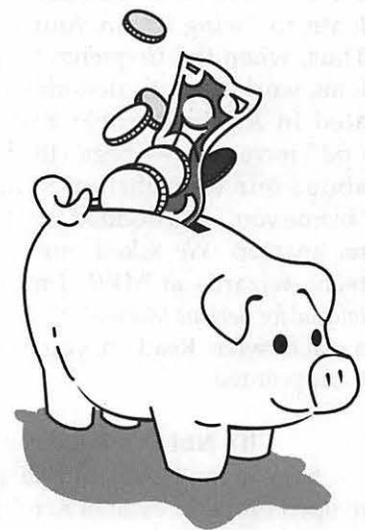
## Save Mucho \$\$\$'s On Everything You Do! WAP Fall Fundraiser

by J. David Mudd

**E**VER WONDER how you could live as well as someone who makes twice your salary? Well, by purchasing the Entertainment® Ultimate '99 Book from Washington Apple Pi (WAP) you'll be able to save up to 50% on just about everything you do every day—dining, shopping, movies and video rentals, car washes and dry cleaning, local theatres and sports, even airline, car rental and hotel discounts. Profits from the sale of Entertainment® Ultimate Books will go to support the work of Washington Apple Pi.

### A Great Deal And A Club Fund Raiser

Once again this year we are raising funds by offering this exciting discount dining and leisure program that helps everybody win. It helps you by providing fantastic savings on dining, travel, shopping, sports, theatre and much more. It helps WAP raise funds without raising membership dues. And, it helps the participating merchants by offering a constant stream of new customers. The book costs only \$35 (plus \$5.00 shipping and handling if ordered by phone) and provides hundreds of 50% off and 2-for-1 Savings on dining, amusements, travel and much more. **THERE ARE OVER \$15,000 IN SAVINGS!** Offers are valid immediately and you can live it up all year long as they are good through December 1, 1999. A FREE Bonus pro-



gram, Dining Advantage (formerly Entertainment® Gold,) is included with the purchase of the Entertainment® Ultimate '99 Book. This program allows you to register your Visa or MasterCard and receive 25% off each initial visit or 10% off each subsequent visit at participating restaurants. No additional card or coupon is needed. Your savings appear as a credit on your monthly statement. It's that easy and it's free! Great for business meals. Compare this with a similar program that's been marketed recently on radio and television but costs \$49.95 per year after a brief trial membership. Again this year in every edition of the Entertainment® Ultimate '99 Book is a 30 minute local and long distance

calling card from AT&T. (Retail value approximately \$12.00) Use the book only once or twice and the savings pays for itself for the entire year. I used the book myself this past year and figure that with conservative use I saved over \$500. I re-tell this story every year about a friend of mine who was not a big believer in coupon programs but became converted ever since he saved a total of \$180 (more than 5 times the cost of the book) on the purchase of three airline tickets for his family to go to Seattle. He recently found he could save \$20 a night at a hotel over their lowest discount rate by using the book. He's happy to use the book just for these savings alone (wouldn't you?) Imagine how much he'll save the other 364 days of the year by using the Entertainment® Ultimate Book. I have another friend who likes to Ski during the winter and play Golf other times of the year. The 2-for-1 savings on Lift Tickets and Greens fees contained in the Entertainment® Book pays for his book each year many times over. He says it's like getting cash back because every dollar he saves is money that stays in his pocket. While our participation in this program is only in its third year, the Entertainment® Book has been used by 75,000 community and non-profit groups across the country for more than 30 years to raise funds. Here is what some local and national publications have to say about the Entertainment® Book program:

*The Washington Post*—"Half-price deals worth checking into... Entertainment offers substantial bargains on dining and sightseeing."

*Money*—"The granddaddy of the discount services,... Entertainment Publications offers the most options by far."

*New York Times*—"The coupons in Entertainment Publications offer dining, shopping and leisure discounts as well as half-price hotel rooms. There are now 157 editions of Entertainment coupon books covering various cities

and regions of the world."

*Consumers Digest*—"Look for... Entertainment Books that benefit your favorite [non-profit organization]... 4.4 million Entertainment Books were sold through charities and community-service organizations."

*Canadian Money Saver*—"For years now, I have used Entertainment Publications coupon books. Whether in North America, Europe or Mexico, I have benefited from this service. To date, I have not found any group, association or government rate that matches the Entertainment discount.

A variety of price ranges for hotels are offered in the directory. One use of this service will repay the cost."

No matter where you live in the Washington, DC area, there is an Entertainment® Ultimate Book for you. Choose between two local editions: Maryland/DC or Northern Virginia/DC.

**A Tiny Sampling Of The Hundreds of Offers In Last Years Maryland/DC Edition.** (Similar Offers In The 99 Edition.) Mrs. K's Toll House, Olde

(continued on page 95)

## The New York P C Users Group Presents 1998 User Group Newsletter Contest (Intergalactic Awards)

Sponsored by Adobe, Corel, Inprise,  
Intuit, JASC, Lotus, and Microsoft

### Large Newsletters

#### Best Design

Winner

—Washington Apple Pi

Runners Up

—PC Alamode, San Antonio

—Hal PC Newsletter, Houston

#### Best User Group Coverage

Winner

—Dayton Data Bus

Runners Up

—Chicago Hard Copy

—Tucson Journal

#### Best Columns

Winner

—16 Bits, Canberra, Australia

Runners Up

—Sarasota Monitor

—Sacramento Sacre Bleu

#### Best Features

Winner (tie)

—Capital PC Monitor

—Washington Apple Pi

Runners Up

—Utah Blue Chips

—Tucson Journal

—Orange Bytes, North Orange County

#### Best Overall

Winner

—Washington Apple Pi

Runner Up

—Capital PC Monitor

<http://www.catalog.com/nypc/news98.htm>

# An Interview with Jeff Gates WAP Member at Large

by Nancy Seferian

**J**EFF GATES IS a photographer and graphic designer whose interests, skills and talents are so many and varied it's hard to know where to begin. Kathryn Murray recently arranged for me to meet Jeff after she became acquainted with him through some of his art in the WAP Journal, and after learning about the work he's doing now for the National Museum of American Art. One facet of his work there includes endeavoring to put the entire art collection on the Internet by the year 2000 when the museum will shut down temporarily for remodeling. The purpose will be to continue to allow the public access to the museum's art.

Jeff heads up all new media initiatives at the NMAA. Presently this includes focusing on developing web sites for the museum—his first job having been to redesign the museum's main web site, which will be launched some time this Fall. He is also responsible for developing procedures which allow many museum departments to work together in bringing new media projects to fruition.

Jeff and I made plans on the phone and by e-mail to meet for an interview, and he invited me to begin our acquaintance by perusing his home page <[www.tmn.com/jgates](http://www.tmn.com/jgates)> to get some background, and I did that first. He also mentioned to me his strong interest in talking about the social/cultural implications of using technology.

When I arrived at his home page at first I didn't know where to click to get a link to another page, but being a good Mac user, I started clicking away, and sure enough, the page contained an image map or area of the image linking it to another URL.

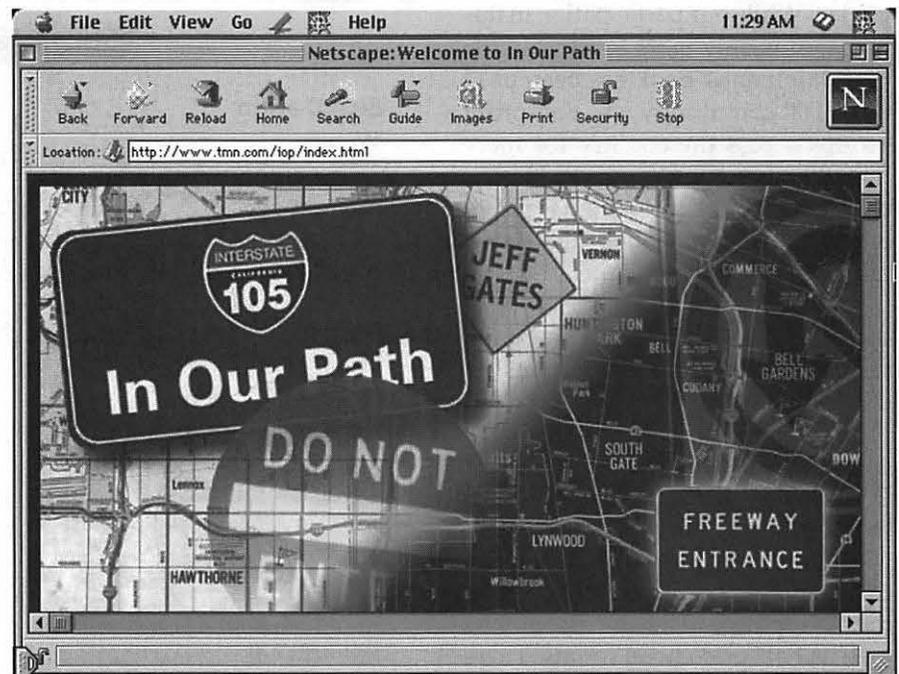
Jeff told me about a series of photographs he had done in the early 90s, and perhaps these Internet pages used a similar idea. The photographic work he described was one in which each photograph was accompanied by text, and although each photograph and its text were related, neither described the other, but together offered a unique experience, each expanding

“Jeff's interest lies in promoting and developing personal and community interaction and relationships on the Internet—in the intersections of the social, cultural, interpersonal and technological.”

the meaning of the other.

Jeff's personal pages on his web site each have a graphic and an associated autobiographical statement. Each graphic offers information about its accompanying statement, but instead, by suggestion, association and good humor.

At this web site I learned that Jeff was from Hollywood, grew up in the San Fernando Valley, and after graduating from San Fernando High at-



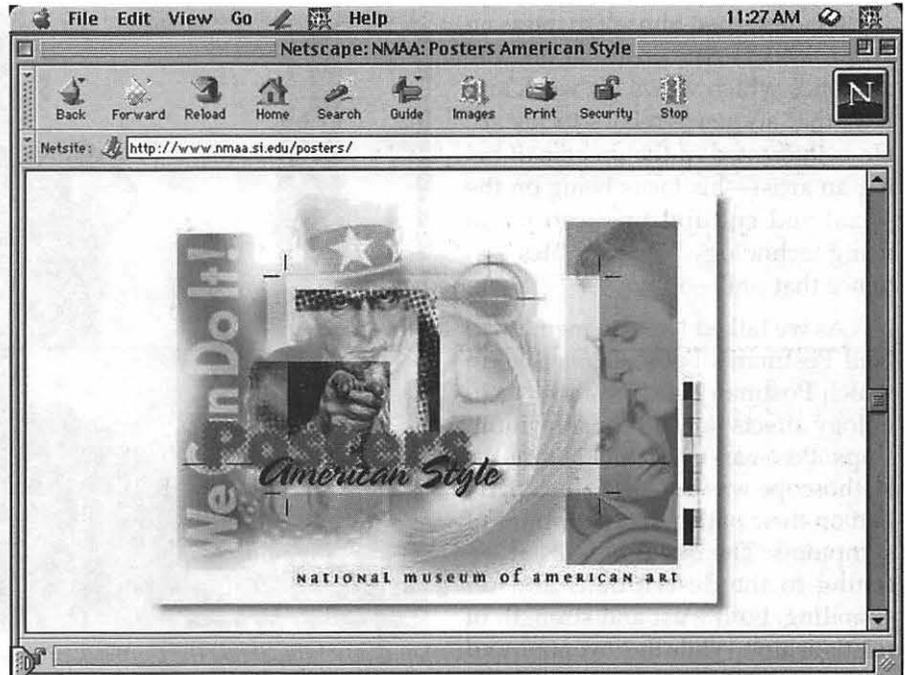
*In Our Path* (<http://www.tmn.com/iop>)

tended Michigan State University where he majored in Political Science. It was there during his senior year that he discovered his main interest—photography—just in time to receive his BA in Political Science.

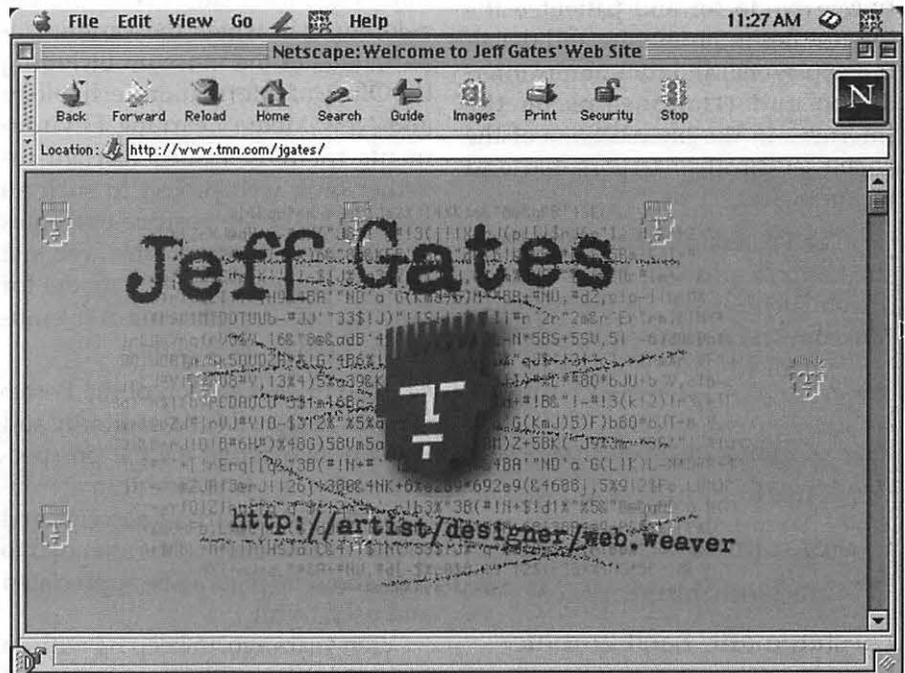
Next he earned an MFA at UCLA where he majored in Photography and Design, studying photography under Robert Heinekin, making his first portopack videos, and taking his first computer class with film maker John Whitney, Sr. He taught in Los Angeles from 1975 until 1984 when he moved to Seattle to teach at the University of Washington on a sabbatical replacement. From there he moved to Minneapolis to teach for a year at the Minneapolis College of Art and Design and then moved to Baltimore in 1985 to begin a three year stint as Coordinator of Graduate Photography at the Maryland Institute, College of Art.

In 1989 Jeff taught the first computer graphics class at Maryland Institute, College of Art. There were 12 Macs networked to two 20 MB hard drives and all the software was on the hard drive. You knew when someone crashed their system because a collective groan would arise from half the class as everyone's computer went down. He continues on the faculty there, and presently teaches web design, and beginning, intermediate and advanced classes in paint, illustration, and desktop publishing programs.

Another area of Jeff's personal web site includes his present interests, activities and endeavors, résumé, accolades, photography, and links to some of the web sites he has designed. One of them, "In Our Path" <<http://www.tmn.com/iop>>, was a Semi-Finalist for the National Information Infrastructure Awards for 1996, for best web sites. The site features his photography and chronicles the construction of a controversial Los Angeles Freeway with essays, interactive maps and a live graphic showing where the most traffic is in the area. There is also a feedback section where



Posters American Style (<http://www.nmaa.si.edu/posters>)



Jeff Gates' Home Page ([www.tmn.com/jgates](http://www.tmn.com/jgates))

people may participate in an online conferencing system much like Internet newsgroups. However, the site differs from newsgroups in that participants may use html tags to cre-

ate links or illustrate a point with an image in their responses, thereby using the whole Web as source material for their discussions.

Jeff described himself to me as an artist who is concerned about the audience which views his work and how that audience relates to his art. He is interested in the process of being an artist—his focus being on the social and cultural implications of using technology. His web sites evidence that philosophy.

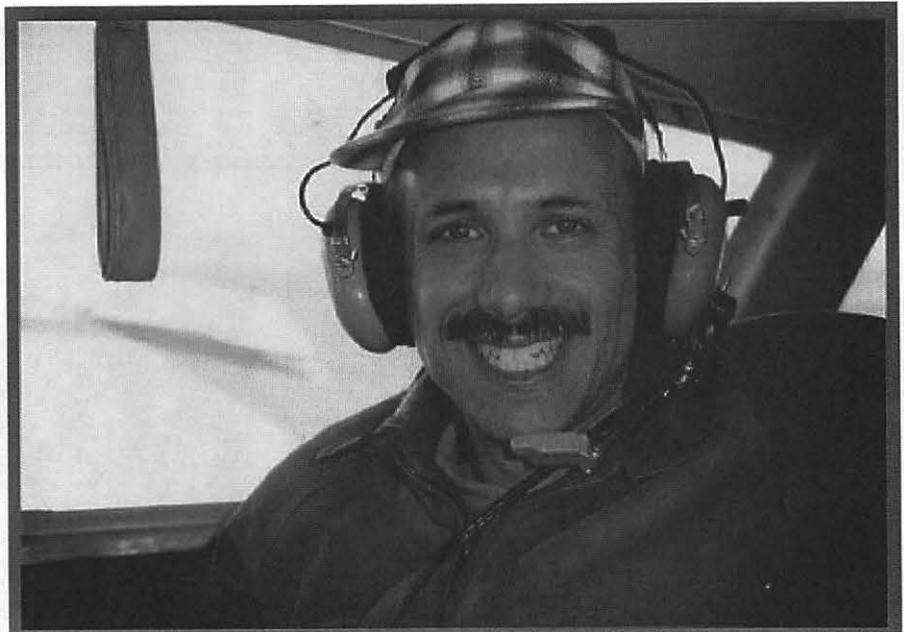
As we talked Jeff also mentioned Neil Postman's book, *Technopoly*, in which Postman describes how technology affects interpersonal relationships. Postman notes that before the stethoscope was invented doctors relied on their patients' descriptions of symptoms. The doctors' skills at listening to the descriptions and responding, built trust and strength of relationships. While the invention and use of the stethoscope allowed the doctor to actually hear the heart beat, there was an interpersonal loss between the doctor and patient. Jeff's interest lies in promoting and developing personal and community interaction and relationships on the Internet—in the intersections of the social, cultural, interpersonal and technological.

The Posters American Style web site <<http://nmaa.si.edu/posters>> is a web site created for the National Museum of American Art which Jeff's

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"Jeff's personal pages on his web site each have a graphic and an associated autobiographical statement. Each graphic offers information about its accompanying statement, but instead, by suggestion, association and good humor."

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*Jeff Gates high above the Outback of Australia*

web design firm, Eye2i, developed before he went to work at NMAA full time. The Poster site was a team development in which the various departments of the museum including the Office of Information Technology and New Media Learning Environments for K-12 Issues worked together on a web project to such an extent. One of the positive outcomes of this work on the Poster web site was the development of a model for how various departments of the museum could work together.

The Impact section of the Poster site was designed to be auditorily and visually interactive for the prospective audience of all American art levels of researchers, art cognoscenti, and the general audience. It is intended to create content that can be appreciated and used by all.

Ten years ago, in keeping with an interest in the public's perception of artists, Jeff started the ArtFBI, or Artists For a Better Image <<http://www.tmn.com/jgates/artfbi.html>>, as a one-person nonprofit 501(c)(3) organization to address issues of how artists are perceived in our culture and to disseminate popular culture infor-

mation about artists.

On this web site you can see and even order the bumper stickers he designed to advance the image of artists. He tells the following story, "I was driving down the freeway at about 60 mph in my '79 Honda (which had ArtFBI's bumper sticker: ASK ME ABOUT BEING AN ARTIST) when an 18-wheeler pulled up beside me and motioned for me to roll down my window. I thought: Is there something wrong with my car?! Great! And I just put \$500 into it. When I rolled down the window the trucker yelled: 'My son, he draws really well. What should he do?'"

"I thought: do I get into a philosophical discussion on what it's like to be an artist at this speed? I decided if I wanted to continue being an artist I'd better not. So I yelled back: 'Call the Maryland Institute (where I teach art).' He gave me the thumbs-up and drove on."

Addendum: Jeff's personal web site was named "Best Website" in Baltimore Magazine <[www.baltimoremag.com](http://www.baltimoremag.com)> just as I was finishing this up. Congratulations, Jeff. ■

# Where Have All The Stars Gone?

By John Martellaro

*He sat very quietly, rubbing his hands against the soil of the Moon and sensing the curiously light pressure of his body against the ground. At long last there was peace in his heart. His hurts had ceased to pain him. He was where he had longed to be, he had followed his need. Over the western horizon hung the Earth at last quarter, a green-blue giant moon. Overhead the Sun shone down from a black and starry sky. And underneath the Moon, the soil of the Moon itself. He was on the Moon!*

— D.D. Harriman (Requiem)

**I**T WAS THE evening of July 20th, 1969. I was a brand new second lieutenant in the U.S. Air Force, fresh out of college with an astrophysics degree. I was sitting in the Officer's Club at Keesler Air Force Base watching Neil Armstrong exit the LEM and step onto the moon. It was an exciting moment, and I thought to myself: "If I play my cards right, I'll be working at a Lunar observatory in the 1980s and 90s, and I'll retire in the Lunar colony in one sixth "g" and live to be 120."

With all due respect to everyone concerned and with only a little exaggeration, we haven't done **squat** since then.

To make the point even more poignant, Alan Shepard died last Tuesday at the age of 74 of leukemia. On May 5th, 1961, he was the first American in space. In February, 1971, he walked on the moon. Twenty-seven years later, he died never having seen an American Space Station in orbit let alone a Lunar colony. It's very sad indeed.

What does this have to do with

personal computing? I'll tell you...

## Obsessions Give Way To Financial Reality

We are at an impasse right now in the exploration of space. While we continue to work on re-usable systems, a next generation Space Shuttle, and refine our technology, the basic fact remains that we are stuck at the bottom of a deep gravity well, and it's awfully expensive to climb out. Lifting a pound into orbit on the Shuttle Transportation System still costs closer to \$1000 than \$100 overall. Next generation systems may reduce that to \$100/lb, but we need \$1/lb to make colonization a reality.

I must remind you and myself here that significant technology development takes time. We didn't go from 1 MHz 6502s and Apple IIs to 400 MHz G3s overnight. It took twenty years of steady, dogged development. So one could argue the same for space exploration. The trouble is, if space technology moved at the pace of computer technology, we'd now be at \$1/lb.

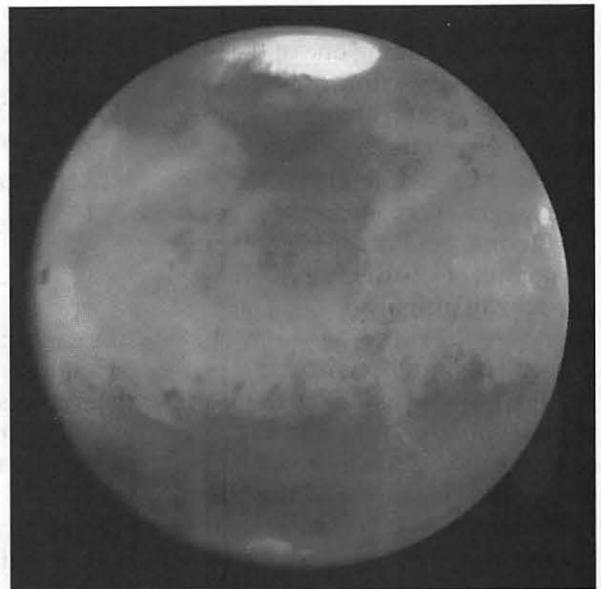
Remember as well that while the United States was willing to pay just about any price to put a man on the moon before the (old) Soviet Union could back in the 1960s, those

events proved that a singular obsession can sometimes make up for the dull routine of a linear technology development. With the breakup of the Soviet Union, our obsessions are fewer now, our pace is relaxed, and we remain faced with the staggering cost of manned space exploration.

## Our Computers Fight Us

I think it was Arthur C. Clarke who first pointed out that the energy of one pound, at orbital velocity, is equivalent to about 30 cents worth of electricity\*. The fact that it takes 3,300 times more money to achieve that is some indication of the inefficiencies of our current systems. That's an awful lot of inefficiency to make up, and propulsion systems are not blessed by the equivalent of Moore's Law: we don't double our efficiency every 18 months.

Clearly, if we are to escape the bonds of Earth, and achieve our destiny, we need some assistance in making it cheaper to climb out of this gravity well. Otherwise, at the current rate of progress, we are looking at another 60 years before Lunar colonization be-



*NASA Hubble Space Telescope view of the planet Mars, the clearest picture ever taken from Earth, taken on February 25, 1995, when Mars was 65 million miles from Earth. Since 1969, we haven't come any closer.*

comes cheap enough to consider.

So I pose this question:

*How can the development of computer technology help open the door to less expensive space exploration?*

If only we could leverage ourselves with the fastest evolving technology we have. The problem is that while we are using computers to solve problems we know how to formulate, we are not applying our technology to develop our ability to interact intelligently and effortlessly with personal computers.

To be sure, we have much faster compilers, greatly more memory, and we can tackle much more difficult problems than just a few years ago. The Internet has enabled considerable collaboration amongst scientists. And almost every day, we hear about a scientist who has discovered how to cleverly use a computer to solve a complex problem in medicine or mathematics. In my opinion, that's not enough. It's not enough because, for economic reasons, our computers are still fighting us instead of helping us.

You may have noticed.

What we need to do is to develop computer systems that actively assist the scientist in doing one of the most important and exciting things that we can do: make a breakthrough. Breakthroughs burst through the linear development of routine engineering advances, get everyone excited, generate funding, and drastically alter the economics of any discipline. We need one now in propulsion.

### Fueling the Empires

It takes a lot of money to fuel the empires of Intel, IBM and the other computer giants. We all know the history of how businesses, unwilling to be underpowered compared to their competition, have financed the tremendous technology surge of the last decade. Now, hundreds of billions of dollars later, what have we achieved besides faster computers, fancier software, and grave security and privacy

risks? As John Dvorak has pointed out in PC Magazine (30 June 1998), computer software technology is mostly moribund. There is no more work to be done in word processing, spreadsheets, or graphics. That had better not be the purpose and culmination of all our efforts and dollars spent. What do we do next?

Before I answer that, let me pose a another question:

*How can we make fundamental advances in the man-computer relationship when the sole purpose of personal computing in the 1990s is to provide steady employment and make-work for those in the industry?*

We Macintosh people have discussed, at length, how IT managers

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“... if your goal is to make collaboration with others and utilization of your computer as powerful and graceful as possible, then you are creating a product that can help us scientists in our work. As I said recently, ‘How do you reach for the stars with tools that weary the soul?’ ”

---

have discriminated against the Macintosh because it doesn't give them as much make-work to do as the PC. We also know how many of our friends sigh and admit that so long as they have that Microsoft Certified Engineer card in their pocket, they will be gainfully employed. While fueling this PC “economy” has been a source of irritation to us, we seldom think about it in terms of our technical and scientific productivity. So long as we are re-installing the OS, fiddling

with the registry, resolving DLL or INIT conflicts, calling customer support and sitting on hold, fussing with IRQs, and so on, the computer is not truly our companion and help-mate. We are more like a wet-nurse.

I believe that it is this funneling of our resources and efforts into maintaining and upgrading our computers that is distracting us from the larger issue of exploiting the current computer technology so as to create a more sophisticated relationship between mankind and the computer (and Network). Why can't a personal computer capable of a billion operations per second a) converse with me, b) be my intelligent agent, and c) manage its own health and security?

So what we need to do next is to vastly improve our OSes and software to give us users a powerful new mechanism for amplifying our natural human strengths. Despite what Microsoft says, simplicity, ease of use, and joy really do count for something when creating a tool for the mind - if making a breakthrough is what you had in mind, not just building a business spreadsheet. Apple Computer, by virtue of its legacy, talent, and inclinations is perfectly poised to engage this pursuit.

### What Will a Breakthrough Require?

Breakthroughs in science don't happen just because we have a faster computer. Even focussed computing power, currently utilized, for example, in Chess and code breaking, is not sufficient to trigger a new kind of symbiotic relationship with mankind. We need a new way of working with the machine, and that method has to be totally focussed on leveraging the human mind.

Have you ever seen the Apple “Knowledge Navigator” video? This video was the source of great inspiration to Apple technologists after it was created in 1992. The Apple Advanced Technology Group (ATG) actually

spent considerable effort analyzing each technology element in the video and trying to develop those technologies for Apple. Later, when Apple got into financial trouble, and those technologies seemed just beyond reach, efforts were dropped. To this day, however, that video still serves as an important reminder of how the personal computer, when properly implemented, can be a powerful amplifier of the human intellect. Find this video and watch it. (I'll see if I can post it as a Quicktime movie.)

To make a breakthrough, we depend on several things.

- Genius: seeing relationships
- Experience
- Inspiration, perspiration, and imagination
- Collaboration with others
- The synthesis of information within and across disciplines
- Access to the previously published literature in the field
- Simulation and modelling tools

Right now, the Internet and Internet II are just beginning to provide the collaboration and access to technical information that we need, but the design of the our computer systems and OSes get in the way. *If your principal strategic goal three years after Windows95 is to so integrate MSIE with the OS that the competition's product (Netscape Navigator) becomes unnecessary, then you are not creating tools that achieve the goals I have described above.* On the other hand, if your goal is to make collaboration with others and utilization of your computer as powerful and graceful as possible, then you are creating a product that can help us scientists in our work. As I said recently, "How do you reach for the stars with tools that weary the soul?"

It is the last four items in the list above where we really need the assistance of the computer. To the extent that a machine can provide leveraged assistance in those areas, much faster progress will be made in the sciences.

### A Challenge to the Industry

The U.S. Government knows that space colonization (not simply exploration) is very expensive and not in its direct interests. It is only when individuals can afford to pack up and go stake a claim\*\* that it will happen. Just as we went from Queen Isabella financing a state sponsored Columbus mission to today when we pull out our Visa card and hop on a 747 to London, it will require a distinct movement to the commercialization of space driven by a cost breakthrough before anything important happens.

It might be that major breakthroughs here can be done by a single man working alone, like Zefram Cochrane\*\*\*. But I doubt it. I'm betting that the next set of scientific breakthroughs in propulsion and science in general will come from those building superior personal computers, much more sophisticated than the Knowledge Navigator, and that scientists collaborating with each other and their (almost human) computers will open the door to the planets and, eventually, the stars. As Fred Giuffrida at MacKido (<http://www.mackido.com/>) would tell you, you can't have a renaissance without a renaissance tool.

Only four of the original Mercury 7 astronauts are still alive (all in their 70s) and 10 of the 12 men who walked on the Moon. In the not too distant future, all of them will be gone, and we will all be sitting here, fat and stupid, wondering how we threw away our generation's destiny. If we don't stop making computers that fritter away our lives, if we don't start making computers that lift our spirits and amplify our minds, then what good was the personal computer revolution except to make a few people billionaires?

How about it, Apple Computer? Are you ready to accept the challenge? Are you still young enough to fulfill your destiny and help us with ours?

Let's stop watching it in the movies and go exploring for real.

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"To this day, however, that video still serves as an important reminder of how the personal computer, when properly implemented, can be a powerful amplifier of the human intellect."

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### Notes

\* One pound (0.454 kg) traveling at 17,500 mph (7825 m/s) has an energy of 13.9 megajoules (MJ). One kilowatt-hour (kW-h) is 3.6 MJ. An average electric utility charges about 8 cents per kW-h. So  $(13.9/3.6) * 8 = 31$  cents.

\*\* Current U.S. treaties with other nations treat the Moon and planets as scientific sites, like Antarctica, available to all and owned by none. I expect that truly cheap access to space will undermine those treaties - signed when it was feared that the Soviet Union would seize the military high ground.

\*\*\* Zefram Cochrane (2030-2117 ?). According to *Star Trek* lore, discoverer of the warp drive in 2061. ■

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*John Martellaro is a Senior Staff Software Engineer for Lockheed Martin Astronautics. He lives at 9,100 feet ASL in Colorado with a Ph.D. wife and two cats. The elevation may explain his occasional delusional writing. When he isn't in front of his G3 Mac, he's on his Volkl skis.*

# Ray Dream Studio 5

review by Stuart Bonwit



Figure 2.

**Broad Brush**  
FRACTAL DESIGN'S Ray Dream Studio 5 is a terrific professional level 3D modeling and animation package. It has features that I could not even begin to cover in this report. Therefore, this is a "first impressions" review. The illustrations that come with the package indicate unlimited possibilities for creativity. My limited journey into the Tutorial has shown the power of the software to create complex models with little effort.

The most impressive thing you see when you open the box is the user's manual, 418 pages of eye-popping results based on the instructions on each page. The manual is repeated on the CD-ROM intact in Acrobat PDF format. The other impressive thing you find right away is the CD-ROM "jewel" box with cardboard front and back covers!

Installation is a snap as you would expect on a Mac: double-click the install icon; click on Install (the

default); and when it's finished, click on Quit and you're done. 54 MB of hard drive space; and 32,224K allocated to RAM.

## Details

The first chapter of the Users Manual covers installation. The next three give an overall view of the software. Chapter five is the tutorial where the fun begins. Twenty-seven

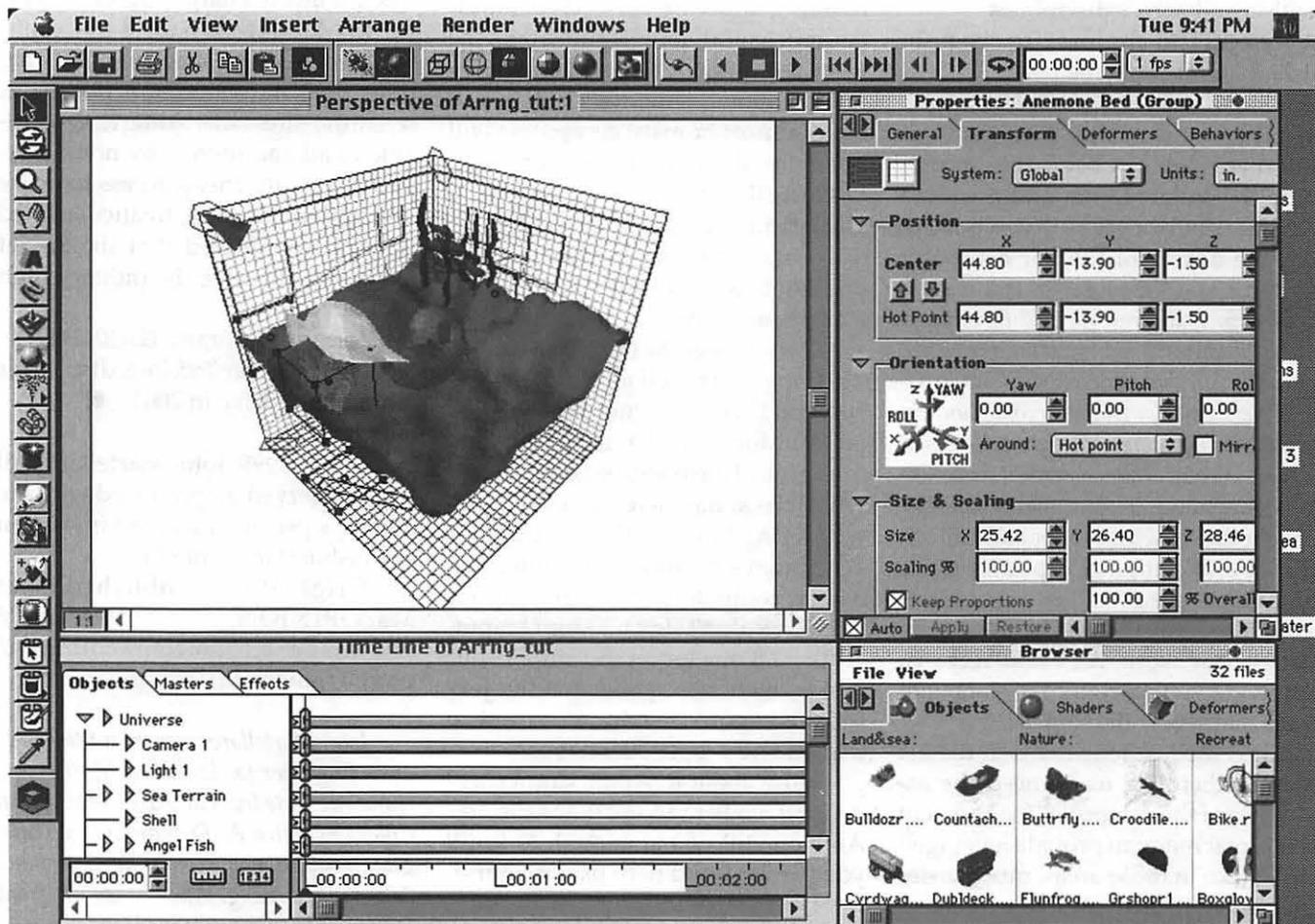


Figure 1.



lessons cover all the basic modeling and animation techniques. The first project is shown in Figure 1, a typical screen shot. The "Universe" is shown in the Perspective view in the upper left. This is an underwater scene that came intact on the CD to awe the beginner. The objects include a school of fish swimming among the seaweed, a shell, a large fish, and under that fish is an anemone bed which is seen boxed, *i.e.* selected. Because it is selected, its properties are seen in the upper right. The lower right contains the Browser where Objects, Shaders, Deformers, etc. are selected for use in a project. The Time Line is seen in the lower left. Each item in the Universe has a time line to control its progress through the animation.

After finishing the first project, I scanned through the whole rest of the manual. For a person starting in animation with Ray Dream, the manual will probably look quite daunting. For me everything looked familiar or at least easy to understand based on my having worked with Macromedia's Swivel 3D Pro for several years. I had great fun and experience with 3D Pro but it does not have nearly the capability of Ray Dream Studio 5. The main feature lacking in 3D Pro that made me graduate to Ray Dream is the ability to change an object's shape during the animation. Articulating object parts, such as arms and legs as I did with 3D Pro, is not changing shape.

A few illustrations illuminate my brief foray into the Tutorial. Figure 2 is a piece of seaweed that was made with a simple cross-section, an extrusion, and a couple of bends and pokes to curve it. Another version of the seaweed with different curves served as a second "keyframe" in an animation. The application of a sinusoidal Oscillation made the seaweed appear to be waving in the water stream. Simple!

Figure 3 shows an anemone that was incredibly easy to make. Even with my stumbling along, I did this in one sitting. Almost everything was



done by bending pieces. All the surfaces are smooth curves. On my old software I would have had to make a large number of cross-sections for each leg and then cover them. There would be sharp edges at each section. And it would have taken me a week to make it.

Figure 4 shows a fish that came canned (if you'll forgive the expression) on the CD. The application of a little curve bending and vertex pulling brought the fish to the more naturalistic pose in the figure. A second picture with a differently curved pose plus the sinusoidal Oscillation had the fish swimming through the water.

Figure 5 illustrates the use of Shaders that put surface features on objects and the use of Lights. The original figure is gorgeous in color. I hope the Journal monochrome version doesn't lose the effect.

The first lessons in animation taught how to control an object's speed and apply physical effects such as impact and flow force in an underwater scene. The previous software package had no physical effects and the preview animation was shown only in box outline. In Ray Dream the preview animation shows all the objects in the preview (simplest) shading. In Ray Dream each object can have its own keyframes. In the previous software package each keyframe was shared by all objects.

Several times during the course of the Tutorial, I got stuck. In every case a contact to Fractal Design's technical support Web page solved the problem. The request for help is done on a detailed form that informs Fractal of all the details of your

system, including the serial number of the software, before it asks what the problem is. After the request is submitted, a note says that an answer will be forthcoming within two working days. In every case my answer came back in less than 24 hours.

This is a great software package with great potential. I'm just beginning to get my feet wet with it. When I've created some models of my own, animated them in a "meaningful" way with appropriate sound, and created a QuickTime movie, I'll feel that I've accomplished something.

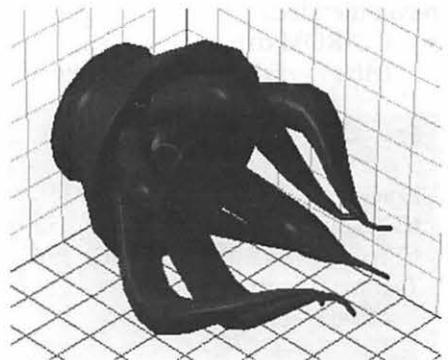


Figure 3.

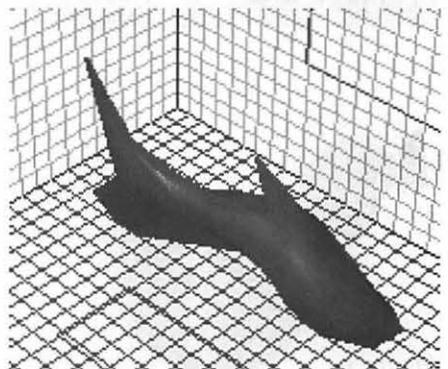


Figure 4.



## Conclusion

For the serious animator Fractal Design's Ray Dream Studio 5 is certainly a valuable application and I recommend it.

The package includes:

- A 418 page Users Manual
- A CD-ROM
- A 6-page reference card

The CD-ROM includes: Installer; Tutorial; Users Manual; Extensions; a large collection of models, shaders, textures, cameras (with selectable lenses, including a zoom), lights, deformers, mechanical links (the human links folder is empty!), behaviors, and render filters.

The reference card shows: all the screen buttons of which there are dozens; the two modelers have their own sets of buttons; all the windows; and a very long list of keyboard shortcuts.

## System requirements

- Power Macintosh
  - System 7.0 or later
  - 20 MD RAM (24 recommended)
  - Color display (24-bit recommended)
  - CD-ROM drive
- (Also works with Wintel machines.)

Fractal Design's Ray Dream Studio 5 is a product of:  
**Fractal Design Corporation**  
 6303 Carpinteria Avenue  
 Carpinteria, California 93013 USA  
 Technical Support:  
 Phone: 408-430-4200  
 Fax: 408-438-9672  
 Web: www.fractal.com  
 List price: \$299.



Figure 5.

# The Alps MD 2300 Printer

review by Michael Corbin

**I**N JULY 1997, Alps Electric introduced a new printer, the MD-2300 "Masterpiece" which promised 8x10 continuous-tone prints for a list price of \$750. Having admired and occasionally purchased the continuous-tone dye sublimation prints made by the \$10,000 Kodak printers, and even the dye-sub prints made by the \$1,800 Fargo printer, I was ready.

I can tell you that the Alps printer is no Kodak unit. For your \$10,000, you get prints in 90 seconds. The MD-2300 takes 8 minutes at the same 300 dpi resolution. It also has a 600 dpi mode, that takes 16 minutes to print. And it is a tad more prone to banding. On most photos, this will not be a problem, but if you have large areas of very even color, you may notice the effect.

The Kodak units use 8 inch wide transparent film "ribbons" to carry the dyes transferred to special receiver paper by the thermal print head. It costs as much as \$3.50 per print for materials. The "ribbons" come only as a set, and cost about \$200 a pop, and the ribbons are loose spools of film you have to spread across the gap and keep your fingers off of.

The Alps unit uses 1/2 inch wide transparent film "ribbons" to carry what Alps describes as inks, which are transferred to special receiver paper by a thermal print head. It costs as much as \$3.50 per print for materials. But Alps' ribbons are in cartridges, and are sold individually for about \$10 each.

Now I don't happen to know the exact chemical composition of the inks/dyes used by these two printers.

I do note that both sets are soluble in lacquer thinner, but not water, and their physical properties seem very similar. Alps at first advertised this printer as an ink jet, but later ads have shunned that label. All I know is that both printers produce a true continuous-tone image that the average consumer will find very hard to distinguish from a conventional photograph. Look, ma, no dot pattern!

I also note that both printers are VERY susceptible to streaking if dust gets caught on the print head. Both require careful and frequent cleaning of the print-head with alcohol. And both are capable of making prints that I have found clients quite happy to buy as photographs.

Kodak claims that their prints have similar fading characteristics to their line of photographic papers. Alps only compares their photo inks to regular printer inks, and allows that regular inks for their printer are more stable and fade resistant. Yours truly is going to be running some tests to find out. But in the meantime, it should be noted that nearly all inks ought to be more fade resistant than nearly all dyes as a general rule.

Alps claims that the regular inks are much more fade-resistant than anybody else's ink-jet inks. My own fade tests have shown that they are much better than the ink the Stylus uses, but I have not compared them to the special fade-resistant inks of other makers, some of whom claim great stability. Initial tests with the continuous-tone photo inks shows they do fade subtly after some weeks in direct sunshine, though they do not



show a shift in color balance.

Unlike the Kodak unit that a colleague has on his Mac 9600, my Alps printer, driven by my much less expensive Mac 7200, was perfectly happy to be set to print in the background, so that after an initial few seconds of starting/loading the picture to print into the print que, I was able to go on to other things with the computer, while prints happened in the background. In fact, I found myself able to have both the Alps printer and an Epson Stylus printer cranking away at the same time on different documents from different programs.

Of course the Alps will make fewer prints between reloads of ribbons than the Kodak printer. I have found that a 20-sheet pack of paper just about consumes a set of ribbons when printing full sized 8x10s. Given the cost of prints, I was much interested to find out what would happen when the Alps ran out of ink/dye in the middle of a print, which it was sure to do given the differences in consumables when mixing several print sizes. Sure enough, it happened with the very first ribbon, which happened to be magenta. To my delight, the printer stopped and a message flashed on my screen begging for a new one. I popped in the new magenta cartridge, and the printer resumed where it had left off. A couple minutes more, and the cyan cartridge died, and once again an exchange set the printer back to printing in the middle of the print. The other two ribbons lasted through the job.

When my Epson runs out of ink mid-print, it just dumbly finishes the page with a color missing. Of course, a printed page from that printer, even in full color, costs only a quarter, rather than \$3.50. The Kodak unit consumes the same amount of each ribbon on every page, whether that dye is called for or not.

I give the Alps a generally positive review. For the bucks, it works well. It isn't quite as good as the

Kodak unit, but I can go for quite a nice vacation or three on the savings in purchase price.

The Alps also does not do quite as good a job making prints with the regular inks as does my Epson Stylus. The resolution just isn't there. Nor will it do envelopes like the Stylus, necessary in a business environment. But the continuous-tone prints are nice enough to make it very useful as a special-purpose printer. And because it attaches via the SCSI chain, the printer port remains free for the Stylus.

Using regular inks on standard paper, it does a lovely job with text. The black ink at the printers "draft" resolution of 300 dpi is crisp and dark,

---

"Having admired  
and occasionally  
purchased the con-  
tinuous-tone dye  
sublimation prints  
made by the \$10,000  
Kodak printers, and  
even the dye-sub  
prints made by the  
\$1,800 Fargo printer,  
I was ready."

---

and looks like it was done on a laser printer. At "standard" resolution of 600 dpi, it is even better. I have not attempted the "super" 1200 dpi resolution offered, and can't imagine why one would need it, but it is available.

Alps offers what are claimed to be the first metallic inks for desktop printers, with gold, silver, magenta and cyan colors. Unlike the photographic inks, and the "regular" inks available for this printer, all of which

are transparent colors, the metallic inks are opaque.

I did buy one of the metallic silver ink ribbons. The printer is capable of printing in spot color mode, so I can produce my company letterhead with selected type in silver. I note that these ribbons produce a dull silver, rather than a shiny metallic color. Since one can put any color ribbon into any of the 4 slots, with the printer finding the color it needs, spot color is easy to use. One can also put 2 or more ribbons of the same color in at the same time, to prevent stoppages when a ribbon runs out.

Having lived with this printer now for nearly a year, I have had to return it for warranty repair twice. Alps was very fair with the arrangement, swapping printers with shipping both ways at their expense.

I note that great care must be taken to use the correct ribbons, either dye sub or standard, on the correct side of the correct paper. I have broken ribbons by printing over the edge of the paper, and by printing on the wrong side of the photo receiver sheet, and while I have successfully repaired the broken ribbons by prying open the cassettes and Scotch-taping them back together, one of the warranty repairs occurred when a ribbon broke inexplicably in the middle of a proper print job, on the correct side of the paper, and wound up gumming up the special platen strip, which is not consumer cleanable, and required a printer swap. The moral here is to be VERY careful you use the right supplies in exactly the right fashion.

Recently, Alps has introduced the MD 1300, which is very similar to the 2300, uses the same consumables, and lists for a bit less. I would recommend this printer to anyone who needs a few dye-sub prints from time to time, who needs a proofing system for graphic work, especially photographs, and who is on a tight budget. ■



# Molar Mac: The Fast, Heavy, Beauty Challenged AIO

© 1998 Washington Apple Pi Labs

**F**ROM OUT of nowhere the call came: "Would you like to set up some Apple Power Macintosh G3 all-in-one computers?" The response was almost instantaneous: "Set up some *what?*"

The semi-mythical "Apple Power Macintosh G3 all-in-one computer" has a name to die for: you can die for lack of oxygen just trying to say it. Apple has restricted sale of these machines to "the education market," which is variously described as schools offering anything from kindergarten through graduate school classes, plus teachers, professors, students, boyfriends and girlfriends of students, school staff members, and PTA members with connections. Would Washington Apple Pi Labs be interested in setting some up? "What did you call this thing again?"

The first thing to check, of course, is "your place, or mine?" When checking out a new computer, it is best to do all testing in a controlled laboratory setting, in order to reduce contaminating influences. Deep in the heart of Washington Apple Pi Labs, past an unsteady pyramid of dead ImageWriter I carcasses and slightly to the left of a forlorn Lisa with a Twiggy drive, there is the Washington Apple Pi Controlled Laboratory Setting, the Test Bench. As the cleanest and (occasionally) clearest horizontal surface in the Lab, The Bench features the Lab's two most prize possessions: almost an entire square foot of desk space and a working 3-prong grounded multi-outlet extension cord. We were ready. "We'll set them up here."

"They have six of them."

"We'll set them up there."

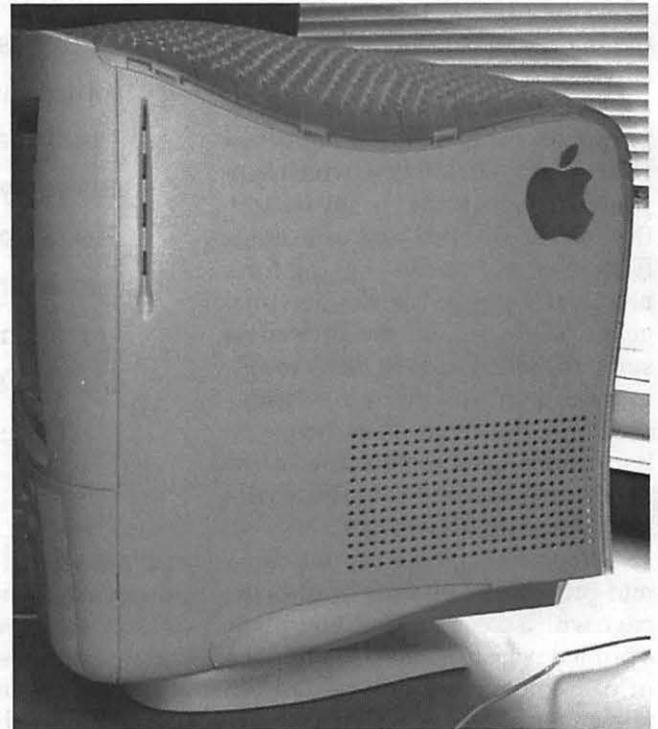
In The Beginning, Macintosh computers shipped in white cardboard boxes. Over the years, in a combination "eco-friendly" and "save pennies on printing" move, the cardboard boxes became unadorned, pasteboard brown cardboard. The Apple Power Macintosh G3 all-in-one (hereafter referred to as the "G3-AIO") boxes were different: they were IBM blue. OK, blue and white. OK, blue and white with some black lettering. But most obviously: IBM blue. With white Apple logos.

After the box, the next thing you notice is: they are heavy. According to the Technical Information pamphlet that ships with every G3-AIO, a single machine is 27 kilograms, or 59.5 pounds, or one heck of a lot when they are stacked three high in a narrow space. While it is possible for a single large, stupid person to uncrate one (or even six) of these without assis-

tance, Don't Do This. The machines are heavy, and the boxes are deep. You can fall into a box and never be heard from again. You can rupture vital organs of a personal nature. Accept the fact that this is a two-person task.

Particularly since you will have to move them multiple times. Receiving has to officially receive them and barcode them. They will need to be carried hither and yon and placed on the desks of their new users. They will need to be picked up and carried somewhere else after it is determined that it shouldn't be *that* user, but *this* user. You may recall the simple formula from your physics classes: work equals energy over distance. So: six machines times 60 pounds times 3,812 miles in an afternoon equals: at least a two person job.

The machines come by their



*The distinct molar profile is clearly visible from the side, as is the translucent plastic piece, which curves over the top and back. The Apple logo on the side is also translucent; we wanted to see if an Apple decal would fit over the space, but got sidetracked by the speed of the machine and forgot. For all we know, the gill-like openings near the top front might be for gills.*



weight honestly. Each G3-AIO has the following packed into it:

- Height: 19.6 inches
- Width: 15.8 inches
- Depth: 17.7 inches
- Built-in 15" color monitor (up to 1024 x 768 pixels)
- Built-in Apple SuperDrive 1.4 MB floppy
- Built-in ATA hard drive (4 GB standard)
- Built-in ATA 24x CD-ROM drive
- Built-in stereo speakers
- Built-in stereo headphone jacks (three, two on front, one on rear)
- Built-in ADB port (for mouse, keyboard)
- Built-in video port (for mirroring internal display)
- Three internal PCI expansion card slots
- Built-in serial printer port
- Built-in serial modem port
- Built-in 10BASE-T Ethernet port
- Built-in microphone
- Built-in stereo sound input port
- (Optional) internal Zip disk drive
- (Optional) composite video input, output ports (pair)
- (Optional) S-video input, output ports (pair)
- (Optional) RCA audio stereo input (pair) and output (pair) ports

Once you plug in a G-3-AIO, the *third* thing you notice is: it is fast. Very fast. These machines allegedly come in two flavors: a budget G3-AIO with a 233 MHz PowerPC 750 processor and a slightly pricier version with a 266 MHz processor. Washington Apple Pi Labs worked only with the budget machines, and found they were: fast.

The fourth thing you notice is: they are beauty challenged. Comments on the looks of the machines ranged from a charitable "cute" to "butt ugly." The top and back of the machine have a single, curving piece of translucent plastic, with hundreds of holes in it. Everyone wanted to

know why it was translucent, and everyone wanted to know what the holes were for. Nobody could think of a good explanation, silly or serious.

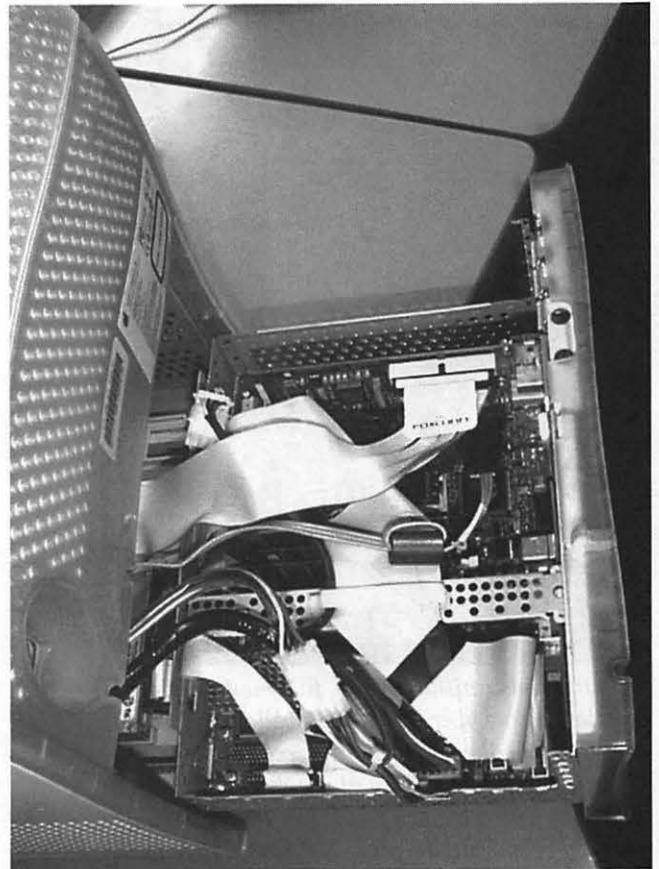
While unboxing and carting the machines around, the G3-AIO machines were conversation stoppers, and starters. "What is that?" "It's a computer." "It doesn't look like a computer." People you didn't know would start following you through the hallways, seeing where you were going and hoping for a chance to see if it was *really* a computer. This doesn't mean they thought the machines were pretty, but they do look funny.

Pi President Lorin Evans has dubbed the G3-AIO the "Molar Mac," which is a perfect name. From the front or back, they look exactly like giant molars. With hundreds of cavities.

But did we mention they are heavy? And fast?

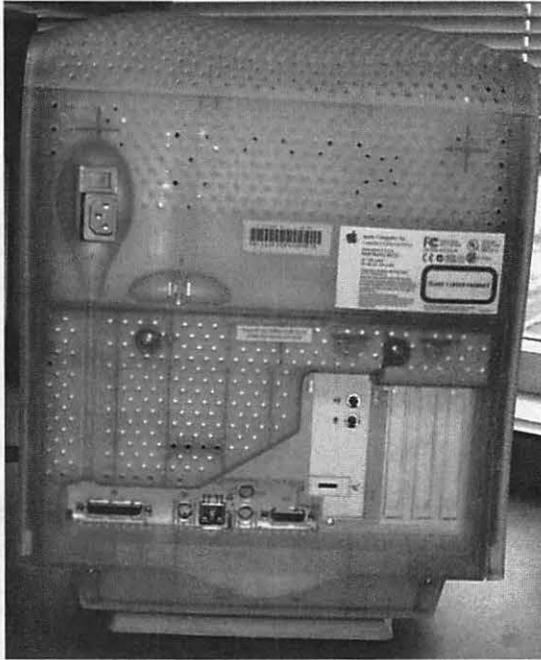
Setup is absurdly simple: unbox them, plug them in. Since almost everything is built-in, all you have to do is plug in power, network, and keyboard and mouse. The system software is pre-installed, so unless you want to partition the drive, there isn't anything to do but install an application or three.

As shipped, the machines have 32



*Getting into the machine is surprisingly easy: remove four Phillips screws and slide the motherboard out. The tray even has a handhold built into the bottom, and rails on the side to support the tray. Once the tray is open, small elves with nimble fingers should have no trouble snaking their fingers through the cables to install memory; regular-sized adults might have to work at this a bit. One thing you won't see: the hard drive and floppy drive do not slide out; exactly how you are supposed to get them out (or install something in the space for the Zip) isn't clear, and seemed more trouble than mere curiosity could justify.*

MB of RAM, which isn't enough for Mac OS 8.1, to be honest. It might work if you never went beyond *ClarisWorks*, but what is the point of having a *fast*, powerful machine and limiting yourself to *ClarisWorks*? Fortunately, adding another 32 MB is simple: unscrew four Phillips screws, pull out the logic board (conveniently mounted in a pull-out tray for just this sort of situation), and find a nimble-fingered midget to twist and turn their hand past all the cables to stick something in one of the two vacant DIMM slots.



The unusual translucent top, filled with hundreds of holes, curves over the back as well. Note that the connector for the power cord is recessed, as are the (from left to right) SCSI port, ADB port, 10BASE-T Ethernet port, modem and printer port, and video port along the bottom edge. The back covers of the three PCI slots are on the far right, also recessed, as is the blank space for the optional audio-visual circuitry. Why is all this recessed? So that teachers and students can push the machines as close to the wall as possible without damaging the cable connectors.

In fact, once set up, the most remarkable thing about the G3-AIO is that, aside from the speed (did we mention they are fast?), they aren't remarkable. When you are looking at the screen, you don't notice the funny shape. When you aren't hauling them around, you don't notice the weight. The dearth of cable clutter is one thing you do notice, by its lack. It acts like a Mac, it runs like a Mac, it has no obvious limitations for its intended environment.

How does it compare with the iMac (which doesn't exist quite yet, at time of writing?) Well, the G3-AIO has several things the iMac lacks: a SCSI port, two serial ports, a video port, a floppy disk drive, three PCI

slots, and an option for a Zip disk and AV circuitry. Plus it looks like a giant beige tooth.

The iMac, on the other hand, looks like a 1960s vacuum cleaner, has a Universal Serial Bus mouse and keyboard, an infrared port, and comes bundled with lots of software. It allegedly will have better speakers, and a much faster Ethernet port, plus one person, without fear of serious injury, can transport it.

Should you get a Molar Mac or a Vacuum Cleaner? If you are a school, the Molar Mac is probably a good choice: it is ruggedly built, it works with existing LocalTalk peripherals, and several features (such as the twin headphone jacks on the front) are ob-



Above the rainbow logo at the top is the small opening for the built-in microphone. The built-in speakers are on the sides at the bottom. Above the space for the Zip drive (left) and the floppy drive (right) are the jacks for headphones; you can plug headphones into both ports simultaneously, plus a third port at the rear. Centered between and slightly above the drive slots is a lighted button for controlling volume. The CD-ROM in the middle at the bottom is about the only conventional component.

viously designed with schools in mind. The weight isn't an issue, since you probably don't want the rugrats carting the machines around, anyway.

If you are a student at a school, the choice of Molar Mac or Vacuum Cleaner becomes more interesting. An iMac will take up less space in the dorm, and fit better in the back seat of your 1998 Volkswagen Bug. It won't work with old LocalTalk peripherals, but you probably don't have any, and it will work just *fine* with Ethernet peripherals, including the Internet link the university so unwisely stuck in your dorm room.

Did we mention that both machines are *fast*? ■

# Best of the TCS

by John Ludwigson and Nancy Seferian



**T**HIS COLUMN highlights some of the best questions, answers and comments found on the TCS, and we hope it will whet your appetite for some discourse there. If you want quick answers to your most pressing computer questions, the TCS is the place to ask them. It's not a bad place to find a good chuckle, either!

## Icons Again!

**Q:** Some of you may yet remember the incessant series of messages I've posted here concerning the matter of disappearing icons for my System file, Finder, and Clipboard. There is news, but first an observation from our correspondent on the icon-fixing scene:

Two days ago (been holding my breath before daring to believe this is permanent), I did try out DFA 8.2, very tentatively: first on a Zip disk I didn't worry about; then on a Zip disk with an OS on it (OS7.5.5); then, with great trepidations, on my very own Hard Disk. No problems—both according to the DFA window, and, apparently, in reality. AND—when I went to look in my System Folder, a miracle had occurred! The Clipboard was there in full icon! So was the Finder, the little Mac. And so was the System file itself in its little suitcase! And I hadn't even restarted!

I may have mentioned gremlins around here a few <G> times. Maybe I should be more respectful. After all, our ancestors worshipped the spirits in rocks and mountains and trees...etc. Heck, why not computers? I will spare y'all the further development of this theme...for now.

**R1:** >I will spare y'all the further development of this theme...for now.>

Drat; it was getting interesting.

I may have mentioned gremlins around here a few <G> times.

I've heard of similar thoughts over the past 20 or so years. And I've noted some curious trends: where most people refer to getting SCSI devices to work as "black magic" or some sort of seemingly random behavior, video and audio engineers, who live and die by cabling, hardly ever have SCSI problems, and think SCSI cabling is very straightforward. Similarly, while many people think programs behave "randomly" and seem to have a will of their own, programmers think programs are very logical and predictable.

Similarly, there are people who claim computing is mysterious because of "jargon." However, these tend to be the same people that have never taken the shrink wrap off their manuals.

In short: computer mysteries, be they hardware or software, are in large measure a function of observation (what are you really seeing) and reporting (can you accurately describe what you saw). The less observant you are (which in many cases means not looking at the right thing) and the less precise you are in your reporting (which often means using the wrong terminology or incompletely describing what you see), the more mysterious something seems to be.

All of which does not preclude my interest in your developing a theme comparing computer mysteries to nature worship. I'm anxious to see what you'll come up with.

**R2:** >> All of which does not pre-

clude my interest in your developing a theme comparing computer mysteries to nature worship.<<

Holistic computer consulting. Wave the chicken more evenly.

**R1:** >>Holistic computer consulting. Wave the chicken more evenly.<< ROTFL! I like it!

With Mac OS 8.5, we can modify this with a self-waving chicken.

**Q:** Ah, adventures in Icon-Land takes yet another turn! Viz:

When we last saw the intrepid computerist and his wonderful, mystifying machine, the icons for his Clipboard, Finder, and System file had returned (no doubt from a vacation in Tierra del Fuego where they had gone to visit the penguins and their old friend Joe Performa who retired there some time back). Well, the IC, never one to let well enuf alone, decided to rebuild his desktop. After all, that usually brings back icons, so it surely couldn't do any damage. Poof! the C, F, and S icons took off again. Now where?

The cure, of course, must be to run DFA 8.2 again...to whistle them up and return them to their stalls. Nonsense. So out came the heavy hitters, DFA in <repair> mode (scary when it works on its own disk, things all disappear for a moment until DFA decides to get on with the job); then TechTool 117 to delete and rebuild the desktop files. Still no icons.

Moved by the wise comments of the Pi secretary, who noted that one must observe carefully, the IC thought of a new scheme: he would restart from his "Pi Beta" Zip disk with OS7.5.5 on it. There was this dim and dusty memory that he had been monkeying around with that disk once before when the icons did their little now-you-see-it-now-you-don't dance. So he switched startup disks



and restarted. Viola! Sweet music! The icons reappeared, both in the System folder window for the Zip disk and for the Hard Disk.

And, Lo! When the machine was restarted yet again from its own Hard Disk, the little wonders had decided to stay around for a while.

Hold your breath, folks!

P.S. They said Joe wishes all his old friends a nice, warm summer—he's pretty thoroughly chilled these days in the southern hemisphere winter...although snuggling up with a bunch of penguins helps somewhat.

**R3:** >> And, Lo! When the machine was restarted yet again from its own Hard Disk, the little wonders had decided to stay around for a while. <<

Okay, let's take a poll. I say it's either icon wanderlust or icon Alzheimer, maybe a David Copperfield iconabe. What say ye?

**R4:** >> Okay, let's take a poll. I say it's either icon wanderlust or icon Alzheimer, maybe a David Copperfield iconabe. What say ye?<<

Nah, it's definitely the icon Shadows ... they move when you're not looking ..

**Q:** Well, the shifty little so-and-sos did it again. When I started up today they were hiding, maybe under the sofa. But, being now forearmed as well as forewarned, I tried something akin to yesterday's merry-go-round of disks: I immediately restarted from the Mac OS 7.6.1 CD-ROM.

Yes! The uncorrupted (that is, pure and innocent) OS on the CD made the icons behave! They were all there, looking a bit abashed at being found out.

Then I restarted yet again (a phrase I'm coming to love) from Mac's Hard Disk, and had it spit out the CD, with thanks.

As of now, folks, it's a detente. The System file and Finder are smiling up at me, but the Clipboard is smirking behind its generic icon. Bah! Humbug! Looks like the choice—given that this intrepid computerist is determined to win the war—is either to fork out \$100 for TechTool Pro2.x (and hope it'll work...) or reinstall OS761.

Or maybe learn chicken-waving.

[A little later...]

When we last saw our intrepid icon man, he was staring at his generic, boring, icons for the Clipboard, Finder, and System files. Dejected, he had given up on home-grown remedies...and hadn't the heart to reinstall the system folder.

One possibility did suggest itself: perhaps as one person suggested, the problem was a corrupted Finder. Icon man remembered vaguely (as he remembers a lot of things these days) that the icons had returned when he had restarted from some other disk than the internal HD. But they didn't stay after a restart.

Time for the lazy whelp to spend big bucks (to avoid the dreaded reinstall). He forthwith sent off an order to the anti-Symantecs at MicroMat, Inc. for their purportedly wonderful new utility, TechTool Pro 2.0.3r1. Then he waited. The order went in on a Monday via email because they said that was the fastest way to get the thing. On Wednesday, Icon man sent off another email querying them as to where was the shipment (having heard a lot about overnight delivery). Well, make that Friday, not Wednesday. A whole week: you'd think UPS would be here by now.

The next Wednesday (really Wed. now...), after watching the big brown truck whiz past yet again, IM determined to take the geeks by their horns. He picked up the phone and dialed an "800" number. "Hello, you have reached MicroMat. We're away on vacation this week in honor of the 4th of July..." Foof! They were out

surfing while the world fumed! (Note the egotism peeking up here...)

Well, while reading the funnies on Friday, there was a knock at the door. Icon man got there just in time to see the big brown truck pulling away and a little box at his feet.

To make a very long story a bit shorter, he inserted the CD-ROM, installed the program, clicked run at the standard (dummies') interface, and watched while it went through everything in the machine. TTP found a bunch of degenerate files, mostly icons, and repaired them, it said. Other stuff passed with a hearty "Bong!" and sometimes some soothing words from Victoria (the thing reads to you!). But the Clipboard, Finder, and System icons were still generic! Man. \$100 down' the hole! Drat!

Sometime later, after a good deal of futzing around, restarting, shut-downs and power-ups, Icon man happened to look in the System folder...for something else, actually. There was a genuine Clipboard image/icon staring up at him! And there was a Finder icon! And a System sootcase! Not daring to believe, IM restarted, careful to note that there were no Zip disks or CDs in the drives. Lo! The icons remained. And there they are to this day. They're even there right now...just checked in the System Folder.

So, TechTool Pro 2.0.3r1 pulled its weight after all. And it is reassuring to have it around.

### Chip Beef

[To not be totally baffled by the following, you need to know about "DHCP". An authoritative source has this to say: "DHCP (Dynamic Host Configuration Protocol) provides a method for dynamically assigning IP (Internet Protocol) addresses and configuration parameters to other IP hosts or clients in an IP network." Got that? Now read on for a saga of our times.]

**Q:** I got tired of messing around



waiting for Cable Modem, xDSL, Mac Support for the Hughes DirecPC etc... and bit the bullet and ordered residential ISDN yesterday. Now the fun begins!

First, I have to select an ISP that supports 128k ISDN. So far, the cheapest is, ta-da, Bell Atlantic at \$21.95 (plus some odd 'government mandated fee' they add that is \$3).

Has anyone here used Bell Atlantic's ISP? I am mainly concerned with performance, reliability and support.

BA has a special on Zyxel routers, so that's what I'll be using. A Prestige 100 router and 4 port hub combo. While this router is Mac compatible, their web site is completely devoid of the word 'Macintosh', and that concerns me a bit in how hard it will be to get it working right.

I am use to a scenario where the router is assigned an IP address, and the computer is assigned an IP address. Then, the router address is just plugged into the Gateway field of the TCP/IP control panel, the computer's IP addressed is plugged into the appropriate field, and the DNS numbers are typed in the DNS box.

However, it looks like I will be set up with a Dynamic IP address instead, and this is where I lose it. I see no way to set up the TCP/IP under Ethernet using Dynamic IP's. I would think you have to have at least one assigned for the router so you can plug in the gateway info?

Is this where DHCP comes in?

Getting permanent IP addresses these days either costs a fortune or just isn't offered. :(

Has anyone ever done this setup? Dynamic IP, Zyxel (or probably any other) router?

I'm so confused... :(

It will be 2-3 weeks before the line is even connected, so I have time to do a lot of research on this before the big day.

One other thing. The Tech at BA

said the extra RJ-11 line I have run from the phone box to the spare bedroom office will work just fine, even with an RJ-11 jack. This line was used for a second phone, but has long since been disconnected. The funny thing is, he said that a standard RJ-11 cord can be used between the jack and the router, even though the router will have an RJ-45 jack on it. He said that you can plug an RJ-11 cable into an RJ-45 jack no problem, but not the other way around (Duh!). I've never heard of this! Is this correct?

**R1:** I just did it two weeks ago, having a great time. Stuff works as advertised. Tried Bell Atlantic.net for three weeks, dropped them yesterday for Heller. When it was good, it was OK-great; when it was bad, even DNS response was slow (also just plain lost some routes).

I checked out Heller's connections to the MAE east backbone, was pleasantly surprised. You might want to check out the 64k access for couple weeks, then upgrade if your throughput needs it. Normal http stuff doesn't need 128; heavy downloads, ftp etc. are great at 128k.

I bought a Netgear 328 router, cost about 270\$ Fantastic! DHCP is very easy to set up. I used the standard "private" network of 192.168.0.x and NAT. The documentation is easy, and there's some explanation online at baynetworks.com Please call me if you have any questions; I still owe you couple favors!

**Q:** Thanks for the info! Heller is on my short list, and the only reason they aren't a shoe-in is because they are \$15 more expensive for the full 128k, which I will use often for some very large FTP downloads...

Can you give me a basic run-down on the DHCP setup? Do you hard-code the DNS numbers into the router using the comm-port on the router and a terminal program? Or, does Open Transport suck 'em in from Heller during the connection?

>>I used the standard "private" network of 192.168.0.x and NAT. <<

Can you expand on that a bit? Is there something 'special' about that IP number?

Thanks!

**R1:** DHCP: >is there something special... YES, EXACTLY. I forget the other numbers, but there are 3 consecutive series of numbers set aside as "private" that are not used on the public internet. 192.168.0.x is probably the most used.

These are reserved for just exactly the reasons you and I want: a private internal network scheme. The router is set to 192.168.0.1 on the private side, but actually talks to the big internet with a second IP given to it by the ppp connection (just like a modem is given a random IP). The router "translates" (using NAT) every request to and from your private net to the public IP, remembering which particular ETHERNET address (called a MAC) generated the request. That way it keeps track of all the packets going both ways.

DHCP is easy to configure on the router. You just tell it what is the starting IP address to give out, and how many clients you have, and the mask. Then you set each Macintosh TCP/IP panel to ethernet and DHCP server and magic occurs.

OK I had to look this up. The 3 ranges reserved by RFC 1597 are:

10.0.0.0 - 10.255.255.255

172.16.0.0 - 172.31.255.255

192.168.0.0 - 192.168.255.255

**Q:** Cool! Thanks!

I talked to Paul Heller at length about this yesterday, and he described what goes on with this DHCP stuff...

As soon as I finish reading all the new messages around here, and finish the Chip-Beef (SOS, for you



military folks) I'm munching on, I'll stop back by here and write a message describing what I learned.

[Later]

OK, folks. SOS all gone :)

As I indicated in an earlier message, I talked to Paul Heller yesterday about this in length. Isn't it cool when you can do that?

Anyway, this is how things happen according to what I learned:

You set the TCP/IP Control Panel to Ethernet and DHCP. No other settings are done there (there really isn't anything you can do, because everything resorts to "assigned by server", and you can't change or add stuff. Not even DNS numbers)

That's about it as far as configuring the Mac :)

OK, here's what happens.

You click on your Browser. It opens, and tries to make a connection to an IP address. Your Mac, being smart, knows that you have specified DHCP. Since your Mac is smart, it also knows that it is NOT a DHCP server, so it polls the network for one.

The Router (in my case, it will be the Zyxel Prestige 100, which Paul says works just fine), sees this query and says "Hey! I'm a DHCP server, and I can help you!"

The Mac says, "Cool!"

The Mac sends the site request. At this point, the address has not yet been resolved by the DNS servers, and the IP is not yet known...

The Mac says "Cool!"

Then, the Router says "Wait, I don't have an IP address for me specified!"

The Mac says "Hey, don't look at me! You said you could handle this!"

So, the router asks Heller "Hey, you gotta spare IP address I can borrow for a while."

Heller's severs says "Sure! Here ya go! I crown thee xxx.xxx.xxx.xxx", where the x's will be the IP address loaned out.

We now have what is called the Dynamically Assigned IP Address...

OK, so the router says "OK, here is my IP, now I need to connect to www.apple.com please." Heller responds with "What DNS server do you want to use"

The router says "Uh, DNS Server?"

Heller says "OK, OK. I guess I'll have to loan you one of those too. So, Heller sends over the DNS numbers for their DNS servers." This is the dynamic allocation of the DNS server numbers from Heller to the Router.

Note —This is the part I was initially confused about, as there was no place to plug in the DNS numbers when you select DHCP in the TCP/IP Control Panel.

So, we now have everything set. The Mac requests www.apple.com, the router sends the request to Heller, and the data comes back to the Mac.

The Mac says "Cool!"

I say "Wow, that was fast!"

And the dog says "Feed Me!"

That's about it. So long as nothing weird is going on, it's about the easiest Internet Connection you could ever wish for.

[Later still]

Well folks, the ISDN install went down yesterday with very little trouble.

If anyone has ever wondered if reversing the two wires would have any effect, it does :) Initially, the tech hooked them up backwards. You get a 50/50 shot when you do this, and he lost :)

The symptoms are really, really strange.

What happens is the 2nd B-Channel ends up on both channels, includ-

ing the POTS jacks on the router!

Reversing the two wires fixed the problem.

No problems with the Mac or the Prestige 100 router. Fired right up. It was really a non-event, other than the speed at which pages showed up :)

Now, not everyone has this much luck with ISDN installations. That's been well documented by many who have been through the torture. However, if you do a few things before your installation, your installation can go just as well as mine did:

1. Read, read, read! Do a couple of searches on the net for ISDN faq's and other information. Learn as much as you can before the guy with the pliers and ugly green truck shows up.

2. Get your router manual (or ISDN Modem manual) out and read it cover to cover. No matter how dry and boring it becomes.

3. Discuss your installation with your ISP. This is really easy if you use an ISP like Heller, where you can call and actually talk to the owner/operator directly :) Other ISP's may not be so helpful.

4. Program your router before the guy with the ugly green truck shows up. There is no reason you can't do this and have it ready.

5. Make sure you ask lots of questions about things you aren't sure of. Every ounce of education you acquire before the phone dude (or dudette) shows up makes things go that much easier.

6. Make sure you understand what DHCP is, and how it works. These days if you get residential ISDN, or if you are using Dynamic IP's, it will become a part of your life.

7. Be there for the installation, even if you don't have to be. If I was not there, we would not have caught the reversed wire situation and I would have needed to wait for them to come back out. ■

# Hotline

The hotline service is only for members of WAP. Please do not call after 9:30 pm or before 8:00 am.

Name	Telephone	Heading	Subjects
<b>Apple General</b>			
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	
<b>Apple //</b>			
Bernie Benson	301-951-5294	Accounting	Apple SSC (Super Serial Card)
Neil Laubenthal	703-691-1360	Apple IIGS	General
Allan Griff	301-654-1515	Apple Works	General
Ken DeVito	703-960-0786	Apple Works	General
Paul Campbell	313-255-6497	Apple Works	General
Ray Settle	410-647-9192	Apple Works	General
Allan Griff	301-654-1515	AppleWorks	General
Ken DeVito	703-960-0786	Beagle Buddies	
W. T. Cook	410-995-0352	Beagle Buddies	
Don Avery	202-362-1783	Beagle Buddies	
Dale Smith	301-762-5158	Communications	
Allan Griff	301-654-1515	Database	Apple Works
Morgan Jopling	410-721-7874	Database	Apple Works
Mitt 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	
Dave Jernigan	540-822-5137	Graphics	Print Shop (before 9 PM)
Joan Jernigan	540-822-5137	Graphics	Print Shop (before 9 PM)
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	
Dave Jernigan	540-822-5137	Operating Systems (before 9 PM)	
Joan Jernigan	540-822-5137	Operating Systems (before 9 PM)	
Joan Jernigan	540-822-5137	Word Processing	Apple Works II (before 9 PM)
Ron Evry	703-490-1534	Word Processing	AppleWriter
Allan Griff	301-654-1515	Word Processing	
<b>Apple // e</b>			
Morgan Jopling	410-721-7874	Upgrade	
<b>Apple // GS</b>			
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
<b>Apple // GS</b>			
Ken Carter	301-834-6516	General	
<b>Apple ///</b>			
Dave Ottalini	301-681-6136	General	
Paul Campbell	313-255-6497	General	
Seth Mize	410-766-1154	General	
Robert Sambolin	787-841-1641	General Repair	
Steve Truax	304-263-5749	Integ. Packages	3 Easy Pieces
Dave Jernigan	540-822-5137	Integ. Packages	3 Easy Pieces (before 9 PM)
Paul Campbell	313-255-6497	Repairs	
Dave Jernigan	540-822-5137		3.5" Super Drive (before 9 PM)
Dave Jernigan	540-822-5137		SCSI Drives (before 9 PM)
Steve Truax	304-263-5749		Stemspeller
Dave Jernigan	540-822-5137		Stemspeller (before 9 PM)

Name	Telephone	Heading	Subjects
Carey McGleish	313-332-8836		Word Juggler (evenings)
<b>Cross Platform</b>			
Ken DeVito	703-960-0786	Transfers	MS/DOS-Apple-Mac
<b>IBM/Compatibles</b>			
Louis Saunders	301-648-7332	Hardware	Troubleshooting & Repair
Etana Finkler	301-891-2821	Illustration	General best to call 9 PM to Midnight
Louis Saunders	301-648-7332	Network	Connectivity
Louis Saunders	301-648-7332	Printers	Connectivity
Tom Cavanaugh	301-627-8889	Printers	General
Louis Saunders	301-648-7332	Printers	Troubleshooting & Repair
<b>Internet</b>			
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
Jaque Davison	703-644-7354	World Wide Web	Web Site Builder
<b>Macintosh</b>			
Nancy Seferian	202-333-0126	Art & Video	General
Robert Sambolin	787-841-1641		General
John Enberg	301-262-9347 or 301-604-8348		Basics
Tho. Snowberger	410-757-4656	Contact Managers	Now Contact/UTD
Mort Greene	703-522-8743	Database	File Maker Pro
Bill Waring	410-647-5605	Database	Filemaker Pro
Bob Wilbur	703-426-0556	Database	Filemaker Pro
Rick Shaddock	202-321-2110	Database	FoxPro
Harvey Levin	301-299-9380	Database	Helix
Bob Wilbur	703-426-0556	Database	Helix Express
Mort Greene	703-522-8743	Database	MS-File
Dick Nugent	703-425-1056	Database	FileMaker Pro
Elizabeth Mangan	703-750-2710	Database	Pro-Cite
Dave Weikert	301-963-0063	Databases	Panorama
Bob Wilbur	703-426-0556	Database	General
Blake Lange	301-942-9180	Desk Top Pub.	PageMaker
Mort Greene	703-522-8743	Desk Top Pub.	PageMaker
Eric Grupp	410-315-8331	Desk Top Pub.	Quark Xpress
Paul Schlosser	301-831-9166	Desk Top Pub.	Quark Xpress
Ron Johnson	410-315-8764	Drawing/Graphics	Adobe Illustrator 3.0
Nancy Seferian	202-333-0126	Drawing/Graphics	Aldus Freehand
Bob Wilbur	703-426-0556	Drawing/Graphics	Canvas
Lloyd Olson	410-544-1087	Drawing/Graphics	ClarisDraw
Etana Finkler	301-891-2821	Drawing/Graphics	Freehand (best to call 9 PM to 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 (best to call 9 PM to Midnight)
Bob Wilbur	703-426-0556	Drawing	General
Blake Lange	301-942-9180	Drawing/Graphics	Illustrator
Etana Finkler	301-891-2821	Drawing/Graphics	Illustrator (best to call 9 PM to Midnight)
Mort Greene	703-522-8743	Drawing/Graphics	Photoshop
Blake Lange	301-942-9180	Drawing/Graphics	Photoshop
Mort Greene	703-522-8743	Drawing/Graphics	SuperPaint 2.0
Dave Jernigan	540-822-5137	Foreign Languages	FlashWorks (before 9 PM)
Dave Jernigan	540-822-5137	Foreign Languages	Greek Tutor (before 9 PM)
Dave Jernigan	540-822-5137	Foreign Languages	Hebrew Tutor (before 9 PM)
Dave Jernigan	540-822-5137	General	(before 9 PM)

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

# September 1998

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		Clinic 1 <i>Dress Up ClarisWks</i> <i>Intro to the Mac-Part 1</i>	2 <i>Modify Your Mac</i> <i>Intro to the Mac-Part 2</i>	3 <i>Web Page Workshop</i> <i>Columbia Slice</i>	4	5
6	Office Closed 7	8 Clinic Genealogy SIG <i>PhotoShop-Part 2</i>	9 <i>Intermed. Mac-Part 1</i> <i>All Around AOL</i> Excel SIG	10 <i>Intermed. Mac-Part 2</i> <i>Intro to Graphics</i> Stock SIG	11 <i>Intro to the Mac</i>	12  Graphics SIG
13	<i>Intro to the Mac-Part 1</i> 14	15 Clinic	16  WAP BoD	17 <i>Internet-Part 1</i>	18 <i>Internet-Part 2</i> <i>MacOS 8.0/8.1</i> <i>Intro/Clinic</i>	19  Annapolis Slice
20	Office Closed 21	22 Clinic	23 Retired SIG <i>Intro to QuarkXpress</i>	24 <i>Filemaker Pro Clinic</i> Women's SIG	25	26 <small>NoVa ComCol</small> <b>WAP</b> General Meeting
27	<i>Intro to the Mac-Part 2</i> 28	29 Clinic	30 Office Closed			

# October 1998

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 <i>Intro to Graphics</i> <i>Intro to Mac-Part 1</i> <i>Intro to Quicken</i> <i>Columbia Slice</i>	2 <i>Intro to Mac-Part 2</i> <i>Intro to PhotoDeluxe</i>	3
4	5	6 Clinic	7 <i>Quark Xpress - Clinic</i>	8 <i>Intermed. Mac-Part 1</i> <i>Intro to ClarisWorks</i> Stock SIG	9 <i>Intermed. Mac-Part 2</i> <i>Dressing Up ClarisWorks</i>	10  Frederick Slice Graphics SIG
11	Office Closed 12 <i>Intro to Mac-Part 2</i>	13 Clinic Genealogy SIG <i>Intro to Pagemaker</i>	14 <i>MacOS 8.0/8.1</i> <i>Intro/Clinic</i> Excel SIG	15	16  Annapolis Slice	17 <small>NoVa ComCol</small> <b>WAP</b> General Meeting
18	<i>Intermed. Mac-Part 1</i> 19	20 Clinic	21  WAP BoD	22	23	24
25	<i>Intermed. Mac-Part 2</i> 26	27 Clinic	28 Retired SIG <i>PhotoShop-Part 1</i>	29 <i>Modify Your Mac</i> <i>Internet-Part 1</i>	30 <i>MacOS 8.0/8.1</i> <i>Intro/Clinic</i> <i>Internet-Part 2</i>	31

# Meeting Notices

Unless otherwise noted, call the SIG chairs or Slice officers for meeting information. A list of the SIG and Slice chairs is on page 4 of every Journal. Calendar events in italics are tutorials, workshops or seminars.

## **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

## **Excel SIG**

3rd Wednesday; 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**

2nd Tues. of the month; 10 AM to noon; WAP office. **Agenda for September**—After taking the summer off with no meetings in July and August the Genealogy SIG will commence its second year with its regularly scheduled September meeting on the 2nd Tuesday of the month, i.e. the 8th of September at 10 AM. The speaker will be Mr. Steven Rhodes, Assistant Director of the DAR (Daughters of the American Revolution) Library in Washington DC. He holds Masters degrees in History and Library Science and will speak on "Genealogical resources of the DAR Library." (In case you do not know these resources are available to non-DAR members!)

## **Graphic Arts SIG**

2nd Saturday of the month

## **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 and December.**

*Upcoming sale is December 12th.*

## **WAP General Meeting**

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

## **Women's SIG**

**Upcoming 1998 meeting:** September 24th. At the Pi Office at 6:00 PM dinner (\$2) followed by 7:00 PM meeting/presentation. Call SIG chair, Kathleen Charters at 410-730-4658 for details.

**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 9:30 pm or before 8:00 am.

Name	Telephone	Heading	Subjects
Joan Jernigan	540-822-5137	General	(before 9 PM)
Dan White	301-843-3287	General	
Dick Grosbier	301-898-5461	General	
Russell Robinson	301-739-6030	General	
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	
Louis Saunders	301-648-7332	Hardware	Troubleshooting & Repair
Joan Jernigan	540-822-5137	Hypermedia	HyperStudio (before 9 PM)
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
Joan Jernigan	540-822-5137	Integ. Packages	ClarisWorks (before 9 PM)
Jim Ritz	301-770-1405	Integ. Packages	MSWorks
Ray Settle	410-647-9192	Integ. Packages	MSWorks
Tim Childers	301-997-9317	Integ. Packages	MSWorks
Dave Weikert	301-963-0063	MacDisketeria	Disk Library
Dave Jernigan	540-822-5137	Mail List Manager	My Mail List Manager (before 9 PM)
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
Jerry Iler	410-987-5432	Older Claris	General
Jerry Iler	410-987-5432	PB180C	General
Lester Morcerf	410-987-0685	Performa 550	General
Tho. Snowberger	410-757-4656	Performa System	General
Rick Shaddock	202-321-2110	Pers.Contact Mgr.	ACT
Mel Benson	410-647-6873	Personal Finance	Dollars & Sense
Bill Geiger	703-237-3614	Personal Finance	Manage Your Money
Mel Benson	410-647-6873	Personal Finance	Manage Your Money
Clarence Goldberg	410-263-5189	Personal Finance	Quicken
Henry Miller-Jones	703-478-3721	Personal Finance	Quicken
Bob Wilbur	703-426-0556	Personal Finance	Quicken
Louis Saunders	301-648-7332	Printers	Connectivity
Louis Saunders	301-648-7332	Printers	Troubleshooting & Repair
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)
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
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

Name	Telephone	Heading	Subjects
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
Bernie Benson	301-951-5294	Telecomm.	Modems Hayes Smartmodem
Jaque Davison	703-644-7354	Virtual Reality	Alien Skin Texture Shop
Jaque Davison	703-644-7354	Virtual Reality	Bryce 2
Jaque Davison	703-644-7354	Virtual Reality	Specular Logomotion
Jaque Davison	703-644-7354	Virtual Reality	Virtus - 3-D
Jaque Davison	703-644-7354	Virtual Reality	Virtus Walkthrough Pro
Dave Jernigan	540-822-5137	Word Processing	Word Perfect (before 9 PM)
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	301-997-9317	Word Processing	Hebrew
Tom Cavanaugh	301-627-8889	Word Processing	MS Word
Harris Silverstone	410-435-3582	Word Processing	MS Word
Joan Jernigan	540-822-5137	Word Processors	Claris Works (before 9 PM)
Dave Jernigan	540-822-5137	Word Processors	Word Perfect

### 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	301-762-5158	Telecomm.	General
John Barnes	301-652-0667	Telecom	AOL
Dale Smith	301-762-5158	Telecomm.	TCS
David Harris	202-966-6583	Telecomm.	TCS
Nancy Seferian	202-333-0126	Telecomm.	TCS
Paul Schlosser	301-831-9166	Telecomm.	TCS

### Networking

Louis Saunders	301-648-7332	Mac	Connectivity
Douglas Ferris	301-924-4180	Networking	Novel
Douglas Ferris	301-924-4180	Networking	Windows
Dave Weikert	301-963-0063	Networking	Mac/AppleShare

***Did we miss you? Want to change your listing? Want to be added to the hotline?***

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

Include your name, phone number and subject(s) you want to assist with.

# Top Ten Hotline Tips

by Tom Witte

*Editor's Note: these tips have been published in the past, but are always worth taking a look at. Those new to the TCS should find them very helpful.*

## #1 Think. Be nice.

The people that may help you are not paid (your dues pay for *Journal* and office space). When you call, explain who you are, and ask the helper if it is a good time for them. If it is, be prepared to present your WAP number (it is on the mailing label of the *Journal*) and a clear description of what you need assistance with. Remember who you are speaking to. Try not to call the same helper three times in row for advice just because their name is listed more than once on Hotline list. Also, if you have call waiting—use \*70 to turn it off before you call. It is rude and unproductive to interrupt your help session for all those tele-marketers trying to sell you swamp things.

## #2. Think. Know what day and time it is.

If it is after 10 PM or before 9 AM or during the last minutes of the Superbowl or season premier of Star Trek, don't call one of the helpers listed in the *Journal*.

*If it is day-time DON'T call the Pi office. The only time to call the Pi office for Tech Help is Tuesday evenings. Our office staff of one is there to run the business of*

the Pi. And the staff often spends a lot of time telling the 30 to 50 people, who call her for Tech help each day, to use the hotline. That time can be much better spent making sure the *Journal* gets out on time or setting up a tutorial class or meeting site.

[If you think we should have help on demand at the office, that is great. Call and let me know what days you want to volunteer to be there. I can give you information that will let you

answer most questions]

## #3. Be prepared to leave your full name and complete phone number.

If you get an answering machine, don't hang up and call back every 5 minutes. Leave your name, phone number with area code, that you are a WAP member and a brief description of your problem. If your call is long distance, tell the helper to call you back collect.

[If you don't leave the above information don't get mad when you don't get called back. I know this sounds really DUMB but I get one call a month left on my machine asking for a call back without a phone number. I even had one guy (Joe—no last name —no phone number) called

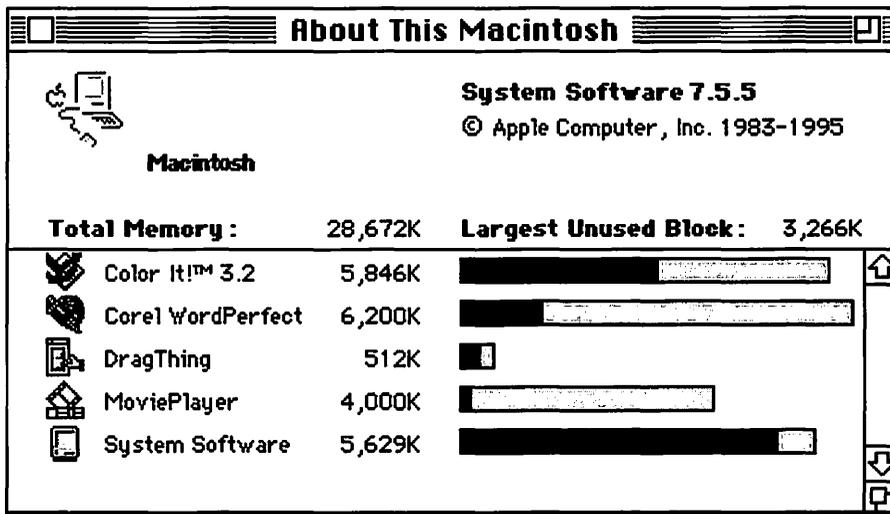


Figure 1.

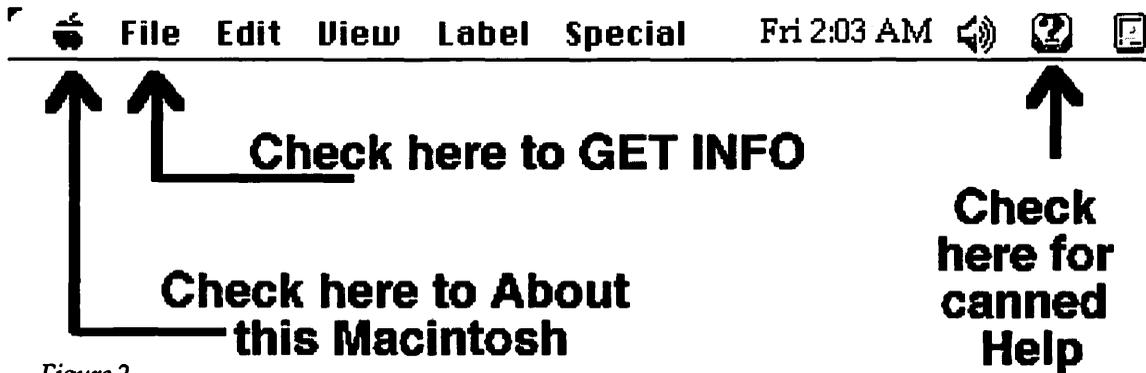
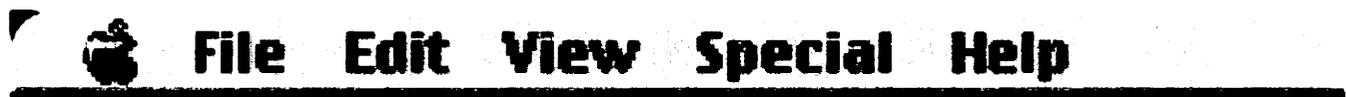


Figure 2.



**The place they hide help since System 8**

Figure 3.

back to the machine 4 times to complain that I never returned his call.]

**#4. Be prepared. What?**

Now while your machine is running, while in Finder select (under the Apple on menu bar) About this (Computer... /Macintosh...) then copy the information about your machine. (See figure 1.) [Or hit the keys shift apple 3 at the same time, after you hear a click, hit command f and search for PICTURE 0 When you find PICTURE 0 double click on it and Simple Text will open the screen dump that you just took and print it. If it does not show your Mac's model number look for a name on the case.]

**#5. Be prepared. Words.**

Look under the Question mark

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*"If it is daytime DON'T call the Pi office. The only time to call the Pi office for Tech Help is Tuesday evenings. Our office staff of one is there to run the business of the Pi. ....the time can be much better spent making sure the Journal gets out on time or setting up a tutorial class or meeting site."*

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(see figure 2) or the word HELP on the menu bar when in Finder (see figure 3). At least once select show balloons. Touch the things you see on your desktop - learn what word Apple uses for them. Words like Folder, File, Hard Drive, Window, Dialog box and menu bar works a LOT better over the phone than this thing or that one. Remember your helper at the other end of the phone can't see your Mac's Screen.

Checking out Macintosh Guide under the question mark / HELP menu item on the menu bar is a good idea for everyone. Review Learning the Basics is a good idea for everyone. Taking one of WAP's basic tutorials is also a good idea.

**#6. Be prepared. Take notes**

It really helps if you copy down the error message. Note: they can be a negative number. Sometimes the numbers or words really help. This isn't essential, but it is helpful.

**#7. Be prepared. Be close**

Try to be in front of the misbehaving computer when you call. It is much harder to help when you have to run from room to room after each question.

**#8. Thing to try first.**

*For most problems and weekly maintenance.* Run Disk First Aid. DFA is a utility that came with your operating software. It should be on Floppy title DISK TOOLS or Apple CDROM. Use DFA to check that files are being stored (on your hard drive or floppies)

are where they are supposed to be. Better yet, get the latest version DFA 8.3, it is available on line and the newest Pi CD-ROM. This version will work on a start-up drive, like Nortons'.

*If a program gives Type I errors.* Try increasing the memory partition for that program. [Use get info Finder's menu. If you don't know what that is check out Macintosh Guide under the question mark on the menu bar. Try trashing the preference file for that application.]

*Check all connections - Disconnect external items.*

**#9. More help.**

If no one is available on the Hotline, there are lots of other good sources of information on our own TCS. While it is an old style command line interface bulletin board it is probably the best source of information. It's available 24 hours a day and there are dozens of experts to help you with your problems.

Apple's toll free 1 800 SOS APPL is there during business hours, even if it can take a long wait.

**# 10. Remember**

Life will continue even if your problem is not solved.

You are TAKING from the Pi's reserves of Givers, don't wait too long to return to the well to GIVE something. You don't have to be a computer expert to take membership flyers to your nearby computer store, or stuff envelopes, or run crowd control at the Tuesday Nite Clinic or ....■

# Telecommunications Help Sheet

A quick reference sheet for use while on the TCS

## TCS Phone Numbers:

- 301-984-4066  
(for 300, 1200, 2400 bps)
- 301-984-4070  
(for 9600, 14400, 28800 bps)

### Main Menu

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

### File Transfer Menu

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

### File Area Menu

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

### Editor Menu

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

### Change Conference Menu

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

### Conference Menu

- <A> ..... Adjust Pointers

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

### Bulletin Board Menu

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

### User Preferences

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

### Electronic Mail Menu

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

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



# Macintosh Tutorials

**V**OLUNTEERS and Instructors—You can't have training without teachers. If you have expertise in any subject useful to Mac or Apple users, please consider teaching. Instructors have an opportunity to work with students in small groups and informal settings. The teaching process is truly rewarding. Besides the spiritual and intellectual, rewards also include compensation; you will be paid. We especially need people who can offer training on Office '98, Excel, and Power Point. Obviously, there are many possible classes that we have not listed. Feel free to call with suggestions for classes that you would be qualified to teach but which we may not yet have considered. Also, a few classes that we are currently teaching are filling up as quickly as we can offer them. If you are willing to be a back-up teacher for extra sessions of certain classes, again please call the office and let us know. You can also e-mail to kristen@tcs.wap.org.

*For those who are beginners or need to "brush up" on the Mac*

## Introduction to the Mac Part 1

You should go through the Guided Tour disk that comes with your computer or system upgrade kit prior to the class. You'll learn: how to safely turn your Macintosh on and off; the basic dos and don'ts; how to understand common Macintosh terminology found in manuals and other documentation; and how the basic components of your Macintosh system, hardware and software work. You'll also learn why the Macintosh user interface is consistent across all applications and how this makes learning and using software easier. This is part one of a two part class. Both parts of the class must be taken

in the same month. The price is \$70 for both parts (\$100 for non members).

## Introduction to the Mac Part 2

Part II will continue the exploration of the basic components of your Macintosh system, hardware and software. You'll learn more of the dos and don'ts; the finer points of the Menu Bar; and Error Messages, Dialog Boxes, Icons, Folders, Keyboard Shortcuts, Scrapbook and Clipboard will be discussed. You'll learn the basics of installing software, as well as use of the Chooser and peripheral devices, and how they are connected to the Macintosh. This is part two of a two part class. Both parts of the class must be taken in the same month. The price is \$70 for both parts (\$100 for non members).

### ■ Evening Set 1

#### Introduction to Mac

Part 1 9/14/98 7-10 p.m.

#### Introduction to Mac

Part 2 9/28/98 7-10 p.m.

### ■ Evening Set 2

#### Introduction to Mac

Part 1 11/2/98 7-10 p.m.

#### Introduction to Mac

Part 2 11/9/98 7-10 p.m.

### ■ Daytime Set 1

#### Introduction to Mac

Part 1 9/1/98 9:30 a.m. - 12:30 p.m.

#### Introduction to Mac

Part 2 9/2/98 9:30 a.m. - 12:30 p.m.

### ■ Daytime Set 2

#### Introduction to Mac

Part 1 9/11/98 9:30 a.m. - 12:30 p.m.

#### Introduction to Mac

Part 2 9/11/98 1 p.m. - 4 p.m.

### ■ Daytime Set 3

#### Introduction to Mac

Part 1 10/1/98 9:30 a.m. - 12:30 p.m.

#### Introduction to Mac

Part 2 10/2/98 9:30 a.m. - 12:30 p.m.

### ■ Daytime Set 4

#### Introduction to Mac

Part 1 11/5/98 9:30 a.m. - 12:30 p.m.

#### Introduction to Mac

Part 2 11/6/98 9:30 a.m. - 12:30 p.m.

## Intermediate Mac Part 1

Intermediate Macintosh, Part I will follow up on the concepts in In-

roduction to Macintosh. You will learn more advanced Macintosh skills and terminology, and about using, installing, and updating system files; about managing memory, hard disk space, fonts, sounds and other resources; the Apple menu, aliases, launching applications, inter-application communications (Publish and Subscribe), and Balloon Help. You'll also learn how to buy hardware and software, how to upgrade, and what kinds of software are available for your Macintosh. This is part one of a two part class. Both parts of the class must be taken in the same month. The price is \$70 for both parts (\$100 for non members).

## Intermediate Mac Part 2

How to maintain and troubleshoot your Mac. Topics will include: organizing and managing your hard disk; backing up information and backup strategies, archiving, disk formatting, defragmentation and optimization; managing start-up resources (including System 7 extensions or System 6 (INITs)); avoiding conflicts and incompatibilities; virus protection; memory management; upgrading or replacing the operating system; system enhancements; customizing software installation; cleaning your mouse; and Macintosh "housekeeping" philosophies. This is part two of a two part class. Both parts of the class must be taken in the same month. The price is \$70 for both parts (\$100 for non members).

### ■ Evening Set 1

#### Intermediate Mac

Part 1 10/19/98 7-10 p.m.

#### Intermediate Mac

Part 2 10/26/98 7-10 p.m.

### ■ Daytime Set 1

#### Intermediate Mac

Part 1 9/9/98 9:30 a.m. - 12:30 p.m.

#### Intermediate Mac

Part 2 9/10/98 9:30 a.m. - 12:30 p.m.

### ■ Daytime Set 2

#### Intermediate Mac

Part 1 9/11/98 9:30 a.m. - 12:30 p.m.

#### Intermediate Mac

Part 2 9/11/98 1 p.m. - 4 p.m.



- **Daytime Set 3**  
Intermediate Mac  
Part 1 10/8/98 9:30 a.m. - 12:30 p.m.
- Intermediate Mac  
Part 2 10/9/98 9:30 a.m. - 12:30 p.m.
- **Daytime Set 4**  
Intermediate Mac  
Part 1 11/12/98, 9:30 a.m. - 12:30 p.m.
- Intermediate Mac  
Part 2 11/13/98, 9:30 a.m. - 12:30 p.m.

**Introduction and Clinic for 8.0 and 8.1**

This class is for those people who have moved over or are thinking of moving over to 8.0 or 8.1. This is not an Introduction to the Mac Class. The first part of this class will be a show and tell of some of the neat new features of 8.0 and 8.1. The second part of the class will be a question and answer session on HFS Plus and other newbies of 8.0 and 8.1. **Prerequisite:** A good working knowledge of the Mac OS and its interface. The price is \$35 (\$50 for nonmembers).

- **Introduction and Clinic for 8.0 and 8.1** 9/18/98 9:30 a.m. - 12:30 p.m.
- **Introduction and Clinic for 8.0 and 8.1** 10/30/98 1 p.m. - 4 p.m.

**Modify Your Mac!**

In this class you will learn how to make new desktop patterns and pictures, learn how to make your own icons and how to use them. Learn how to record and use your own alert sounds. Learn how to change the start-up screen, how to personalize the launcher, and how to change the fonts used by the Macintosh. Learn about screen savers, marching feet, colored menu bars, additional clipboards, better scrapbooks, fancier notepads, and new calculators. Learn about the problems and conflicts some of these programs can cause and how to deal with them! Learn how to make a secondary start-up drive so that you can save yourself if you over-modify your Mac and need to be able to get back to work quickly! **Prerequisite:** A good working knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non

- members).
- **Modify Your Mac!** 9/2/98 1 - 4pm
  - **Modify Your Mac!** 10/29/98 1 - 4pm

**Work Processing/Integrated packages**

**Introduction to ClarisWorks**

This class will introduce the student to the integrated software package, ClarisWorks. The course will begin with an introduction to the fundamentals of the ClarisWorks 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. The price is \$35 (\$50 for non members).

- **Introduction to ClarisWorks** 10/8/98 1 p.m. - 4 p.m.

**Dress up those ClarisWorks Documents!**

In this class we will take ClarisWorks to a new level! Learn how to make easy outlines, lists, and check-off charts. Make great slideshows and videos right in ClarisWorks. Learn how to dress up charts and graphs, how to make specialized dictionaries, and how to have ClarisWorks read to you! Learn the secrets of stationary files, how to make your own ClarisWorks libraries to 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 and lab reports. Many of the projects included will be using the capabilities of ClarisWorks 4.0 and 5.0 Students will receive templates, stationary files and handouts to take home. **Prerequisite:**

**Some Specifics**

*Please remember that all of the tutorial dates listed are subject to change without prior written notice. To check on the current class calender we recomend that you check the web page at [www.wap.org](http://www.wap.org) periodically. Please call the office to register for classes before you send in payment.*

- **Where:** Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 12022 Parklawn Drive, Rockville, Maryland.
- **When:** unless otherwise stated, all tutorials are three hours in length and begin at 7:00 P.M. on the date listed. The office building is secured at 6:00 P.M..
- **Fees:** \$35.00 per class for members and \$50 per class for non-members. Pre-registration and payment must be made to hold a seat.
- **Class Size:** Class size is limited to 6 students per class.
- **Instructor Cancellation:** If a class is 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 by the office 72 hours before a class is scheduled. The only exception to this is a cancellation due to illness.



Introduction to ClarisWorks or a good knowledge of the basics of ClarisWorks and its interface. The price is \$35 (\$50 for non members).

■ **Dress up those ClarisWorks Documents!** 9/1/98 1 p.m. - 4 p.m.

■ **Dress up those ClarisWorks Documents!** 10/9/98 1 p.m. - 4 p.m.

#### ClarisWorks Clinic

This class is for those who have some experience with ClarisWorks 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 you would like help with. The idea being that they can work on a project that interests you while the instructor is helping another with a project that does not interest you. **Prerequisite:** Introduction to ClarisWorks or a good knowledge of the basics of ClarisWorks and its interface. The price is \$35 (\$50 for non members).

■ **ClarisWorks Clinic Call for Dates**

#### Database

##### Introduction to FileMaker Pro

This course covers the following topics: what FileMaker Pro does, what a database is, database terms, using a database, creating a new database, entering and editing information in a database, and formatting and printing. **Prerequisite:** Introduction to the Macintosh Part 1 and 2, or a general knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

■ **Introduction to Filemaker Pro 11/6/98 1 p.m. - 4 p.m.**

#### 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 and you should bring along on floppy a sample of things you would like help with. **Prerequisite:** Introduction to Filemaker

Pro or a good knowledge of the basics of Filemaker Pro and its interface. The price is \$35 (\$50 for non members).

■ **Filemaker Pro Clinic Call Office for Dates**

#### Financial

##### Introduction to Quicken

Course will be an introduction to Personal use of Quicken v6.0 or 7.0, 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. This class will introduce the program to anyone already at ease with using a Macintosh. Please have played a bit with the program and made some attempt to use it before class; bring your questions well prepared in advance; the class will be taught using Quicken 7. The instructor will try to answer all questions as long as they are within the curriculum outlined above. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

■ **Introduction to Quicken 10/1/98 7 p.m. - 10 p.m.**

■ **Introduction to Quicken 11/5/98 1 p.m. - 4 p.m.**

#### Getting online

##### Email to the Max

Class members will explore the configuration options and features of stand-alone applications (Eudora, Claris) versus email functions in Web browsers. Topics include using mail filters to manage multiple mailboxes, configurations for more than one username or account, and sending and receiving attachments to email, with a relevant discussion of compression, encoding, and virus protection. You will learn how to find, subscribe to and unsubscribe from Listserv and majordomo mailing lists, and how to set up and maintain a mailing list. We will also look at a new direction in

### Other Educational Opportunities

■ **Apple Computer Inc.,**  
Reston, VA.  
703-264-5100 or  
[www.seminars.apple.com](http://www.seminars.apple.com)

■ **Mac Business Solutions**  
301-330-4074

■ **Micro Center**  
703-204-8400

■ **Piowar & Associates**  
202-223-6813

■ **Carol O'Connor**  
703-430-5881  
(Photoshop Special Effects  
and Photoshop for Web  
Graphics)

email: HotMail, a free Web-based emailer. **Prerequisite:** Internet tutorial or equivalent experience. The price is \$35 (\$50 for nonmembers).

■ **Email to the Max**  
9/24/98 9:30 a.m. - 12:30 p.m.

#### Internet

In this two session class we will discuss choosing, installing, configuring, and customizing an Internet browser including the use of popular plug-ins. Students will learn how to use search engines to find sites and information. They will learn how to organize, edit and share bookmark files. Newsgroup and listserv subscriptions will be discussed and students will learn how to download, upload and deal with Internet files. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$70 for both parts (\$100 for non members).



■ **Daytime Set 1**  
**Internet Part 1** 9/17/98 1 p.m. - 4 p.m.  
**Internet Part 2** 9/18/98 1 p.m. - 4 p.m.

■ **Daytime Set 2**  
**Internet Part 1**  
 10/29/98 9:30 a.m. - 12:30 p.m.

**Internet Part 1**  
 10/30/98 9:30 a.m. - 12:30 p.m.

■ **Daytime Set 3**  
**Internet Part 1**  
 11/12/98 1 p.m. - 4 p.m.

**Internet Part 2**  
 11/13/98 1 p.m. - 4 p.m.

**Learn how to use the TCS! (the Pi's legendary bulletin board)**

Learn how to configure ZTerm (a telecommunications program); and how to log on to the TCS and send and receive Internet e-mail. You'll also learn how to navigate around the TCS's conference system, and both read and enter messages and download files. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

■ Learn how to use the TCS!

9/24/98 1 p.m. - 4 p.m.

■ Learn how to use the TCS!

9/25/98 1 p.m. - 4 p.m.  
**Call Office for other dates**

**All Around AOL**

Now that you've been using AOL, are you ready for more? Come explore what else is available and how to get there. Discover how to stay on line and how to get to AOL from the WAP Explorer Service or any other provider. Learn how to upgrade to the latest version of Netscape or Microsoft Internet Explorer before AOL does. Learn how to make your time more productive and your surfing more pleasurable. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

■ **All Around AOL** 9/9/98 1- 4 pm

**Building Web Pages**

**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 the demo versions of Claris Home Page or Adobe PageMill 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. Their pages will be ready to upload to the web. If you have a external Zip drive, please bring it and an empty Zip Disk to class. If you have an internal Zip drive at home, please bring an empty Zip disk to class. This is an all day workshop. Please bring a sack lunch or money to order pizza. 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. The price is \$70 (\$100 for non members).

■ **Web Page Workshop**

9/3/98 9:30 a.m. - 4 p.m.

■ **Web Page Workshop**

11/19/98 9:30 a.m. - 4 p.m.

**Graphics and Sound for My Web Page**

In this all-day workshop students will learn how to use a scanner and digital camera to make graphics for a web page. They will learn how to

**Washington Apple Pi  
 Tutorial Registration Form**

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

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone (day) \_\_\_\_\_ (evening) \_\_\_\_\_

Member Number \_\_\_\_\_ Non-member \_\_\_\_\_

Number of Classes \_\_\_\_\_ x Class Fee \$ \_\_\_\_\_ = Total Fee \$ \_\_\_\_\_

Check/Money Order     Credit Card

Card Number \_\_\_\_\_

Card Expiration \_\_\_\_\_ Signature \_\_\_\_\_

Please fill in the course number(s) of the class(es) that you wish to attend.

Class #1 \_\_\_\_\_

Class #2 \_\_\_\_\_

Class #3 \_\_\_\_\_

Class #4 \_\_\_\_\_

Class #5 \_\_\_\_\_

Class #6 \_\_\_\_\_

**WAP Form #CL006 (mod. 7/90). Mail registration and payment to the above address.**



make backgrounds, clip art, buttons, rules, dividers and animations. They will learn about GIF and JPEG formats and when to use them. In the sound portion of the class students will learn how to record and edit sound files to prepare them for adding to a web page. Copyright issues will also be discussed. Bring several photos for scanning and a CD or tape for music and sound effects. There is no web page-making component in this class. 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 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 pizza. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$70 (\$100 for non members).

■ **Graphics and Sound for My Web Page** 11/20/98 9:30 am - 4 pm

**Introduction to Adobe PageMill**

This inexpensive program is fun and easy to learn. It can be used to make and edit web pages. In this class students will learn how to create a simple personal web page using hypertext, graphics, and tables without having to learn the mysteries of HTML. Students should come prepared with a simple design for the page they want to create and a floppy disk with the graphics (GIF & JPG) that they want to include. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

■ **Call Office for Dates**

**Presentation**

**Movies and Music from my Mac**

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 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? In this class we will do these projects, discuss what you need to do them, and show you where to buy the missing parts without spending a fortune. This is an all day workshop. Please bring a sack lunch or money to order pizza. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$70 (\$100 for non members).

■ **Movies and Music from my Mac** Call Office for Dates

**HyperStudio Your Way**

Do you use HyperStudio in your school? Have you ever wished you had the time and an expert to show you how to do some really cool stuff with it? After a quick session to learn or review the basic program you will explore the sound and animation features of the program. You will learn how to use the new graphic tools and PhotoShop plugins to make really neat pictures. You will explore NBAs, where to get them and how to use them and you will learn how to include QuickTime movies in your stacks. We'll even learn how to use the Logo programming language for special effects. Time will also be spent learning how to make stacks playable on Windows machines and over the Internet for people who don't have HyperStudio. This is an all day workshop. Please bring a sack lunch or money to order pizza. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$70 (\$100 for non members).

■ **HyperStudio Your Way** Call Office for Dates

**Home Graphic Arts**

**Introduction to Graphics**

Are you confused by graphic jargon? Would you like to learn how to choose and use a scanner? Do you

know the difference between Draw and Paint? Are you wondering about digital cameras? Are you baffled by PICT, GIF, TIFF BMP, JPEG, and all those other graphic formats? Would you like to learn how to send a picture by e-mail? Do you know what to do with pictures people send to you? Would you like to learn how to make your own Finder backgrounds and icons? This is the class for you! We will explore all these topics in non-technical language and show you how make graphics work for you! **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

■ **Introduction to Graphics**

9/10/98 1 pm - 4 pm

■ **Introduction to Graphics**

10/1/98 1 pm - 4 pm

**Introduction to Adobe PhotoDeluxe**

This inexpensive program is fun and easy to learn. It can be used to edit images for the web. It also can be used to make calendars, posters, and cards. The only major drawback to the program is a 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. The price is \$35 (\$50 for non members).

■ **Introduction to Adobe PhotoDeluxe** 9/17/98 9:30 a.m.-12:30 p.m.

■ **Introduction to Adobe PhotoDeluxe** 10/2/98 1 p.m. - 4 p.m.

**Professional Graphic Arts**

**Introduction to Pagemaker**

This course is for new users of PageMaker. It will cover using the various tools in the tools palette, the commands in the pull-down menus, and the control palette. You will learn how to create pages, bring in various types of text and graphics and do page layout. **Prerequisite:** Introduction to the Macintosh or a good knowledge



of the Mac OS and its interface. The price is \$35 (\$50 for non members).

■ **Introduction to Pagemaker**  
10/13/98 7 p.m. - 10 p.m.

#### **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 you would like help with. **Prerequisite:** Introduction to Pagemaker or a good knowledge of the basics of Pagemaker and its interface. The price is \$35 (\$50 for non members).

■ **Pagemaker Clinic Call Office for Dates.**

#### **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 defaults 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 color, create master pages and manipulate text and graphic objects. Also covered will be style sheets, hyphenation and justification settings, tabs, fonts, and checking document spelling. 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. The price is \$35 (\$50 for non members).

■ **Introduction to Quark XPress 9/23/98 7 p.m. - 10 p.m.**

#### **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 questions and answer format and you should bring along on floppy a sample of

## **Most Commonly Asked Tutorial Questions**

#### **When should I register for a class I want to take?**

You should register as soon as you know that the class will fit into your schedule. There are two main reasons for this. The first is that class size is limited to 6 students per class. If you wait till the last minute the class may be filled by the time you call to register. The second reason is that all classes must have at least three students before we will run the class. Yes, we do run classes with just two students at times, but the policy is that there must be three students before we will run a class.

#### **This is Wednesday afternoon and the class isn't till tonight why did you already cancel the class?**

As a courtesy to the teachers the office tries to tell them as much in advance as possible whether their class will be run or not. Our teachers have just as busy lives as the rest of us and need to know their schedules to make plans. If a class is scheduled for Wednesday and on Monday there is only one student registered for the class, the class will be canceled. When you call Wednesday afternoon and want to register for the class you will be told that the class is canceled. Yes, this sometimes is upsetting, but we are a small organization.

#### **Why don't I ever see the classes I want to take offered?**

We aren't offering the class you want to take because we don't know you want to take it. The office is not psychic and we need you to tell us of your interests. If there is a class you would like to take and have not seen it in the tutorial section of the Journal, please email the office <office@wap.org> or call the office during office hours and give us a list of the classes you'd like to see offered. We can't make any guarantees that a class will be offered right away (since we will need to find a teacher for the class), but at least we will have a better idea of what kinds of classes you would like to see.

#### **Why does the class I want to take always say "call office for dates"?**

A class will have the "date" as call office for dates because the teacher of the class can not give the office their schedule three months in advance. Remember that the Journal is closed a month and a half before its publication date. So the January/February Journal is closed in the end of November. This means that a teacher for a February class is committing themselves to teaching that class way back in November. Not all of our teachers can do that. Also, some classes are less popular than others so we only schedule them when there are sufficient students, so do make sure and call to get your name on the list so that the class can actually take place.

#### **What happens when I call the office about a class that is listed as "call office for dates"?**

When you call the office you will be put on a list of students for the class. When the list has three students the office calls the teacher and schedules a time for the class to be taught. The office will then call the students and tell them the date of the class. The students will be asked to register at that time or let the office know that the date that has been scheduled will not work with their schedules.



### Which class should I take?

This is another place where the office can't determine your specific needs. You are most aware of how much you know about your Mac and what your learning style is. The best thing to do is read the descriptions of the classes in the Journal and decide where you fit into those descriptions. Remember, the Introduction to Mac and Intermediate Mac classes are taught as sets. You can't take just part two of the Introduction to Mac class; you must take both parts. Additionally, the Introduction to Mac and Intermediate Mac class sets are tailored each month to the speed of those students. All the material will be covered, but the rate at which it is covered may vary. Therefore, you can not take Introduction to Mac Part One in January and Part Two in February.

### How do I cancel my class registration?

You can cancel your registration in a class by calling the office (and speaking to someone, not the machine) during office hours. You can also cancel a class by sending email to the office at <office@wap.org>. You may **not** cancel a class registration by leaving a message on the answering machine. Remember that you must cancel a class registration at least 72 hours before the class is scheduled or you will not receive a refund for your class fee.

### Why do I have to cancel my registration for a class 72 hours before the class?

A class is run only if enough students pre register and prepay for the class. If you are in a class that only has enough students pre-registered and prepaid to have the class run, your cancellation will mean that the class will need to be canceled. This means that the office will have to notify the teacher and the other students that the class has been canceled. The office must have at least 72 hours to accomplish this. Even if the class had a full roster of six students and you are canceling you will not get a refund unless you have called 72 hours in advance. Once again, the office needs the 72 hours to contact other prospective students who are on a waiting list for the class in order to fill your slot.

### Since I can canceled a class via email, can I register for a class via email?

Yes. You will need to send your registration to <office@wap.org>. In your registration message please include the your name, daytime phone number, class name, date and time. Please **DO NOT** include your credit card number. Email is not a secure medium and the office would prefer that you give a telephone number where you can be reached to get your credit card number over the phone or you can state in your email that you are sending a check.

### Why do I need to pre-pay for a class?

Your registration is not official until we have received payment for the class. This is the only way that we can guarantee you are serious about taking the class. Sadly, when we do not demand pre-payment, we end up with people simply not showing up and classes taking place without enough students to pay for the teacher or with wait-listed people never being given the opportunity to attend. Finally, our teachers are meant to be teachers, not enforcers. They do not relish asking you for money upon your arrival, and you and your fellow students are there for a class, not administrative details.

things you would like help with. **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).

### ■ Quark Xpress Clinic Call Office for Dates

#### Adobe Photoshop Part 1

This class covers the basics of bitmap graphics, the tools palette, preferences, layers, clipping paths, and basic menus such as fill and feathering. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

#### ■ Adobe Photoshop Part 1 10/28/98 7 pm - 10 pm

#### Adobe Photoshop Part 2

This class will cover use of the plug-in filters, scanning, exporting files for use in other applications, and more on layers, channels, and paths. **Prerequisite:** Adobe Photoshop Part 1 or a knowledge of the topics covered in that class. The price is \$35 (\$50 for non members).

#### ■ Adobe Photoshop Part 2 9/8/98 7 pm - 10 pm

#### Introduction to Adobe Illustrator

This course will cover the basics of vector graphics, drawing straight lines, curves, and shapes, tracing images, using paint tools, working with layers, and creating and editing text. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is \$35 (\$50 for non members).

#### ■ Introduction to Adobe Illustrator 11/10/98 7 pm - 10 pm

#### Networking for the Home and Small Office

What is the differences between Apple Talk and Ethernet? What are the advantages to using one over the other? When would I use Apple Talk and when would I use Ethernet? How does a server work? Why would I want to set up a server? How do I set up a server? I just want to share a printer/scanner, how do I set that up? If you have ever asked your self these questions then this class is probably for you.

#### ■ Networking for the Home and Small Office 9/25/98 9:30 a.m. - 12:30 p.m.■



# Buy a Power Mac G3 or Spend \$10.95: That Was the Question

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**W**ASHINGTON APPLE Pi Labs is best known for its top-notch testing expertise, honed to a fine edge over the past 20 years. Our motto is: "If we can't break it, it must be OK." Proof of this expertise will be for sale at the December 1998 Washington Apple Pi Computer Show and Sale, better known as the Garage Sale. We broke some of this stuff a couple decades ago...

But we have other skills, aside from writing in the first person plural: we are also world-renown experts at solving all manner of arcane technical problems. Occasionally, we even handle the mundane and ordinary.

A case in point: one day, a distressed damsel came to us with a computer that wouldn't boot. Nor would it glove, belt, or verbize any other piece of clothing. In short: when you pressed the Power On key on the keyboard, no power came on. This change happened suddenly: after working perfectly since purchase, the machine simply wouldn't turn on; there was no warning or transition. This alone was strange: Macs tend to die tragic, movie-style deaths over several months or years and then, just like in the cartoons, magically spring to life again in a new movie (or after repairs with Disk First Aid).

All the normal checks were fruitless: the machine was plugged in, the power switch was on, the keyboard was plugged in, etc. This particular machine was a Power Computing Power 100, one of the very first Power Macintosh clones, and functionally

something of a cross between a Power Mac 7100 (it is a desktop machine) and a Power Mac 8100 (the motherboard has many of the AV features of the 8100). They are not known for strange, unexplained failures, so we did a comprehensive check:

"Macs tend to die tragic, movie-style deaths over several months or years and then, just like in the cartoons, magically spring to life again in a new movie (or after repairs with Disk First Aid)."

- All peripherals were unplugged except keyboard, mouse and monitor;
- The Power 100 was also unplugged from the surge suppressor and UPS (Uninterruptable Power Supply), and plugged directly in to the wall socket;
- The wall socket was tested with a multimeter\*, and was working;
- A different monitor, keyboard and mouse were tried with the machine.

Nothing worked. Despite the best

efforts of a coterie\*\* of highly trained, experienced people, representing almost 15 years of post-graduate education, the Power Computing 100 just sat there. While we don't like computers to mock us, a little anthropomorphic mocking would have been appreciated: we were desperate, and looking for any signs of life. Even abusive signs. ("If a Mac can sit," we observed, "it should be able to mock.")

At this point the distressed damsel looked surprisingly cheery. She observed that, if the Power 100 really *was* dead, she would be forced to replace it with a Power Macintosh G3. Oddly enough, she didn't seem too upset at the thought of being "forced" to get a G3.

We, on the other hand, decided to take desperate measures:

- On rare occasions, hard disk problems might prevent a Mac from booting. So we removed the hard drive; nothing. The hard drive also seemed perfectly happy in another Mac;
- On even rarer occasions, a damaged floppy drive will prevent a Mac from booting. So we removed the floppy drive; nothing;
- We replaced the power cable with another power cable; nothing;
- We cleaned the contacts on the keyboard, mouse and power cable, and on their respective ports on the Power 100; nothing;
- The Power 100 has two video ports, so we tried plugging the monitor in the other port; nothing.
- We looked for a fuse or something else that might prevent the machine from booting, and found — nothing.

In fact, the Power 100 was incredibly clean inside, with none of the usual dust bunnies. (In some machine, dust bunnies are the size of small horses.) There were no scorch marks indicating a short, no smell of burned electrical components, nothing out of the ordinary. The Washington Apple



“...a distressed damsel  
came to us with a com-  
puter that wouldn’t boot.  
Nor would it glove, belt,  
or verbize any other  
piece of clothing.”

Pi Labs team was getting a bit miffed: we expect this kind of behavior from *those* machines but Macs, and Mac clones, are supposed to behave better.

A conversation on the TCS (the Pi’s computer bulletin board) alerted us to the possible need to reset the “Cuda.” Exactly what the “Cuda” might be (aside from a nickname for a 1960s Dodge sports car) was a mystery. Fortunately, the TCS also had a file called the PowerGuide MLB 1.0.2 (File Transfer Area 3, File 704) that is an electronic guide to the main logic boards on Power Computing computers. The guide didn’t explain what the “Cuda” was, but it did show us where to find the Cuda reset button on the Power 100.

So we pressed the red Cuda button to reset it. It isn’t clear if this resets it — the PowerGuide just shows where it is, not what to do with it. We pressed the Power On key and — nothing. We were getting annoyed (but the distressed damsel was looking happier and happier).

Knowing that the Power 100 uses many standard parts also used by those *other* computers, we decided to rip out the machine’s power supply and see if we could get a replacement. As soon as we removed the power supply we noticed: a battery. A purple battery. A purple 3.6 volt lithium battery.

One thing that *can* cause a Macintosh to fake its own death is: a dead battery. This is most often seen in old “compact” Macs (128K and

512K Macs, Mac Pluses, Mac SEs, etc.) or in certain desktop models (particularly the Mac IIsi, Centris 610, Quadra 610 and Power Mac 6100). We’d never heard of someone having a dead battery problem in a Power Computing machine, but we decided to test the battery with our multitester.

It was dead. Now, “dead” is a relative term; a 3.6 volt battery reading 2.5 volts will prevent a Power Mac 6100 from booting. But this battery didn’t read 2.5 volts; it read: nothing. The Washington Apple Pi Labs team has *never* seen a recently-working Mac with a *completely* drained battery; we were impressed, and privately started to refer to the machine as Bunnacula, the battery-sucking vampire.

The formerly distressed damsel was less impressed: after a quick trip to a Radio Shack store and the purchase of Part 23-026, “Lithium Battery: for Apple Macintosh Computers and Wireless Security Systems,” a brand-new purple battery was installed, the Power On key was pressed on the keyboard and —

Apple suffered a delay in the purchase of a Power Macintosh G3. The Power Computing Power 100 instantly sprang to life, somewhat confused about the date and location, but otherwise in robust good health. A quick trip to the Date & Time Control Panel, and the Map Control Panel, eliminated the confusion over date and location, and the Power 100 was off and running.

Nothing else was wrong. Nothing else at all: the hard disk drive was in perfect health, all the peripherals worked, the UPS

was fully functional. In short: the only problem was a dead \$10.95 battery.

Few things in life are as sad as a formerly distressed damsel who will not be (immediately) purchasing a Power Macintosh G3. ■

\* A multimeter is used for testing multisis (preferably when they are asleep, though the infants are kinda cute and not as dangerous). It can also be used for checking electrical outlets and batteries.

\*\* We’ve always wanted to use “cote-rie” in an article, and this looked like a good opportunity.



One highly irresponsible tourist attempted to convince a large cluster of Israeli and German tourists that the Statue of Liberty was holding a Newton. Photos © 1998 Lawrence I. Charters

# The Odyssey: Using Microsoft Word to Create a Large, Complex Document

© 1998 Kathleen G. Charters, Ph.D.

**T**O COMPLETE MY graduate studies, I wrote a dissertation that was just under 300 pages. The document had a 17 page multiple section beginning, five chapters with 12 tables and 11 figures, 13 appendices, and a bibliography. This document met both American Psychological Association *Publication Manual* (4<sup>th</sup> ed.) guidelines and University of Maryland Graduate School *Instructions for Preparing Master's Theses & Doctoral Dissertations* (<http://graduate.umaryland.edu/>). Creation

of this document occurred between April 1997 and July 1998.

The first computer used in the creation of the document was a Macintosh IIsi with 17 MB RAM running *Mac OS 7.5*, which was replaced by a *Power Computing 100* with 48 MB RAM running *Mac OS 8.0*. Both machines were attached to various peripherals, particularly an *Iomega Zip* drive. The first version of the document was created using *Microsoft Word 5.1*, which was upgraded to *Microsoft Word 6.0*. The document

was completed using *Microsoft Word 98*. At one point, it was necessary to transfer the document to a Pentium running *Windows 95* and *Microsoft Word 97*.

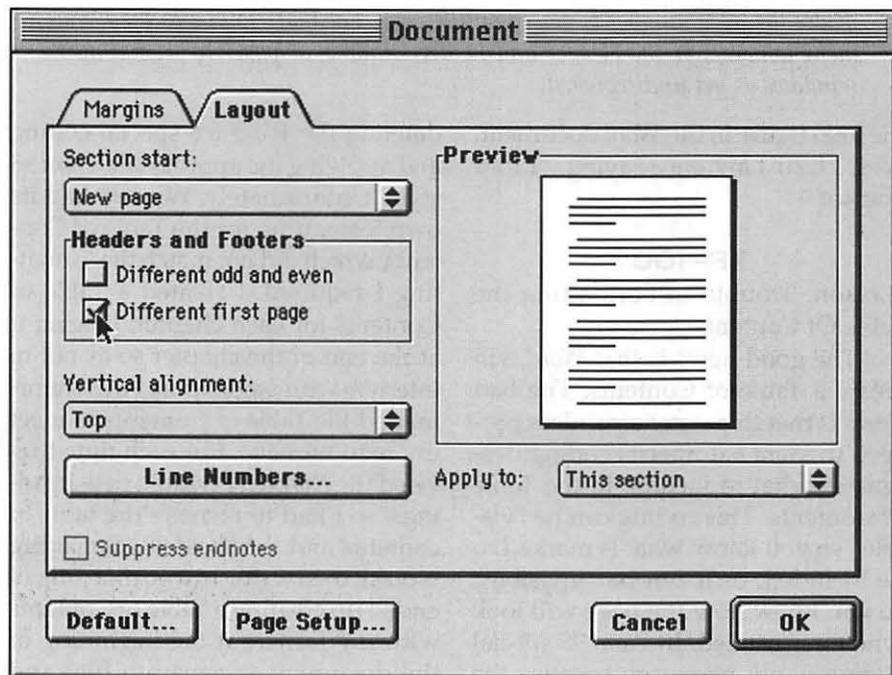
This journey provided numerous "learning opportunities." Five principal categories of learning opportunities include: 1) document management strategies, 2) importing graphics, 3) creating a table of contents, 4) labeling tables and figures, and 5) pagination. Each version of *Microsoft Word* provided different strengths and weaknesses in each of these categories.

## Putting All Your Eggs in One Basket - Not

(Lessons: Control the Risk; Do Illustrations Right)

My strategy was to work on one version of the document located on an external hard drive in a folder labeled "97 Dissertation." During a work session, at approximately one hour intervals, I saved a back up copy (using "save as") to an internal hard drive in a folder labeled "Dissertation 97 BU." At completion of the work session, before quitting *Word*, I saved the revised document (using "save as") in "97 Dissertation" on the external hard drive, and in "Dissertation 97 BU" on the internal hard drive. Copies of both the "97 Dissertation" folder and the "Dissertation 97 BU" folder were then placed (using "drag and drop") on an *Iomega Zip 100* disk. During a work session there was a document under revision on the external hard drive, a copy of the revised document no more than one hour old on the internal hard drive, and two copies of the original on the *Zip* disk.

Early in development of this document, the first three chapters were a single file with about 25 pages of text. Then I added figures created in *Microsoft PowerPoint*. This greatly increased the size of the document and really slowed down scrolling through the pages. I moved the fig-



When you want page numbers to appear on different parts of the page in different sections, you won't find how to do this in the Page Number Format window. Instead, divine inspiration is supposed to lead you to the Document window, which seems to be devoted to margins but, in this one case, also deals with page numbers.

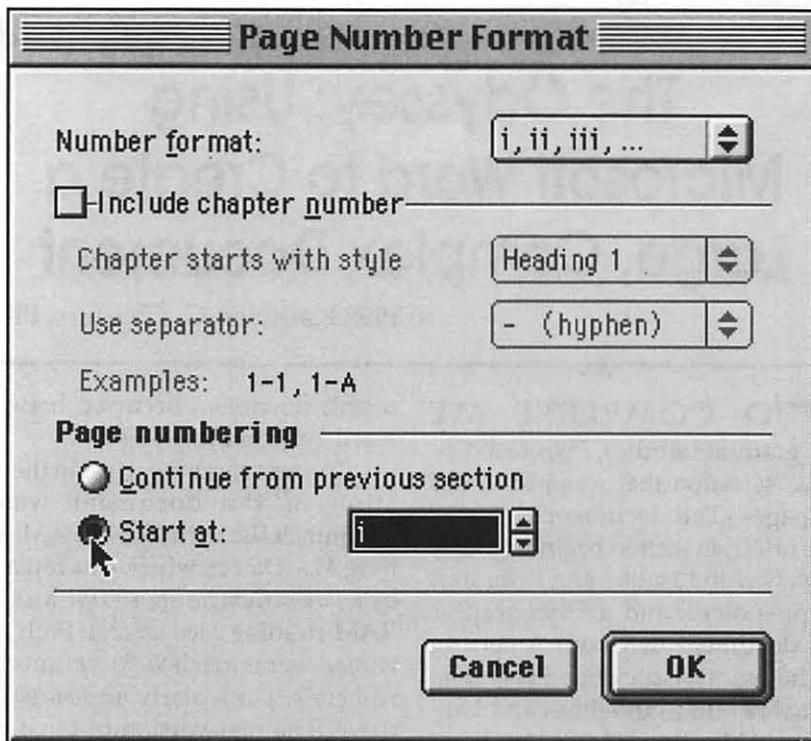


ures around within the document and ended up with a corrupted file. At this point I decided to change my document management. Using "cut and paste" I created a separate file for each chapter. This cleaned up the corruption problem. I learned to add figures after each chapter was essentially complete, just before the final edit of the chapter. The advantages of separate chapters included keeping the file size within the available RAM, keeping scrolling within a chapter relatively quick, and limiting the amount of damage done if a file was corrupted. The challenge of having separate files for each chapter was in keeping the formatting uniform. I had to make sure the margins, headers, footers, and styles were done the same way. On the final printout, keeping the pages sequential required close attention.

### WYSIWYG – Sometimes

(Lesson: What You See Is What You Get — WYSIWYG — as long as you do not use *Word's* graphics editor for changing figures created in *PowerPoint*.)

I know Microsoft *PowerPoint* is not a primary graphics illustration tool. However, I used *PowerPoint* to create briefs illustrating several of the concepts I used in my dissertation. Since I am "energy challenged" (lazy), I wanted to use the work I had already done rather than starting over from scratch. I used "copy and paste" to move a figure from *PowerPoint* to *Word*. As long as I did not try to edit the *PowerPoint* figure in *Word*, everything was fine. When I decided to change something within the figure, double clicking on the figure to open it in *Word's* graphics editor "broke" the text. I ended up recreating the entire figure in the *Word* graphics editor. In retrospect, for the amount of time I spent on revision of the figure, I probably would have been better off doing a new figure in a robust graphics illustration package and placing



The *Page Number Format* window allows you to set the style for page numbers (small Roman numerals, regular Roman numerals, Arabic numbers, etc.). It also controls the numbering sequence: do numbers start over with each section? Are they continued from a previous section? But it doesn't cover where the page number is placed on the page. For that, you go to the *Document* window, or the *Header and Footer* window, or possibly several other windows as yet undiscovered.

the final figure in the *Word* document. (Yes, I hear Lawrence saying, "I told you so!")

### TIF – TOC

(Lesson: Trouble In Formatting the Table Of Contents)

The good news is that *Word* will create a Table of Contents. The bad news is that this is not a painless process. In *Word* 6.0, special coding designates what to include in the Table of Contents. This coding can be "visible" so you know what is marked to be included, or it can be "invisible" so you know how the page will look when it is printed. In *Word* 98 special coding is not necessary because the designation of what to include in the Table of Contents is handled through style. When I moved from *Word* 6.0 to *Word* 98, I went through the document

deleting the *Word* 6.0 special coding and applying the appropriate *Word* 98 style. Unfortunately, *Word* 98 had its own formatting for the Table of Contents, which did not match the formatting I required. I created a Table of Contents for each chapter, placing it at the end of the chapter so as not to interfere with pagination. I then reformatted the Table of Contents to meet my requirements. But each time I revised the chapter, I created new headings, so I had to recreate the table of contents and the *Word* 98 formatting would overwrite my formatting. I ended up creating a Table of Contents with my format at the beginning of the document (a separate file) and manually corrected page numbers based on the *Word* 98 formatted Table of Contents at the end of each chapter. Then I deleted the end of chapter



Table of Contents before the final printout of the document.

One "trick" in creating the Table of Contents with my format was discovering how to turn on the dotted line between the heading and the page number. I could not find this feature looking through the menu options, but stumbled across it when I had to change the tabs for one of my styles. In *Word 98*, under the Menu "Format," select "Paragraph" and you will see a window with a button "Tabs" at the bottom left hand corner. Click on "Tabs" and you will see a window with two parts. The lower half of the window is called "Leader" and has radio buttons for different options: none, line of dots, line of dashes, and solid line. Selecting one of the options will put that style line between the heading and the right tab where the page number is located.

#### TIF - TAF

(Lesson: Trouble In Formatting the Tables And Figures)

The problem of *Word 98* "fighting"

with the formatting I wanted extended to the labels for tables and figures. I needed two different fonts for the figure labels: the initial part in italics and the rest plain text. *Word 98* would do an "automatic update" and change the label to all italics. I turned off the automatic update function by going to the menu heading "Format," option "Style," buttons "New" or "Modify," button "Automatically update." But *Word 98* still changed my formatting. Then I went to the menu heading "Format," option "AutoFormat," bottom left button "Options," tab "AutoFormat As You Type," button "Headings" and turned that feature off. At last I was able to make a change in the label and not have *Word 98* overwrite the change.

#### The Challenge of Pagination

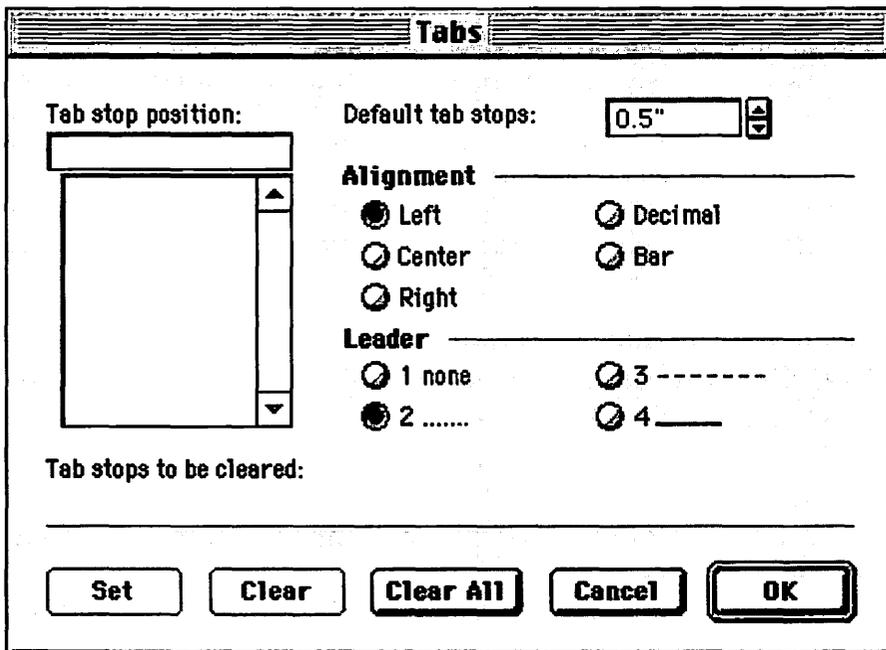
(Lessons: Different Formats For Different Sections; Don't Move The Pages Around)

The format required for pagination was complex. The chapters and bibliography were formatted so the

"The good news is that *Word* will create a Table of Contents. The bad news is that this is not a painless process. In *Word 6.0*, special coding designates what to include in the Table of Contents. This coding can be 'visible' . . . or it can be 'invisible' so you know how the page will look when it is printed."

first page had the page number centered in the footer, and the following pages had the page number in the upper right hand corner of the header. This required putting a section break at the end of the first page, by positioning the cursor at the end of the text on the first page then going to the *Word 98* menu heading "Insert," option "Break," and selecting the radio button "Section Break next page." Because the end of the page was in the middle of a sentence, I had to put a paragraph end at the end of the last line and reformat the first line on the next page so it was not indented.

In order to create a different first page I went to the *Word 98* menu heading "View," option "Header and Footer," and from the Header and Footer toolbar selected the icon for "Document Layout." Working in the "Document" window, under the tab "Layout," under the section "Headers and Footers," I checked the box for "Different first page" and applied it to "This section." Now that the footer format would apply only to the first page, I went to the *Word 98* menu



The Tab window has radio buttons allowing you to select tab leaders, useful for creating a Table of Contents. Naturally, this window is not referenced anywhere in any of the windows dealing with a Table of Contents.



heading "View," option "Header and Footer," and from the Header and Footer toolbar selected the icon for "Format Page Number." This opened the window "Page Number Format," and under the section "Page numbering" I selected the radio button for "Start at" and used the arrow key to select the page number for the first page of that chapter. I formatted the section 1 footer by double clicking on it and selecting the "Center" button from the toolbar. Then using the "Header and Footer" toolbar, I selected the icon for "Insert Page Number." This completed the pagination for the first page of that chapter.

To create the pagination for the following section, I moved the cursor to the second section (the next page) and went to the *Word 98* menu heading "View," option "Header and Footer." From the Header and Footer toolbar I selected the icon for "Document Layout." Working in the "Document" window, under the tab "Layout," under the section "Headers and Footers," I removed the check from the box for "Different first page" and applied it to "This section" (section 2). Now that all the pages in section two would be formatted the same, I went to the *Word 98* menu heading "View," option "Header and Footer," and from the Header and Footer toolbar selected the icon for "Format Page Number." This opened the window "Page Number Format," and under the section "Page numbering" I selected the radio button for "Continue from previous section." I formatted the section 2 header by double clicking on it and selecting the "Align right" button from the toolbar. Then using the "Header and Footer" toolbar, I selected the icon for "Insert Page Number." This completed the pagination for the rest of that chapter.

The beginning section required Roman Numerals in lower case centered in the footer. To get these I went to the *Word 98* menu heading "View,"

option "Header and Footer," and from the Header and Footer toolbar selected the icon for "Format Page Number." This opened the window "Page Number Format," and under "Number format" I used the arrow keys to select the lower case Roman Numerals.

The problem I encountered in the beginning section occurred when I changed the order of the pages. I could tell where I was within the document by reading the information at the bottom left of the screen, but I could not get a printout of a chosen subset of those pages. I tried using the print command and putting in the page numbers of where they fell within the document, but those were not the pages that printed out. I had to print everything to get the subset pages I wanted.

#### Summary

Each version of Microsoft *Word* provided different strengths and weaknesses. I used *Word 5.1* because it was very stable. But I reached a point where some of the complex formatting I needed was not supported. I moved to *Word 6.0* to get the Table of Contents and Indexing features. When I had the formatting codes visible, they altered the spacing of the document and I found I was making changes I did not need to make. When

I made the formatting codes invisible, I did not catch some of the formatting mistakes until I printed the document. I moved to *Word 98* to get rid of the visible formatting codes, but paid the price of trying to find features buried deep within the menus or hidden in windows that I never guessed were relevant. Sometimes I did not understand the order in which I had to make changes, as when I struggled with different pagination for different sections of the document. I was irritated when *Word 98* kept changing the formatting and it took a while to figure out how to stop that.

I really like the font Garamond, and used that for my document. This was fine as long as I worked on a machine that had the Garamond font. When I moved the document to a Pentium running *Windows 95* and Microsoft *Word 97*, the font was changed to Times and the spacing changed. Tables and figures were no longer on just one page. This made the document unreadable. If I knew from the onset that I would have to move the document between machines, I would have chosen a font universally available.

I'm glad the journey is over. Now all I have to do is convert the document into HTML so I can post it to a Web site. I'm sure there will be many more lessons to learn. ■

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Twenty years of Pi:  
1978-1998

Gymnasium, Northern Virginia  
Community College  
8333 Little River Turnpike  
Annandale, VA  
(Exit 6 West from I-495)

washington Apple pi

First Bi-Decadal  
Saturday, 9 to 2

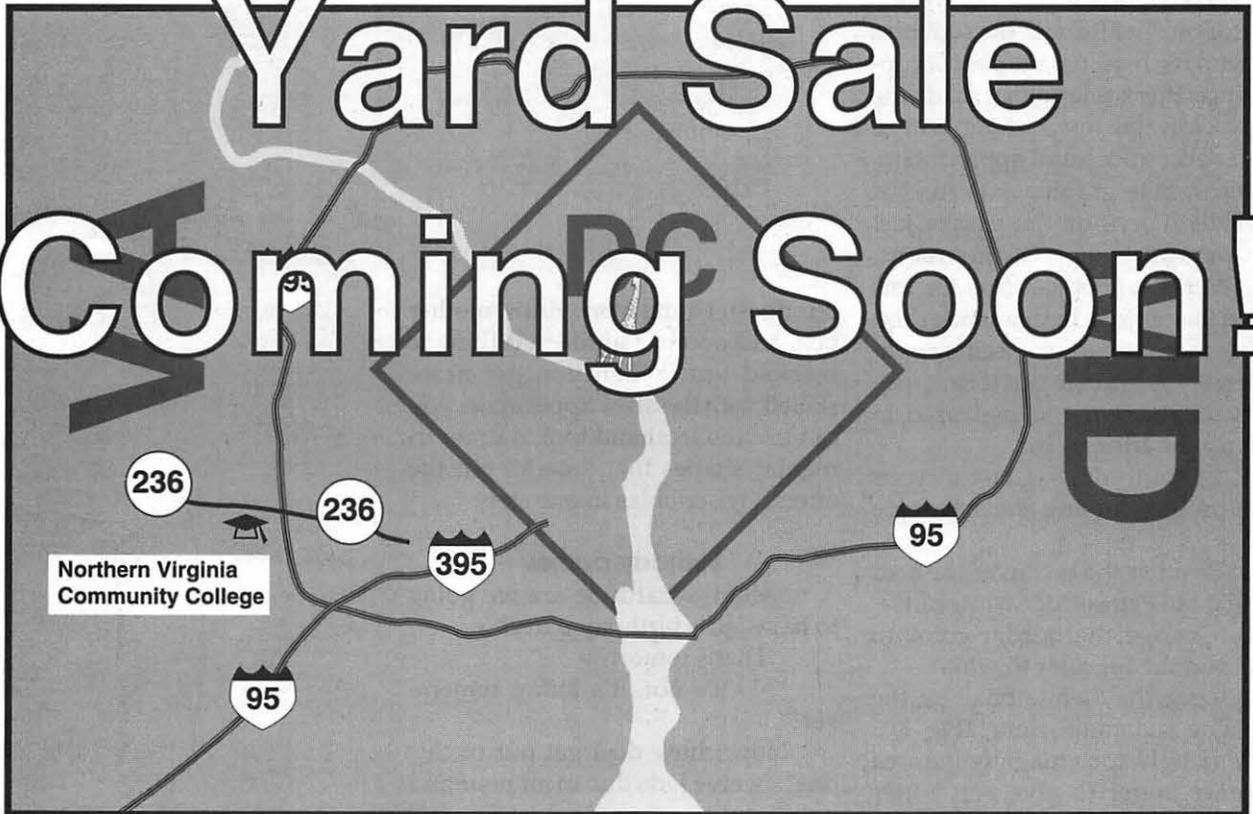
Dec 12, 1998

Anniversary

Garage and  
Co. Center

★ Get a Mac health check-up  
★ Visit the Web site in May for a discount  
coupon on admission; <http://www.wap.org/>

Yard Sale  
Coming Soon!





are cool, wrap them in plastic wrap, stick on the graphic, use more tape to stick a ribbon to it and you have a "Cookie Medal" which doubles as an edible party favor. (Fig. 2) If the kids are computer literate, they can create their own graphic. For an upscale party favor when you are planning ahead, some bakeries will use your art to airbrush cookies or cakes.

If you remember about the party, you and the birthday child can co-create the theme, e.g., dinosaurs. Then you can print a black and white picture of a dinosaur on transfer sheets. If you want to save money or if the kids are small, scale to fit four images on each sheet. Print out the transfers and iron them onto T/shirts. On the day of the party, give the kids washable paints and let them paint the shirts as desired. The washable paints mean clean up is guaranteed to be painless and when the shirts are washed, the paint will wash out so the kids can paint the shirts a different color or leave them black and white. You can also use washable glitter to make little girl dinosaurs. With a minimum of work, you have "cookie medals" and custom colored t/shirts for activities and party favors. Add cake, drinks and you're through

### Behavior modification

Cookie medals could also be used for behavior modification. When a "good" behavior takes place, a "mini" version of the cookie medal could be used as positive reinforcement. If you keep a log of cookie dough in the freezer, you can slice and bake the medals as you need them. If you prefer a non edible version, a graphic can be printed on shrinkable plastic for a permanent memento of the occasion or good behavior. These can be turned into "sew on" buttons to adorn a "merit banner". You can also use the directions for the edible cookie but substitute a non edible dough made from flour, salt and water, paper mache or "modeling magic" foam. Any of these mediums

will also make permanent medals.

### "Mom, what is there to do? I'm bored"

ComputerMom to the rescue! Have the kids draw doll shapes, clothes shapes, wigs, animals, etc. in black and white outlines. Scan them and print on greeting card stock. Let the kids cut out the shapes, color and play with the finished dolls. When they get worn out, print a new set. You can also print a doll shape on shrinkable plastic and shrink it for a more durable "paper" doll.

### T/Shirts

Keep a supply of inexpensive T/shirts on hand. Have the kids draw pictures for the T/shirts. Scan the pictures and print out on transfer sheets, fusible fabric sheets or pieces of poly/cotton fabric that have been ironed onto freezer wrap or spray starched to stiffen the fabric. Use "iron on fusible webbing" or adhesives to bond the picture material to the T/shirts (pillow cases, sheets, curtains can be substituted).

### Security Blankets

For a summer project, get a piece of polar fleece the size of a twin bed. Sew or glue a hem to prevent the edges from curling. You could use a fusible web to iron the hem up. There are some two sided adhesive tapes that will also make a no sew permanent hem. Have the kids draw a new picture every week or so, this can also be done as an annual project where they draw a picture a month. Scan the pictures and print on transfer sheets, "iron on" fabric sheets or stiffened fabrics pieces. Iron, glue or sew the pictures on the fleece leaving enough

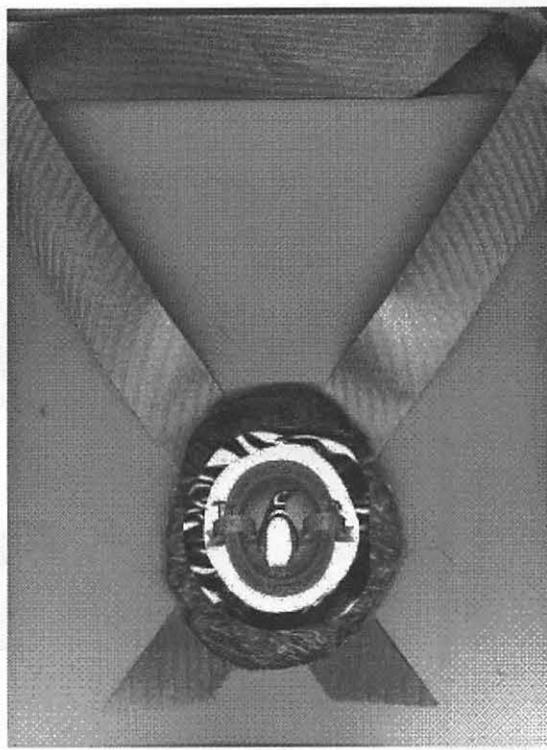


Figure 2.

room around each one for the background color to show through and create a "frame effect".

These throws can be used as bedspreads, afghans, security blankets, memory quilts or gifts. For the child or adult having a really hard time who may need an extra measure of security, you can use the polar fleece to make a simple vest. Use glue, tape or sew a hem around all the outside edges. Print pictures of "safe" or comfortable things or people, e.g., Mom and Dad, pets, favorite toy, etc., on transfer sheets, fabric or stiffened fabric. Iron, glue or sew the images to the **inside** of the vest to make it a secret security vest.

### Jewelry and Accessories

Have an outfit that needs a specific piece of jewelry in a very precise color that you can't find? Head for the computer. This is also a good way to learn your graphic applications. Doodle shapes until you find one you like, color it to match or complement your



Beat the Heat  
with Washington Apple Pi

# Tutorials

- Introduction to the Macintosh
- Maintaining Your Macintosh
- Adobe Illustrator, Photoshop, PageMaker
- Introduction to the Internet
  - Web Page Authoring
- EMail, News Groups, Chat, Web Browsers
- Macromind Director
- Microsoft Word
  - Claris Works
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outfit. Experiment with creating your own gradient colors and patterns. When you like what you have created, scale it 60-100% larger than the size you need. Print it out on shrinkable plastic. Let it dry well and bake it. Add any jewelry findings necessary, pin backs, earring backs, tie tac backs, jump rings, etc. and enjoy.

The shrinkable plastic reduces the object by approximately 60% and thickens it. This makes it possible to have a great amount of detail in very tiny objects. You can make unique sets of buttons or button covers as gifts, add matching necklace and earring sets, "antique" brooches, etc.

Using clear shrinkable plastic, you can make jewelry that looks like stained glass, or some that recreates the look of "tinsel" jewelry from the turn of the century. What about a sepia toned locket? Or you could use the opaque shrinkable plastic to simulate the look of scrimshaw. If you are skilled with 3D graphic art, you can make a "faux" cameo.

#### **Business card key rings**

Design a business card you really like. Scale it up 60% larger, print on shrinkable plastic. Be sure to punch a 1/4 inch hole and round the corners before baking. When cooled, add key ring and jump ring if necessary. These business cards are less likely to get thrown away and more likely to "advertise" your firm for a long time.

#### **Quilting Templates and Stencils**

Quilters can print templates on shrinkable plastic or print stencil patterns on it. For durability, print the templates large and shrink them for thickness. The stencils can be printed at desired size and cut out with an Exacto knife or other sharp instrument including ordinary scissors and sharp paring knives.

#### **Teen Makeovers**

Preteen and teenage girls can learn the basics of makeup and good taste

by scanning a picture of themselves and using a paint or drawing application to experiment with makeup colors. There are several commercial products available but the technique can be done with any basic draw or paint application as well. This would help the teen learn software as well as experiment in a safe (and cheap) way with makeup, hair color, haircuts and styles. Anyone having trouble communicating with a barber or hairdresser could use this technique to create a picture of what they want to end up with and take it on their next trip to the salon.

"For the child or adult  
having a really hard  
time who may need an  
extra measure of secu-  
rity, you can use the  
polar fleece to make a  
simple vest. Use glue,  
tape or sew a hem  
around all the outside  
edges. Print pictures of  
'safe' or comfortable  
things or people . . ."

#### **Do it yourself "stained glass"**

Want stained glass windows but can't afford them? Design your windows from original art, clip art, doodles, some of the above or all of the above. Print it out and cover with a piece of heavy clear plastic. Use stained glass paints and faux leading to trace and color your design. Let dry flat on a table for 24 hours or more. When it is completely dry, you can peel the paint off the plastic and stick it on your window like a decal. Just peel it off when you tire of it. The kids can decorate their windows also.

#### **Home Decor**

Don't confine the stained glass technique to windows only. You can create soft victorian watercolors to decorate a mirror. Print it on cling plastic decal media and stick it on. Peel it off and change as often as you like. This will work on glass shower doors also. The cling plastic is thin and flexible enough you could use it to decorate drinking glasses for a special event.

#### **End the "6 toasters" gift problem**

Find an inspirational message, add clip art to reflect the mood and sentiment, print out on shrinkable plastic. Use it at full size or shrink it as desired. Back it with a softly colored background mat and frame it for a lovely gift. By using a saying, theme or mood that is special to the recipient, you give a treasured one of a kind gift that will not be duplicated by somebody else. To make it even more personal, write your own message to the recipient.

#### **"Faux" Glass painting**

There is an old fashioned charming technique that uses decoupage papers glued to glass sheets to create a three dimensional effect. You can recreate this technique by printing each layer on a piece of shrinkable plastic and assembling them with a round or flat toothpick glued between each layer to give the required amount of space to create an illusion of depth. Mat and frame appropriately, then hang in a place that showcases it.

In this technique the plastic is serving as a substrate for the graphic image and will not be shrunk. It is important to keep the plastic away from heat sources if you use shrinkable plastic. If you want the finished project to be placed near significant heat sources or in windows, use the static cling plastic instead and place it on a sheet of stable plastic or glass for the space separation instead of using toothpicks.



### “Magic amulets or talismans”

Most of us have something we are afraid of or situations where we are uncomfortable. How much easier these times could be if we had some sort of magic amulet to protect us from or at least help us to manage anxiety better. Scan a snapshot of Mom and Dad. Print on shrinkable plastic and bake. When Johnny and Sarah go to school for the first time, they won't have to feel so alone. When they get lonesome or afraid, they can pull Mom or Dad out of their pocket and feel safe again.

Adults also need reassurance lots of times. Find what creates comfort for that person and print it on shrinkable plastic, punch a hole for a jump ring, bake it and attach a keyring to it. Your friend now has an amulet against the “bad stuff”.

### Exorcisms

For really bad times when you feel betrayed by someone who was supposed to be a friend, create an exorcism ritual. Scan a photo and print it out on paper. Tear the paper to shreds as small as possible, when you can't tear any smaller, cut with scissors until no piece can be cut again. Put all these tiny pieces into a blender and add water to fill the container. Tear up another sheet of white paper in medium size pieces and add to the mixture. Blend until the paper is well shredded and just small pieces of fiber floating around.

Pour the mixture through a sieve to drain off some of the water and put the pulp in a mold or inside an open metal or plastic cookie cutter. Use a sponge and towels to press out the excess water, remove the mold or shape and place the paper creation on an absorbent surface to finish drying. If you want to color it, try pale watercolors while it is damp or when dry, apply eye shadow or other makeup powders sparingly to tint the object. Artist pastel chalks can be applied with a soft paintbrush to give very

soft, subtle colors. Food color or paint may be added to the pulp if you want an evenly colored product.

Use whatever colors and media you desire to make this a unique piece of art. By the time you finish the item, you should have moved out of the hurt and angry feelings to a more comfortable place within yourself. Place the art where you can see it and if bad feelings resurface, remember how you made it.

If necessary, go through the ritual again as many times as it takes for the hurt to move away. Remind yourself each time you see your artwork about how you were able to transform something so painful into something new that has no power over you or your moods. This ritual, in effect, re-creates actively in you, the myth of the Phoenix rising above the ashes of a fire. It also helps you regain a sense of control over the pain and the events involved. It moves you out of the “victim/victimized” feelings and into confident, empowered feelings.

### Don't waste the empty spaces

When you are printing on shrinkable plastic, make use of the “wasted” space between images. Use color gradients to fill in the empty spaces or create colored shapes using patterns, gradients solids or tints.

When these pieces are baked, use a pair of gloves to protect your fingers while you shape the plastic into “bead” shapes. String them on cord, ribbon or wire to make a necklace, bracelet, earrings, etc. from these scraps. Use a hot metal skewer to make a hole for the jump ring if you want the pieces to dangle from a post, back or wire.

### Still bored?

For more information about products or techniques, send email to Mary at: [e.mkeene@tcs.wap.org](mailto:e.mkeene@tcs.wap.org)

Informal style classes will be formed if there is enough interest in making gifts

and learning new crafts using a Mac. No experience will be necessary to take classes. If interested, contact Mary or call the Pi Office.

Plan also to attend the Oct. 10, 1998 meeting of the Graphic Arts SIG where all of these products will be demonstrated by Steve Singer of Micro Format, Inc., who manufactures many of these products.

Micro Format Imagination Gallery  
<http://www.sendit.com/mformat/index.html>

Local craft stores carry some of these products.

© 1998 Mary Keene —Mary is a freelance graphic arts, craft designer and teacher



While they lack the classic Art Deco lines of the Empire State Building or the Chrysler Building, the World Trade Center towers do serve one valuable function: they fill up awkward vertical spaces in Mac computer magazines. Photo © 1998 Lawrence I. Charters

# Don't You Wish Your Parents Named You 'MazMaz'?

© 1998 Lykara Iann Charters

**C**risis in Alborz Galaxy: An Adventure of Detective MazMaz is a multimedia mystery math game. (Aliteration runs in my family.) This educational adventure game, developed by EZ Solutions Software Corporation, is available on CD-ROM, and is accelerated for Power Macintosh.

## Now, about system requirements:

- Macintosh or compatible
- CD-ROM drive
- 256 color setting option
- 13" color monitor or larger (640 pixel \* 480 pixel screen)
- 4MB available RAM
- System 7.1 or later with QuickTime

## For better performance:

- Faster than double speed CD-ROM drive, but double speed is O.K.
- QuickTime 2.5 or later system extension, but QuickTime 1.6 will work.
- A later version of system software.

For this review, I used a Power Computing PowerCenter Pro™ 180 Mac-compatible with 64 MB memory running Mac OS 8.0, QuickTime 2.5, and a faster than double speed CD-ROM drive (I have no idea how fast it really is). There were no performance problems. To install, insert the CD-ROM into your CD-ROM drive. Drag the *Crisis in Alborz Galaxy 1.60* program icon and License Folder into your hard drive. Enter your name, your organization, and (if you have purchased your license) your license number. If you haven't purchased your license number, you can choose the free time-limited trial license agreement, which requires no registration

number. (To enter the registration number, you have to go under the Apple menu once the game has been opened.)

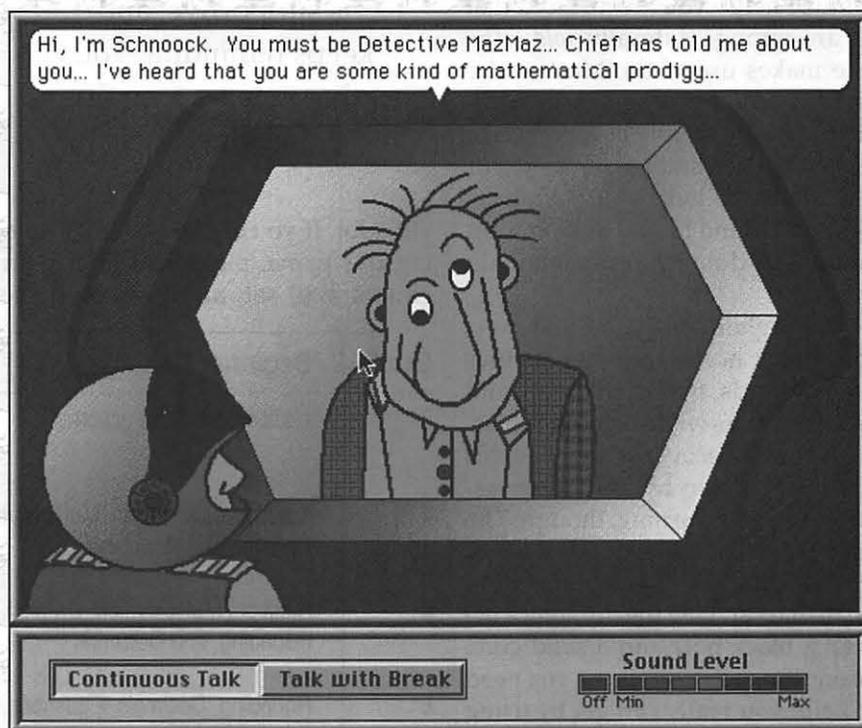
## Audience

While the game states that it was designed for grades 3 through 8, it really does depend on the student. The skills the student has already

worked on and the ones that still need work matter more than the grade they are in. If your child has mastered most of the skills on the chart (see table), this game will work as a review tool, but they won't learn much more. However, if your child is struggling, or hasn't yet covered most of the skills, this game could be a real learning tool. In addition to the game, your child can take tests with options for intensity and length. I'm sorry I can't help more with deciding whether or not this game would be a good buy for you, but it is a very individualized question.

## The Game ... FINALLY!

Your life as Detective MazMaz starts when you are "given" a letter from Chief SunShine (your new boss) welcoming you to the ClueMasters



Detective MazMaz is the person in the lower left corner, and Schnook is in the window. At the bottom of the screen, you can see that, in addition to the word balloons, every time someone talks, you can control their volume, and you can have them talk continuously, or have them talk with a break so you can take notes. If you choose 'Talk with Break,' every time a new speech bubble would come up, you have to press a 'Continue' button to move on. If you are impatient like me, that gets old real fast, but it is helpful when taking notes.



Detective Agency. Once the letter is put in your inventory, which stores all your clues, you hop aboard the intergalactic shuttle bus to get to planet Pikar in time for your briefing and first case assignment. After your briefing, you go out to meet your shuttle and Schnook. Schnook is a Synthetically Constructed Humanoid with Numerous Obsolete, Obscure, and Contradictory Knowledge. He is your assistant and copilot. As you can see in the picture of Schnook introducing himself to you, the graphics aren't Michelangelo, but they fit the bill for a computer game.

The game constantly involves math questions in clues, activities, and transportation. While the game is supportive, and keeps reminding you that you are a math genius, if you get stuck on a math problem, you don't get much help - you are just told that you are wrong. (Literally *told* - the game makes use of the Mac's voice synthesis when people talk in addition to a speech bubble.) I suggest that you keep pencil and paper handy, or a calculator, to help you if you get stuck, but I found I could answer most questions by doing the calculations in my head.

Throughout the game, you must avoid black holes and collect clues from landlords, trash, junk mail, and other characters while helping Professor Magneton recover key parts to his experiment stolen by his former assistant. I have a warning, though. The gypsy lady that appears often is not really helpful - she has a *genius* crystal ball that can't tell the difference between a black hole and a sand crab. The one time where it seems you need her help, you really can get by using a trial-and-error method. Don't ask. Don't tell.

My favorite feature of the game were the strange sayings Schnook told you. If you ask his advice, he will take famous sayings and twist them into strange, often stupid, but *always* amusing sayings like, "Rome was not

built in a day, but it sure looks like it,' and 'An apple a day keeps the doctor away, a garlic a day keeps the dentist away.'" His advice doesn't help much in solving your case, but it is a funny thing to hear when you are stuck or frustrated.

**Overall, When it's said and done, and In Conclusion...**

I feel obligated to say again that this game has a varying target audience. It's not for everyone, but the people it would benefit would ben-

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"The game constantly involves math questions in clues, activities, and transportation. While the game is supportive, and keeps reminding you that you are a math genius..."

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efit a lot. If you are considering buying this game, please consider your child's skill set, and how long the

game would be useful. I enjoyed the game very much, even though I've covered all the math skills it worked on. Unlike many other math games, the math was all relevant, and did not dominate or overpower the mystery and fun side of the game. I highly recommend it... to the people it would be useful for. I have two pieces of advice to end with (only one having to do with the game; guess which one): "don't Vulcan Mind Meld with hamsters - it hurts," and beware of *everyone!*

*Crisis in Alborz Galaxy*

\$49.95; \$34.95 for Washington Apple Pi members (volume discounts available)  
EZ Solutions Software Corporation  
PO Box 455, Germantown, MD 20875  
<http://www.ezsolutionsoftware.com/>  
(301) 916-7106  
E-mail:  
[feedback@ezsolutionsoftware.com](mailto:feedback@ezsolutionsoftware.com)

*Lykara Iann Charters is an honor roll student at Mayfield Woods Middle School in Elkridge, MD. In the fall, she will be taking the advanced study courses there for eighth graders. She enjoys reading and 'riting, but unfortunately, not 'rithmetic; and is an apprentice Mind Melder. This is her first review article for a magazine.*

Grade	Beginner Settings	Advanced Settings
3	Addition and Subtraction	Addition, Subtraction, Multiplication, Division, and Rounding
4	Addition, Subtraction, Multiplication, Division, and Rounding	Multiplication, Division, Rounding, Fractions, and Decimals
5	Addition, Multiplication, Division, Rounding, and Decimals	Rounding, Fractions, and Decimals
6	Rounding, Decimals, Equations, and Powers and Exponents	Fractions, Decimals, Equations, Percents, and Integers
7	Decimals, Equations, and Powers and Exponents	Fractions, Decimals, Equations, Powers and Exponents, Percents, Integers, and Sequences
8	Fractions, Equations, Powers and Exponents, and Sequences	Fractions, Decimals, Equations, Powers and Exponents, and Percents

# Stellaluna by Broderbund

review by Jackie Hurley, President,  
Panhandle Macintosh User Group

I HAVE reviewed and worked with numerous children's software packages in my classroom. I am excited and impressed by the quality of children's software on the market today. I thought that the Living Books by Broderbund Software, Inc. were exceptional pieces of software. Wow, did *Stellaluna* knock my socks off! What can they possibly come up with next to top this book on CD?

*Stellaluna*, by Janeil Cannon, is a story of a little fruit bat that gets separated from her mother while flying around one night. A terrible and I do mean TERRIBLE owl attacks the mother and *Stellaluna* falls into a bird nest.

The little bat learns how to "follow the rules of the nest" which include NOT sleeping by hanging from a branch, how to act like a bird, sleep at night, and eat yucky green grasshoppers.

*Stellaluna* and the little birds become a family. The differences that the birds and *Stellaluna* overcome and endure to become a family lead to lots of discussions in the classroom about being different and unique.

One of the most endearing features of the CD version of the story is the interaction between the characters as they talk with each other. These conversations are a delightful addition to the original story. Some concepts and ideas that are inferred in the story are brought to light through the character interactions that younger children might miss while just reading the story.

The educational value of the software is exceptional. Of course, you

have the reading along with the story, and rereading with the words on your own if you like. I love the bat quiz that is an option on the main menu. The quiz has 3 different levels and helps the children learn all about bats.

I have had the CD in my classroom for three weeks. I have 5 Mac computers with children's software. The computer with *Stellaluna* is always selected first with each group of kids that I call. It causes a small stampede in my room if I happen to call all five kids at the same time. It's a race to see who can get their headphones and get there first. This is also the first time that two children have plugged themselves up to the same computer when another computer was free.

When the Claris SIG group came to work in my room, we had seven adults standing there watching and listening and interacting with *Stellaluna* for thirty minutes.

In the afternoon, teachers from other classrooms ask if they can see *Stellaluna*. I think that it is the most popular program that I have ever put on my computer! Help, Broderbund, I need 4 more copies Just to keep peace in our room!

The program has been working on a LC580 for three weeks without any problem (It is used all day each day of the week.). It was simple to install and operate. I also use KidDesk and there have been no complications going through that application.

If you're looking for a great program for children ages 3-8 or 9 or 10, or for some adults, *Stellaluna* is a great piece of software. You get quality, entertainment, and educational value

for an exceptional price (\$19.95 at Broderbund's Website). I highly recommend *Stellaluna* to anyone looking for children's software. It is available in a lab pack from Educational Resources. ■

From the *Panhandler*, newsletter of the Panhandle MUG of Pensacola, Florida, for February 1998.



You just don't see sights like this in downtown Washington, DC, by day or by night, but MacWorld Expo New York gave several Pi members the excuse they needed to see the Empire State Building. Photos © 1998 Lawrence I. Charters



# Traveling with My Powerbook

by Lisette Rook

**I** HAVE COME a long way since I wrote about my hobby and passion "the computer." I have upgraded from a Performa 6300 to a G3 (with help from Lou Dunham, at MacUpgrades), and gotten a scanner and a color printer and now spend several hours a day learning new things. I wrote an article a couple years back about cybercafes in Paris. It used to be a great joy for me when in Paris to go to a cybercafe 2 or 3 times a week to send and receive my email.

The first one was not too far and as I returned to my hotel I enjoyed walking through different little streets finding new things every time (as you can in Paris). The last time, last year, I went back to the Galerie Lafayette where they had had the Bistrot Internet. I had enjoyed that place—it had several computers and also a bistrot where you could take drink and a sandwich. The service was very courteous. Well it had changed, no more cafe (that was alright with me) but the computers were moved where the computer sales was located and the young man attached to the service was a not helpful. I did not know the system and he would only open the computer and let me battle with it (most of my mail never went and I received very little I could find). To add insult to injury, at the end of my session he would hand me a bill to take to the cashier (payment was per minute) and watched to see that I paid and didn't leave without doing so.

When I came home I thought about all this. After all computing was

supposed to be an enjoyment for me. The thought came to me to buy a laptop and do my own email from my hotel room. That turned out to be a great idea.

I started looking for an inexpensive laptop, found one in the MacWarehouse catalog, but every time I called they were sold out. Finally I decided to call every day and eventually I got a Powerbook 520c. The next problem was finding an ISP for Paris, and the only one I could think of was AOL. I started calling (many times many different answers). Also went into AOL international online, got more answers, also more problems. I found a phone jack converter at Radio Shack. I downloaded AOL to my laptop, which by the way came with a transformer as the current in France is 220V. Suddenly someone mentioned that I should check whether the hotel's phone line was digital or analog, and I had no idea what they were talking about. After emailing the hotel, I found they had analog phone lines (which is the same kind that are used in most homes).

The next problem was that you had to dial 0 to get an outside line. So armed with laptop, phone line and switches and also electrical switches I went to Paris. Also, I had downloaded some games as I thought if this does not work at least I can play some games!

The first thing I did upon arriving was to test the laptop. Each time I connected to AOL the line disconnected. I tried many times (and phone

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"I had to curb myself as every time I came in my room I wanted to get online. It was a happy experience and I expect to do it again on my next trip to Paris."

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connection is expensive in a hotel). I stopped, felt very bad and one more time at night I tried and it worked. What had happened as so often occurs with AOL, was that their phone line was out of order. But from then on, morning and evening, I was able to send and receive email every day. It was great. In the course of a month I must have sent and received several hundred emails. I had to curb myself as every time I came in my room I wanted to get online. It was a happy experience and I expect to do it again on my next trip to Paris.

Interestingly, having email when I was traveling turned out to be a god-send. While I was traveling, my daughter-in-law became ill and required several operations. I was able to stay in touch with my son, and stay up-to-date with the situation. Even though I wasn't there physically, I was able to lend my support via email messages I sent.

My advice to others traveling with their laptops overseas is to plan ahead as much as you can, ask lots of questions of different people, and then don't be too disappointed if things don't work out perfectly the first time. After figuring things out, you'll enjoy having your laptop with you, and your vacation will be that much more fun. ■

Lisette Rook  
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# Grab It Off the Web!

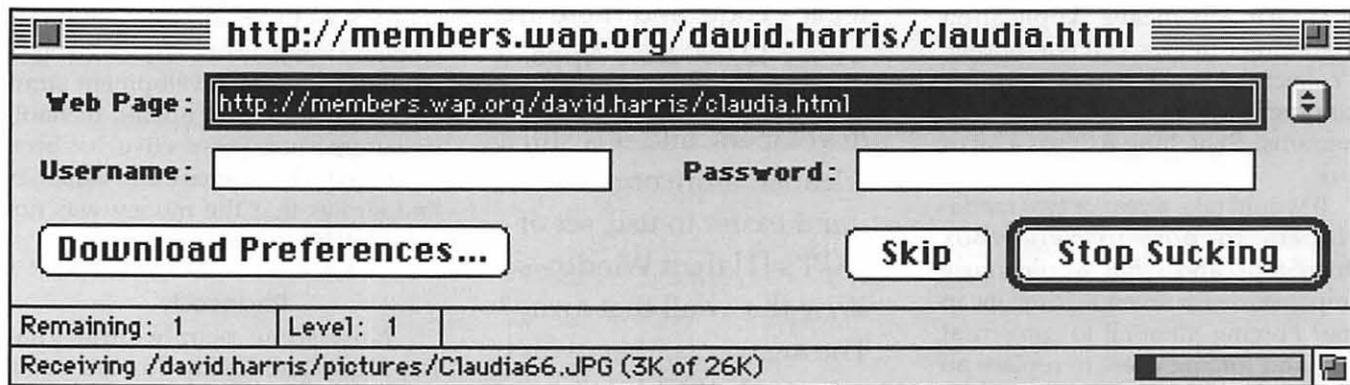
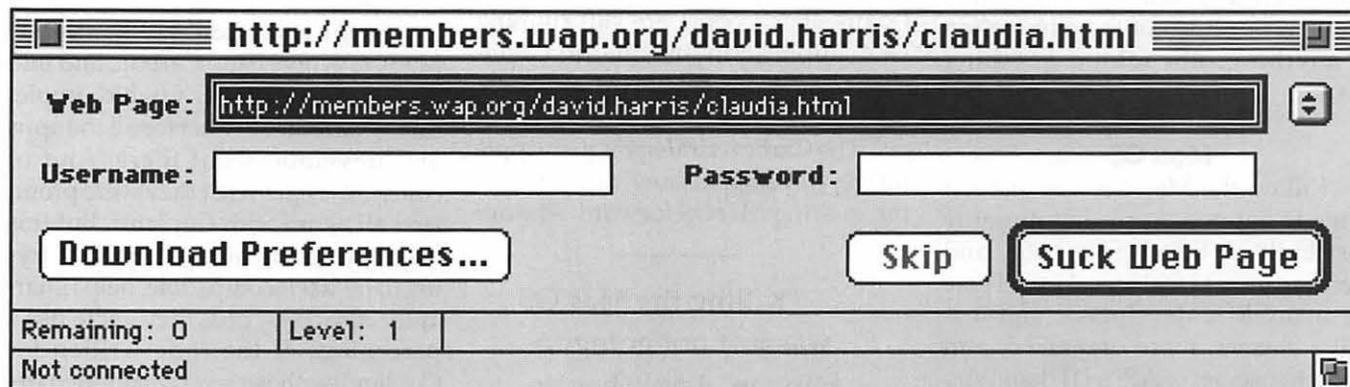
by David Harris

**W**EB DEVIL 3.5 is an application that, given a URL and an Internet connection, rapidly sucks that Web page and all its graphics, textures, and links (if desired) onto your hard drive so you can view it offline. It doesn't say so specifically but I found it also retrieved QuickTime movies. You can tell Web Devil to what lengths it should go in getting linked pages: limit it to a local

directory or let it get pages anywhere on the Net. It should run on any Macintosh with System 7 or greater that has the Thread Manager (built in to System 7.5 and greater). Web Devil is \$10 shareware. It has worked well for me, with the exception that I can't figure out how to import or export bookmarks!

It is file number 788 and you can find it in the TCS File Transfer Area 39. ■

"It doesn't say so specifically but I found it also retrieved QuickTime movies. You can tell Web Devil to what lengths it should go in getting linked pages: limit it to a local directory or let it get pages anywhere on the Net."



Windows for capturing and stopping capture of Web elements



# Rhapsody is Dead—Long Live Rhapsody!

by David K. Every

**S**OME PEOPLE have been saying that Rhapsody is dead, and that Apple is changing their strategy, again. I don't think so. This is exactly what and where Apple should have gone, which is why most developers are happy and aren't riled. But some of the public may be confused.

Remember, I, and many others, have been talking (occasionally) about converging the YellowBox and BlueBox and bringing both forward. That is all that Mac OS X is — that strategy. But it is not the elimination of anything, nor taking anything away.

## Mac OS

Killing the Mac OS was just not going to happen. Apple has its entire past built on that legacy code, and there are over 12,000 Mac Apps. There are many Mac developers, and it is still a cleaner, more organized, and easier to use, set of API's [1] than Windows. Why throw all that away? The answer is, they won't, and wouldn't.

[1] An API means Application Programmer Interface. It is a routine, or collectively a library of routines, that programmers use to make programs. Switching API's is a lot of work.

It would take a year or two for developers to port to YellowBox (OpenStep), and what would those companies do for revenue in the mean time? Forcing them all to convert at once, and forcing users to replace all their software at once is a way to guarantee the failure of your OS, and com-

pany. So Apple planned to transition people to YellowBox (the better way to write new apps) through the use of BlueBox (the ability to run older apps on the new System). But BlueBox does not add any functionality to the OS, and Steve has been telling us for nearly a year now that, "The MacOS is not going away". For it to not go away, it has to be brought forward. Up or out. You either improve or die. So we knew Apple was going to have to offer something during this transition that could take years or even a decade. (Remember, people are still running DOS application and the first Windows came our well over a decade ago).

The Carbon strategy is just Apple telling developers how they are going to bring MacOS forward. The an-

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"Killing the Mac OS was just not going to happen. Apple has its entire past built on that legacy code, and there are over 12,000 Mac Apps.

There are many Mac developers, and it is still a cleaner, more organized, and easier to use, set of API's [1] than Windows. Why throw all that away? The answer is, they won't, and wouldn't."  
—————

swer was pretty simple. They are going to eliminate a few thousand of the "bad" API calls, and replace them with better ones. Great. Developers will be able to bring their applications forward, and take advantage of new technologies (Protection, Threading, and so on). But Apple is NOT going to throw away all the old apps, Mac OS X will have a blue box to run old Apps (MacOS 8 and before) — they just may not call it that. Those older Apps will just not take advantage of the newer technologies — so there are reasons for developers to "fix" them.

Developers are not going to have much trouble upgrading their Apps to Carbon. Adobe and others are talking man days or man weeks — not team-years like to change everything to YellowBox. This guarantees that Microsoft, Adobe and others don't lose their investments, and that Mac OS X will continue to have the best software.

**So the evolution will be simple;** Mac OS evolves into Carbon, and into the future via Mac OS X (which implements Carbon). Perfect for all the apps and developers out there. And of course, they get what they were promised all along with Copland. But this way of implementing it, by NOT trying to be 100% compatible, helps guarantee it success, plus they get to use a percentage of the code written for Copland — those few remaining parts and concepts that haven't already been used in Mac OS 7.6, 8.0, 8.1 and soon 8.5. As I've been saying all along, Copland is not dead — it just changed it's name and its development strategy. Almost every Copland technology (from a user perspective) has been leveraged. This is smart, and valuable, and shows that the money was not completely wasted.

## Rhapsody

Now some people think that Rhapsody and YellowBox are dead. They are wrong. YellowBox is the way people will develop Apps in the fu-



ture. I don't have millions of lines of MacOS code. If I was writing a new App, even though I know the MacOS well, I would rather write in YellowBox.

YellowBox is an Object Oriented API (Framework) [2] that rides on top of a lower level API's. That those lower level API's change from Display Postscript and Unix to MacOS to Windows to Solaris is irrelevant. It was doing for 5 years what Java promises to do in the future. (Actually Java does it, just not well... yet.)

[2] An Object Oriented API, called a Framework, is better for most things — primarily it is easier to program and isolate bugs. They usually have more stuff "done" for the programmer — so it takes less to achieve the same ends. That is why developers who know both, prefer frameworks.

YellowBox is not dead. YellowBox is the future. YellowBox was the key to Rhapsody — but Rhapsody was more than YellowBox. So what was Rhapsody? Rhapsody was a strategy for the convergence (and implementation) of the following things:

1. Apple would converge NeXT Step and the Mac look and feel.
2. Apple would converge Unix, YellowBox and Mac Applications onto a single platform.
3. Apple would bring Mac Application forward with a BlueBox.
4. By putting Rhapsody on Unix, it would make a far more powerful platform for the future which would include Server Capabilities.

So Apple has not changed anything. Rhapsody is coming out this Fall, and is delivering everything they promised for next year, and then some. BlueBox compatibility is way ahead of schedule, and they have converged the Mac and NeXT Step user experiences faster than people

thought possible.

But Apple also learned that to bring YellowBox forward, they need more cutting edge technologies as well. Including things like QuickTime, new drawing, better 3D rendering, a more versatile file system, better Fonts, and so on. They need good low-level API's to build better high-level API's (Frameworks) on top of. So YellowBox needs to ride on top of many of the MacOS API's. So Apple went back, and made sure to FURTHER the MacOS (with Carbon) and further the YellowBox — both converging in Mac OS X.

To quote Steve Jobs, "Rhapsody

"The Carbon strategy is just Apple telling developers how they are going to bring MacOS forward. The answer was pretty simple. They are going to eliminate a few thousand of the "bad" API calls, and replace them with better ones. Great. Developers will be able to bring their applications forward, and take advantage of new technologies."

doesn't go far enough, Apple needs to go further". That is NOT saying that Apple is killing Rhapsody, they are just going beyond it. Apple said specifically that they are using Rhapsody and YellowBox technologies to make Mac OS X.

So the evolution of YellowBox will be simple; YellowBox is implemented in Rhapsody, which gets

evolved into what can be called Rhapsody Plus — which is Mac OS X. This is perfect for the current YellowBox (OpenStep) developers. Rhapsody is not dead — it is just prepared to grow into Mac OS X.

### Mac OS X

So what is Mac OS X? 100% PowerPC Native, very fast, G3 optimized, fully buzzword compliant OS, with all the latest technologies and the future of both MacOS and Rhapsody. Look at these release paths:

- Mac OS 8.1 (Q1 '98), 8.5 (Q3 '98), 8.6 (Q1 '99), 9.0 (Q3 '99) —> MacOS X (also Q3 '99)
- Rhapsody DR-2 (Q2), Release-1 (Q3 '98), Beta Mac OS X (Q1 '99) —> MacOS X (also Q3 '99)

Remember the things that made Rhapsody into Rhapsody? They are still there:

1. Apple would converge NeXT Step and the Mac look and feel, even MORE than we expected for Mac OS X.
2. Apple would converge Unix (Kernel), YellowBox and Mac Applications onto a single platform, even MORE than we expected for Mac OS X. Though we are not 100% sure of what Kernel will be used for Mac OS X, it will probably have a Unix kernel (and would be able to run Unix applications).
3. Apple would bring Mac Application forward with a BlueBox — and MacOS X still has a BlueBox to run older Apps, but those Apps won't run as well as those upgraded to be Carbon apps. Carbon is just Apples way to bring Mac Apps into the future as well.
4. MacOS X will not only be an awesome server platform, it will also be the premier desktop and main-stream platform as well.



## Conclusion

There may be some confusion by users and in the press. But developers get it.

If I have a huge code base (Application) written for the Mac OS, I can't always afford to just throw it all away to move into the future. Apple is preserving that investment by bringing the best MacAPI's forward. In fact, if I write for the Carbon (Mac) API's, my Apps will continue to run on Mac OS 8 (and Mac OS 9).

Mac OS API's are great low-level API's — but low-level API's are not the best way to be productive. Some people will keep using them, because that is what they know, have huge investments or they are afraid to change, or have requirements that go beyond what the YellowBox can deliver — but not everyone will. In fact most new people will not need the MacOS API's. YellowBox will allow 95% of the functionality of the Mac API's (or more than 95% in practical usage), but Yellow Box only requires 20% of the programming effort to achieve the same ends. Also Yellow Box developers will be able to deliver their Apps, as native programs, on both Mac and Windows as well. Programmers will rarely need to go "deeper" — but Apple is guaranteeing to further the Mac OS API's (through carbon) so that depth is there.

Both Mac technologies (YellowBox and BlueBox) are converging into one unified technology (Mac OS X). This is so that Mac users don't have the configurability

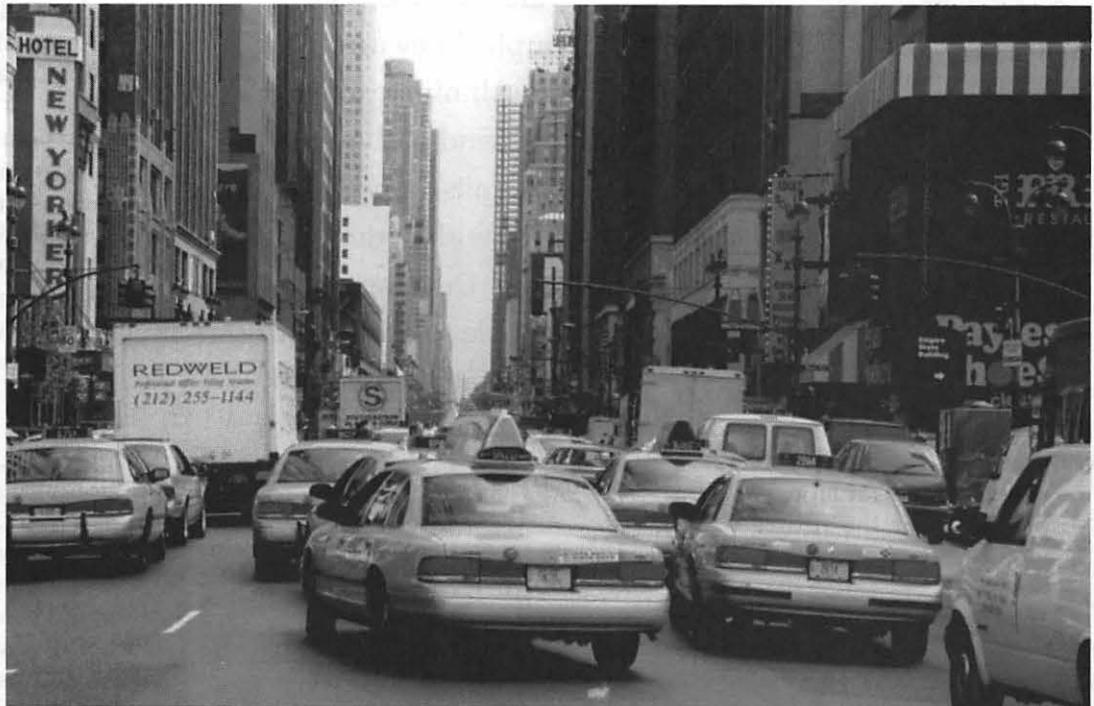
hell of dealing with WinNT vs. Win95 (OSR1 vs. OSR2) vs. Win98 vs. Win3.1 vs. WfW vs. DOS. In the Mac world there will be Mac Applications. Some will use different technologies (MacAPI's, the Carbon subset of MacAPI's which adds features, or YellowBox API's which has similar features) — but users won't have to know the difference. Their Apps will just work.

Apple is calling it "Evolution into Revolution". They are going to evolve their way into a dramatically different System. There are two paths to get there, but all roads lead to Mac OS X. By furthering the MacOS with Carbon, developers can still make great Mac Apps. By furthering the YellowBox with Mac OS X, new Apps will get even better. Developers can even mix and match and use Yellow Box and MacAPI's (and Java, and probably Unix API's) as needed. This

is the best of all worlds approach, with very few compromises. **It is not a change in Apple's strategy — just a refinement, that takes us further than before.** But be warned — this is not the last change in Apple or the industry. Next year, Apple will refine it more and probably be planning for Mac OS 11, and so on. Progress marches on, and so must we — but developers now know (more than ever) that Apple is marching in the right direction, and they are trying not to leave anyone behind. ■

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*If you found this article interesting, there is much more like it on David's web site called Mackido. Point your browser to: <<http://www.MacKiDo.com>> and pay him a visit.*



*Manhattan's Wall Street is actually named for a street built along a wall, once upon a time, long, long ago. To MacWorld Expo visitors from out of town, however, these concrete canyons filled with taxis made one thing clear: we weren't in Kansas anymore. Or Boston, either. Photo © 1998 Lawrence I. Charters*



# ClarisWorks Companion

## An official ClarisWorks 5 book

author, Jan L. Harrington  
published by Claris Press

review by Grace Gallager

**I**F YOU BUY only one additional book to supplement the official manual in your learning to master ClarisWorks 5, *ClarisWorks Companion* should be that book.

Although written for first-time users, it will provide valuable in-depth coverage of the basics of ClarisWorks and general computer application concepts for people who have used ClarisWorks 4 and prior versions at a only a cursory level. This book not only gives detailed instructions for specific ClarisWorks functions but also discusses customization of ClarisWorks for the individual user. The Button Bar, the main operating and on screen visual difference between ClarisWorks 5 and previous versions, is explained simply and completely and just that initial explanation will make the version switch much easier and more intuitive for current users.

And it provides the background for understanding the "why" of how the operating system and program work, not merely the "how." As someone who trains both teachers and students to use integrated computer applications, I have found that the knowledge of the logic on which a program is based is central to the complete and efficient learning and use of a program. *ClarisWorks Companion* provides that logic knowledge base in small bytes throughout the book. At each point where a new concept is introduced (for example the draw and paint modules and their different

strengths and functions) a succinct paragraph or two explains the underlying logic so the operation of the program immediately becomes much clearer for efficient mastery.

*ClarisWorks Companion* is a totally cross-platform book. If you and/or your employer are looking for an integrated program which is truly cross-platform without convoluted translation procedures, this book will demonstrate how totally seamless is the transition from Macintosh to Windows operating systems and return for the files created within it. For Word users who must remember tricks to translate even from different versions of that program within the same platform, ClarisWorks 5 will appear as a godsend! At every function or instruction, both the Macintosh and Windows instructions are shown in a mini-chart format in *ClarisWorks Companion*. These charts provide very clear specific instructions in two to four lines for every instruction. Use of the F keys as shortcuts for both Mac and Windows are listed with each set of directions. The one anomaly that I could not understand or make work was the set of 1-x directions used as keyboard shortcuts in the Macintosh directions. Substituting the  1 (command) key for the numeral 1 in each shortcut works very well.

Dr. Harrington introduces ClarisWorks by illustrating the working Claris environment including managing documents, basic formatting, button bar use, online help ac-

cess, and all of the necessary conventions for functioning in every module. Getting that out of the way at the beginning is another use of the programs internal logic to make each additional "how to" more intuitive.

Word Processing basics of formatting text includes an explanation of documents versus frames which makes the insertion of word frames, tables, or charts so simple. The simple trick of double clicking on a tool so that it does not instantly revert to the document's default after a single use will make anyone's life easier. Several succinct paragraphs on understanding typography and fonts proceed the setting of type characteristics, again making the whole process more intuitive.

All of the word processing extras—outlining, headers, footers, footnotes, dates, style sheets—and many more are demonstrated. An explanation of why some dates and times don't update, even though set to do so, will eliminate the frustration of trying to do something that is not logically possible. A chapter on word processing tools which includes an explanation/illustration of tailoring Find's behavior and the efficient use of both thesaurus and dictionary will speed up the mastery of all 3 tasks.

The Drawing chapter begins with a five paragraph illustrated explanation of the differences between drawing and painting on a computer. That clear explanation, in itself, will make the selection of appropriate features of the integrated program much easier. Even the use of straight or curved lines with the Bezier tool is handled simply. Object organizing, aligning, distributing, layering, rotating, grouping, locking, flipping, and much more is covered. A section on modifying clip art using the drawing tools is a boon for the artistically challenged among us.

The one area which I missed in this book is a definitive one on the Slide Show feature of the Drawing



module. This is the ClarisWorks alternative to Office's PowerPoint. It completes the set of presentation tools which are least publicized strength of ClarisWorks 5. These are extraordinarily useful for both teachers and business world exhibitions.

The Painting chapter, in addition to clearly explaining the use of the standard painting tools, has a section showing "how to" use tools to edit a painting. Given the almost "can't change" nature of items created with that module, the editing tips and directions are invaluable. Explanation of the shear, distort, perspective, invert, blend, rotation and resolution capabilities are clear, illustrated, and sometimes even imaginative enough to suggest previously unimagined treatments of rather prosaic art.

The first six pages of the Spreadsheet module should be *must reading* for anyone new to the concept of spreadsheets (or even those of us who use only the most basic of its capabilities). Again, this concise explanation of the logic behind such a program makes understanding and using the tools, commands, and formulas explained in the chapter so much easier. After the instructions on creating a basic spreadsheet, creation and customizing charts from the data is explained simply so that the results will appear professional. Adding labels and frames to a chart is made simple and certainly extends the value of the chart.

A 56 page appendix which spells out all of the esoteric function alphabet soup is a great help to anyone who wants to use all of those neat math formulas that come with the ClarisWorks spreadsheet but can't figure out which does what or how to substitute real numbers within the function formula.

Database instructions fill the longest single module sections of the book, over 200 pages. But this is the first set of instructions that has enabled me to use the ClarisWorks

database to easily do all of sorting, calculating, and reporting tasks I used to do simply in AppleWorks 3.0.

Beginning with the customary "understanding" section, *ClarisWorks Companion* proceeds to illustrate creation and manipulation of the myriad of useful data fields. The sections on sorting data for reports and creation of layouts using customized parts and layering enable one to change the ordinary report into a more effective and professional looking document. The explanations of logical queries, find versus match, and simple illustrations of searches make further sophisticated uses of this database much more user friendly. A Data Management Extras section expands the use of a database in sophisticated mail-merge custom documents while also giving added instruction in layout configuration techniques.

The final chapter, Customizing ClarisWorks, walks the user through setting up the button bars to the most efficient placement depending on individual needs and usage. Creating, recording, playing and modifying macros are explained simply and illustrated concretely. Even the setting the preferences (which I though I had mastered) gave me some new ideas to make my ClarisWorks easier for my often used or repetitive tasks.

*ClarisWorks Companion* contains 4 appendices. For me, using the equation editor was the most helpful. For others, creating HTML for the web or simply internal document linkage might be more useful. Using ClarisWorks assistants is short, simple and quick to cover. The ClarisWorks Functions explanations are invaluable. And for any teacher or simply novice computer user, the glossary at the back gives simple English one- or two-line explanations for all of that confusing jargon which is used throughout all computer manuals.

For computer newbies or even intermediate users, this book is a **MUST** companion for ClarisWorks 5. It will enable you to master the program's capabilities quickly and with much less frustration than any other "how to" guide I've found on the market. ■

*If your interest in ClarisWorks 5 is not in learning more about the 5 most used modules, but rather about the Internet, New Media and Paperless Documents, look for next issue's feature on the ClarisWorks 5 book dedicated only to those specific topics.*

*Grace Gallager is a trainer for teachers and students in the usage of Macintosh Computer Applications in the Prince William County School System.*

### Discount to join ClarisWorks User Group

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) membership dues when they join or renew.

Contact 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>.

# Crashing and Freezing

*From the Nashville Macintosh Users Group*

*Troubleshooting Methods and their Effectiveness (edited from an Apple System Engineer report) (some additional slight editing by Dave Ottalini)*

**WE** HAVE recently done an in-depth report of troubleshooting methodologies and their effectiveness, and want to share our results with you. Our study covered situations with more than four calls on the same issue during an 8-week period, where the issue was crashing and freezing.

Extensions troubleshooting worked 56% of the times it was tried. Clean Installs worked 28% of the time they were tried. Disconnecting SCSI Devices worked 21% of the time that it was tried.

These are all valid troubleshooting steps (they have a higher percentage of fixing a customer's issue) To further clarify:

Extensions troubleshooting is the most widely applicable troubleshooting step. It is appropriate for any error type 1, 2, 3, 10, 11, 25 or freezing in addition to miscellaneous wierd behavior. If the issue occurs on startup or in multiple applications, this is the best bet. If you're going to guess anything, guess this. The corollary of this is: Don't ever guess. If you don't know, troubleshoot. :-)

**Clean Installs:** When all third-party hardware and software have been eliminated and the issue persists on startup or in multiple applications. Reinstalling system software may be appropriate. A clean install is not necessary if a custom-install or easy install will fix it. If you have narrowed

down the issue to a certain file or the issue seems only to affect a certain component of the system software, you should be able to quickly custom-install that item and fix the issue. A custom-remove is also not, strictly speaking, necessary before a custom-install. There is a lot of recovery required after a clean install. Many customers do not understand how to recover from a clean install and this can cause multiple callbacks. It's good to avoid unless simpler steps don't fix it. At times it is appropriate, but other times, it's overkill. You can save a lot of time here by doing the quickest thing to solve the customer's issue, not the easiest. This will be easier to judge as you gain experience.

## **Disconnecting SCSI Devices.**

This step is appropriate when a computer starts with a gray screen and a pointer only and goes no further. Random, hard freezes and recurring directory corruption can also be signs of SCSI chain problems. Many customers do not realize that ALL SCSI devices must ALWAYS powered on BEFORE the computer is started and then left on at all times while the computer is being used. There are no exceptions to this rule. This is explicitly stated in every CPU manual put out for the last two years. Customers often miss this point and have chronic problems because of it.

In CONTRAST... the following troubleshooting steps were shown to be tried way TOO OFTEN.

Rebuilding the Desktop worked 0% of the 54% of the time that it was tried. Deleting Preferences worked 3% of the 38% of the time that it was tried.

**"Disconnecting SCSI Devices.** This step is appropriate when a computer starts with a gray screen and a pointer only and goes no further. Random, hard freezes and recurring directory corruption can also be signs of SCSI chain problems."

Zapping the PRAM worked 5% of the 77% of the time that it was tried.

From this we conclude that time spent telling/helping customers to do these things is, for the most part, wasted. In an effort to provide relevant troubleshooting to customers, please try to limit the use of these steps to the following situations:

Rebuilding the Desktop should only be tried to resolve generic file icons (but not the generic chooser icon in Mac OS 8.1). A single generic icon is often a file level problem (such as a bundle bit), that rebuilding the desktop won't fix. In rare cases, application/document connection problems can be fixed by rebuilding the desktop. (For example, you double-click on a document and it opens the wrong application. However, this Mac OS Easy Open does this same thing by design.). This can easily waste several minutes on a call, especially on the large drives in newer computers.

Moving Preferences should only be tried when an issue is isolated to a specific item (Finder, control panel, application). Usually, the program will crash on startup or the application-specific settings fail to "stick" when you quit the application. It is not



"Keep in mind that resetting the PRAM resets ALL of those settings to their defaults and causes the customer to have to reset any that he customized."

necessary to actually delete the preferences, just move them.

Resetting the PRAM should only be tried in cases where PRAM-resident settings are not "sticking". These settings include startup disk, keyboard control panel settings (repeat rate, delay until repeat), sound level, memory control panel settings (RAM Disk, Virtual Memory, Disk Cache, 32-bit Addressing), mouse control panel settings (double-click speed, tracking speed), selected AppleTalk port, highlight color, default printer, Date & Time Control Panel (Time Zone, Daylight Savings Time ONLY), General Controls (Folder Protection, Insert Blink, Menu Bar blink ONLY), plus undocumented features.

Keep in mind that resetting the PRAM resets ALL of those settings to their defaults and causes the customer to have to reset any that he customized. The following control panels are not affected by zapping PRAM: Energy Saver, File Sharing, Text, Numbers, Speech, PPP, TCP/IP and many others.

Resetting PRAM can affect ADB and serial port issues and little else.

As a reminder reformatting the hard drive should never even be attempted unless Disk First Aid reports problems that it cannot fix. Unless a bad hard drive is suspected, a low-level format should also NEVER be tried. Zeroing all data should also NEVER be tried if the customer doesn't specifically ask how to totally prevent data recovery. ■

<http://www.macusers.com/help.html>

## The MAC RAM Disk

From the Central Oregon Macintosh Users Group (COMUG)  
<http://www.teleport.com/~comug/>

### What is it?

**A**RAM DISK is a volume that you can create on your desktop. The icon of the disk looks deceptively like a floppy disk but it is entirely within the RAM of your Mac. To create a RAM disk, go to the memory control panel and click the button next to RAM disk marked on.

There is a slider bar next to it for adjusting the size of the RAM disk. The disk will not appear right away, you must re-boot to see it. (See figure below.)

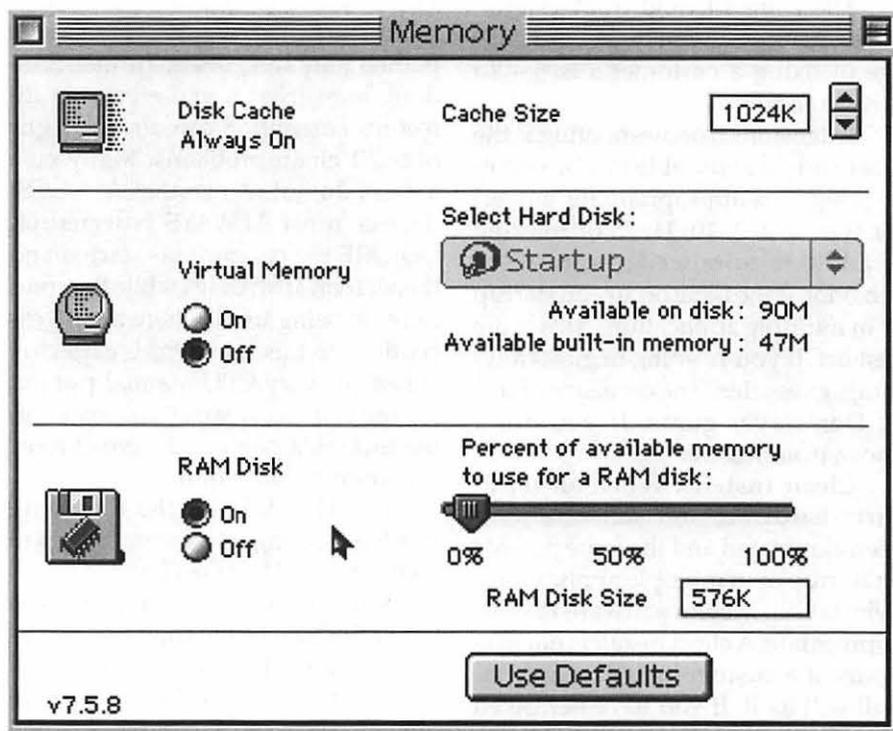
### OK again, What good is it?

At first, the RAM disk seems

pretty pointless. OK, so I have another volume on the desktop called RAM disk. Big stinking deal. The RAM disk serves as a great scratch disk. Some programs like Photoshop and Netscape need to store temporary files on the hard disk. The RAM disk fools these programs into thinking that they are writing to a fixed disk when they are actually writing to RAM.

### Performance

Any time a program has to write to a hard disk it slows the program down because hard drives are very slow compared to RAM and system speed. If the program writes its tem-





porary files to RAM rather than the slower hard disk, performance will be greatly improved.

### Using the RAM disk

So you want to give the RAM disk a shot? Make a 1-2 MB RAM disk in the memory control panel and re-boot. Launch either Photoshop or Netscape.

#### Photoshop users:

Version 3.x: Go to File -> Preferences -> Scratch Disks. Then set the RAM disk to be the primary scratch disk. If you are feeling really daring you can set the RAM disk really high and watch Photoshop fly like never before. Make sure that you save enough room to actually launch Photoshop. If you haven't figured it out yet, it takes a LOT of RAM to pull this off.

#### Netscape users:

Version 2.x - 3.x: Go to Options -> Network Preferences. Select the Cache tab and choose browse to relocate the cache files to the RAM disk.

Version 4.x (Communicator) - Go to Edit -> Preferences -> Advanced -> cache and choose the browse button to select the RAM disk.

This was a great trick to use with older versions of Netscape when it was really unstable (version 2.x). Netscape had a problem of corrupting hard drives when it crashed in the middle of a cache write. If it crashed while writing to a RAM disk, there was no harm done!

#### Getting rid of the RAM disk:

This can be quite complicated at first. One would think that the nice Mac-like way of doing this is to drag the icon to the trash. This does not work. Like an icon possessed by the beast, it flies back to its original location.

To actually rid yourself of the demonic beast, you must take it out of this world the same way you brought it in; the memory control panel. Turn off the RAM disk using the off button next to RAM disk. Hopefully, the RAM disk will fly to the trash.

If this does not work, go to your sharing setup control panel (OS8 its called file sharing) and turn off file sharing. Repeat memory control panel instructions. ■

## Apple Menu Tricks

Contributions by Lynn Drennen, BigAl, Mary Kreul, Dick Wilson, Cheryl, Chuck Heath, CBLeGray, Diane Ross. Edited by Diane Ross.

*Note from Steve Mack: This article was generated through a private discussion started via the MacTalk mailing list.*

**T**HE FOLLOWING TIPS from list members show how the Apple Menu can be customized. For those that are not familiar with the Apple Menu, I'll give a brief introduction to adding these tips to your Apple Menu. There is a folder in the System Folder called Apple Menu Items. You can customize these items in any order you wish or add additional items. Organizing the Apple Menu has several advantages such as getting the alias clutter off the Desktop and being able to open up programs, files, etc. even when the screen is filled.

#### To add an alias to the Apple Menu

(1) Make an alias of the item you wish to add and drag it to the Apple Menu Folder. (To make an alias, highlight item and select Make Alias under File menu or press the Command key and M.) or (2) Highlight the folder, file or application you wish to add and under the Apple Menu select Automated tasks—Add an alias to Apple Menu

#### Tips:

##### Add Apple Menu Folder to the Apple Menu

Make an alias of the Apple Menu folder and add to the Apple Menu. This will enable you (to get) quick access to the Apple Menu to edit or arrange items. After you drag an alias to the Apple Menu you can delete the word alias at the end.

##### Add Desk Accessories Folder

This will give you quick access to seldom-used items and make your Apple Menu more manageable. (Here's how:) Open Apple Menu folder. Make a new folder. Name (it) Desk Accessories. Drag the following into the folder (Note: your system may contain different items):

- Apple System Profiler
- AppleCD Audio Player
- Calculator
- Chooser
- Graphing Calculator
- Jigsaw Puzzle
- Key Caps



Note Pad  
Scrapbook  
SimpleText  
Stickies

*(Editor's note: the above works best if you have Apple Menu Items turned on.)*

### Keep the Most Used Software Titles at the Top of the Menu

This is great way to launch software.

### Prioritize and Group Items in Menu

Use the following tricks:

1. Place a space at the start of the alias file name. Items with two spaces would sort before items with one space. The more blank spaces the higher on the list the file will be located.
2. Place an ' (accent—usually found at the upper-left corner of the keyboard) at the start of the alias file name. The accent sorts after the Z.
3. Place a ~ (tilde—usually found at the upper-left corner of the keyboard—hold the shift key down) at the start of the alias file name. The tilde sorts after the accent.
4. Place a number at the start of the alias file name. Numbers sort before letters.
5. Place a • (option-8). Sorts after the tilde.
6. Place a ™ (option-2). Sorts after the bullet (•).
7. Place returns before name. A more aesthetically pleasing way to order your items. Open any word processor (SimpleText will do), write the name of the folder or application and then insert one or more [Return]s before the name. Then copy or cut and paste the modified name into the folder, application or alias name you have placed in the Apple Menu (be sure to highlight the Return spaces ). A Return key command

floats higher than a space preceding the software title. Also, the Return key command doesn't leave your software title hanging further over to the right of the menu.

### Use Now Menus in Now Utilities

Note that all versions of Now Utilities, including 6.7, are considered incompatible with OS 8, and are to be used at your own risk.

### Put Favorite Applications in Menu

Email Application, Word Processor, Internet Browser, etc.

### Place an Alias of a Document You Use Frequently in the Menu

Selecting it will open it and the application that created it. Examples: Computer Tips file. Add tips from MacTalk; OS 8 Tips file for adding info on the new system.

Two books suggested for further reading on the Apple Menu are *The Little Mac Book* by Robin Williams and *Macintosh System 7.6 for Dummies* by Bob LeVitus.

With the exception of the desk accessories, usually only aliases of the applications, files, documents, or accessories should be placed in the AM. Note that some applications like Global Village Fax Center and Suitcase will place their icons in the Apple Menu. When starting out it (is) important to keep organized. The Apple Menu is a great way to start. Next month some hints on dividers in the Apple Menu. ■

From the June 1998 *GravenStein*, newsletter of the GravenStein Apple Users Group (California):



*One New York City restaurant conglomerate put together this "Millennium Clock" as a combination advertisement and countdown to the end of the century. Fortunately for Macs, the only real barriers to working correctly in the next millennium are dead batteries. Photo © 1998 Lawrence I. Charters*

## Tim's Top Tips

by Tim Thomas

### Cut to the chase...

**I**F YOU don't care about all the technical minutiae, and just want to know about my first hand experiences with CD-R (Compact Disc Recordable), then this is the article for you.

CD-R is not like just another Zip or Quantum plugged into the SCSI chain. My experience, and I've heard the same from many others, is that CD-R is a beast that you must learn to tame, if you want to be a successful CD producer.

First, what to buy. The best units today are Sony and Yamaha drives. But that's not what it'll say on the box. It'll say La Cie or APS or who knows what, but the box probably won't tell you who made the mechanism.

So how do you know? I strongly advise dealing with a reputable drive dealer like La Cie or APS, and stay away from those 'special' deals from the catalog places. Do some research. Visit Web sites and go to the newsgroups. Check out [news:comp.publish.cdrom.hardware](mailto:news:comp.publish.cdrom.hardware), [news:comp.publish.cdrom.software](mailto:news:comp.publish.cdrom.software) and [news:comp.publish.cdrom.multimedia](mailto:news:comp.publish.cdrom.multimedia). Find out what the latest mechanism model numbers are, and what firmware revision is current. Do not buy old or discontinued models. Buy only current models, with current firmware (the ROM code, which in most cases is not user upgradeable).

Do not buy a drive from anyone until they give up the information; who made the mechanism? Then don't buy anything except Sony or Yamaha. Maybe go for a Panasonic or

Ricoh, if the price is right. In particular, stay away from JVC, HP, and Philips (Their other products may be very good, but their CD-Rs are trouble). Most of the complaints I've seen recently are about these models. A word to the wise...

Don't buy from anyone who won't let you return the drive if it doesn't work on your system. Some dealers just sell drives and expect you to go to the mechanism's manufacturer if you have problems. Again, I really recommend La Cie or APS. They stand behind their products.

Buy external drives. They cost more than internals, but CD-R drives get quite hot in use. You probably don't want all that extra heat inside your CPU.

Buy good media. I have had very good luck with TDK's, which have been available at COSTCO recently. HP media sucks. Sorry, but it's true. Some drives may like a particular flavor of disc, so don't buy a bunch until you find a brand that works for you and your drive.

Toast is the software you want. It smokes. It's got all the bells and whistles you could possibly want. Look for a CD-R vender who bundles Toast with their drive. Otherwise, plan on buying it. It's great, and miles ahead of any other CD-R utility.

How about CD-RW (re-writable)? Nope, I don't recommend it right now. The drives cost a lot more than a CD-R, and the media is way expensive. CD-R media is available as low as \$1 each in quantities, but CD-RW is up around \$15 each if you buy a three pack. It's not 15 times better than CD-R, by any stretch of the imagina-

tion.

And don't wait for DVD (Digital Versatile Disc) burners. They are not yet available, and when they arrive, they will be very expensive. In a few years they may be great, but there's always some new technology just around the corner. CD-R is available now at a reasonable price, and it works, for the most part.

If you buy a CD-R, SCSI woes could be in your future. CD-R drives really don't like competition for space on the SCSI chain. Plan on hooking the CD-R up by itself on the chain when you burn CDs. Use good SCSI cables. Use an active terminator if you can afford one.

Don't expect to use the CD-R as a CD reader. They aren't really made for it, and you'll shorten the drive's useful life. Besides, you don't want it on your SCSI chain when you aren't using it.

Here's some general usage tips:

- Any interruption in the flow of data will ruin that session or disc, so you need to be more careful with your CD-R set-up than with other drives. Don't plan on doing any other work on your Macintosh while you are burning CDs. Don't have any other programs running while making CDs.
- Place the CD-R level and stable. Don't move it or bump it while it is writing. Any interruption in the flow of data will ruin that session or disc.
- Set up the CD-R as the only item on the SCSI chain while you are recording. Be sure to use a SCSI address that is not already used on your chain. Any interruption in the flow of data will ruin that session or disc.
- Use a short, good quality SCSI cable. I've seen otherwise great SCSI peripherals come with very cheap cables. Don't hesitate to buy new SCSI cables if you have any problems. Any interruption in the flow of data will ruin that session or disc.
- Have an adequate power supply.



(This is mainly an issue for internal drives. I recommend against them anyway.) Any interruption in the flow of data will ruin that session or disc.

- Make up a special start-up set of extensions to use when burning CDs. Strip out any extensions that aren't positively necessary. Be sure to turn off any extensions that periodically access your drives, or waste CPU cycles. (Norton Disk Light, for example, which flashes a little icon in your menu bar whenever a drive is being accessed. It's likely to cause problems for any labor intensive task.) Any interruption in the flow of data will ruin that session or disc.
- If your burner is capable of burning at 4x or faster, and you experience failures, use 2x. It'll take longer, but slower speeds are more reliable. Any interruption in the flow of data will ruin that session or disc. (Get the message?)
- Run SAM (Symantec Anti-Virus for Macintosh) or some other virus detector on your data before you start burning a disk. If you burn infected data to your CD, you'll be stuck with it forever. CD-R creates WORM discs; Write Once, Read Many (you can't make any changes on the finished disk).
- Before you burn a disc, run a simulation. Toast will let you perform the complete burning procedure except that the laser will not be turned on during the simulation. You'll catch most problems this way and be saved from creating a lot of expensive silver "coasters." (A failed disc isn't much good for anything else.)
- Treat your CDs gently. Don't expose them to direct sunlight for long periods of time, keep them in their cases, don't write on them with ballpoints, don't stick paper labels on them which might unbalance the disc. Remember, your data is stored in a pattern of dye spots. CDs are tough, but not indestructible. You can abuse a disc severely enough to lose your data. ■

## Old Apple Computers Assist VA Patients in Their Therapy

by Paul Gerstenbluth

*Following is the text of the letter that I received from the V.A. Hospital Brockton, Massachusetts. We received this letter after the ARIE Foundation donated it's first of several Apple 2c computers to the V.A. Hospital.*

From: Madeline Dupras, Rehabilitation Arts Therapy Clinic, Brockton, Massachusetts—V.A. Hospital

### It Was A Dream Come True

**T**HE ARIE Foundation is a volunteer group who wished to give something back to the system by helping hospitalized veterans in various V.A. Hospitals through-out the USA. They initially began by donating trading cards, coins and stamps to be distributed to the veterans as a hobby materials to occupy their time during evenings and weekends.

During one of their visits to donate more items for the collectibles club we began discussing computers. It was then that Paul Gerstenbluth, President of the ARIE Foundation and his friend Tom, who are members of the Rhode Island Apple Computer Group, talked about the need to donate computers to our V.A. Hospital.

They realized I was serious about introducing a computer applications program into my therapy clinic. This would help in making this new knowledge available to my Geriatric Veteran clients, that comprise the majority of the patients in the clinic. The clinic is located in the basement

of the nursing home care unit in Bldg. 4.

It was a dream come true. The ARIE Foundation, several months later, donated an Apple 2c computer, monitor and Imagewriter printer along with overall programs to get started this new V.A. Program.

The Wood Technology Clinic under the supervision of Mr. Ray Averill and his assigned veterans constructed a special adaptive computer desk for the patients in my clinic, most of whom are in manual wheelchairs, and then remodified it to accommodate electric wheelchairs.

The program was off and running. However, I shortly realized that piece of adaptive equipment was needed, many wheelchair bound veterans were unable to accurately view the keyboard because of their positioning in the chair.

I again challenged Mr. Averill and his patients and with my input they constructed a raised platform desk to bring the keyboard up from the rear and lower in the front for better viewing. Also, I requested an extra support board be placed in the front to make it possible for patients with multiple sclerosis, who have difficulty controlling spastic arm movements, to brace their thumbs up against the support board and keyboard with the other eight digits.

Many of these clients due to



their physical limitations are unable to complete the written word for communication. This is due to lack of control in manipulation, dexterity, and decreased strength. Yet through therapy patients are capable of using the computer to accomplish this task.

My thanks to the ARIE Foundation volunteers for their computer donations to the veterans affairs hospital in Brockton, Ma. I use the computers as part of group therapy for mental stimulation, cognitive comprehension and memory skills for my V.A. Hospitalized patients therapy. ■

*You can help the hospitalized veterans. The ARIE Foundation is now looking for donations of Apple Powerbooks. Remember your donated Apple and Macintosh computers help V.A. Hospitalized veterans in their stay and recovery.*

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has toured the USA several times.

The only (distant) relative we have found around Skien is Jan Christensen, mentioned below. If we go back six generations, and he goes back eight generations, we come to a common ancestor. In my relationship terminology, that establishes a sixth grand aunt/uncle/nephew relationship among us.

### Telemark

Our explorations in Telemark were made possible by the generous help of five Internet correspondents there that I had discovered over the period of about the previous three years. These are:

- Jan Christensen, a talented and well equipped non-commercial genealogist in Skien.

- Gard Strum, another talented and well equipped non-commercial genealogist in Skien.

- Terje Bestul, a Lutheran (national church of Norway) priest in Stokke, not genetically related to us, but using the same surname because his ancestors operated the Bestul farm for 20 years after my paternal grandfather and great grandfather emigrated from there in 1861. I met Terje through his now son-in-law, Ole-Harald

## An Internet-Assisted Genealogical Visit to Norway

by Alden Bestul

**H**AD IT NOT been for the Internet, my sister (only sibling), Joyce, her husband, Gene Schrader, my wife, Marie, and I, would undoubtedly never have made our three week visit to Norway between Fri 13 June and Fri 4 July, 1997. The dominant motivator for this trip was to explore about equally Joyce's and my father's and mother's ancestral places:

- in the Luksefjell annex chapel area of the parish previously known as Gjerpen just north of Skien in Telemark, Norway, from which my father's people emigrated in the 1860's,

- and on and around the very large island of Bremanger in the entrance of Nordfjord about 100 miles above Bergen, on the west coast, from which my mother's people emigrated around 1890, as well as to meet and remeet many present day relatives, on the order of second cousins, and more distant kin, around Bremanger. I had visited Bremanger for a few days

alone in 1956, and with my nuclear family in 1964. Nine relatives from there had visited the USA for a family reunion in Sioux Falls, SD in 1993. One Bremanger relative, and her husband, who live in Asker, near Oslo, are members of a folkdance group that



*The Macintosh is a world-wide phenomenon, and is in turn the product of many minds from many cultures. So a side trip to Ellis Island seemed in order but alas, no Macs were available. One exhibit does feature an abacus. Photo © 1998 Lawrence I. Charters*



Mykland, who married Terje's daughter Katrine. Ole-Harald responded to the web site of John Bestul, a Wisconsin Bestul (see later), whose brother Dan referred me to Ole-Harald. As far as serious searches have determined, Terje's is the only family with the Bestul surname left in Norway now. Apparently all the rest (beyond those who changed their surnames with changing farm location as is usual), probably mostly my relatives, have immigrated to the USA, where the Switchboard web site now shows about 200 telephone listings under the name Bestul.

- Jens Barland, a sub editor of one of Norway's largest newspapers, in Oslo. He responded to an inquiry of mine in the guest book of the University of Bergen's Historical Institute's web site for the Emigrantprotokollane for (emigration records from) Bergen. His motivation was that he is acquainted with Terje Bestul, above, and noticed Terje's and my common surname, which turns out to be very rare in Norway now.

- The "lodge Bestul" web site for the present building on the Bestul farm. This is now used as a rental lodge, mainly for moose hunting in the fall, and fishing in the spring and summer. The contact man there is Barry Ord Clarke, Fiskekonsulent til: Luvenskiold-Fossum & Treschow Fritzie. The Bestul farm is part of the 85,000 acre Luvenskiold estate.

### Bremanger

Our visit in Bremanger was much less dependent on, but our appreciation was greatly enhanced by meeting in person, the following two Internet correspondents:

- Sture Thorgaard of Floru, Norway, which is one of the main ports for Norwegian North Sea oil. He provides access to the data base of all customers of a large business in Ytre (Outer) Fjordane, the western part of the Sunnfjord part of the county Sogn og Fjordane, where Bremanger is lo-

cated. He responded to a surname list I posted in the GENNAM-L genealogical mailing list.

- Frode Iglund, a previously unidentified third cousin, who grew up in Bremanger and now lives in Bergen. On Christmas eve 1996, while visiting his mother in Bremanger, he responded to an inquiry of mine in the guest book of the University of Bergen's Historical Institute's web site for the Emigrantprotokollane for (emigration records from) Bergen.

### Internet Preparations

Before we left the US we used the Internet to:

- Receive from Jan Christensen and Gard Strum, over a period of almost a year and half, the substantive framework of our paternal ancestry in Luksefjell, and also about ten miles west of there, across north-south oriented mountains, rivers, and swamps, in Sauherad parish.

- Rent a six passenger van in Skien to explore the area around there with guest-guides from there.

- Reserve hotel rooms for 16 June to 19 June at the Dag Bondeheim (farmer's home), "the most 'Norwegian' hotel...[in Skien]...", where they serve good Norwegian home-made dinners everyday. And not too expensive either."

- Reserve lodge Bestul from 19 June to 24 June. This included "Jonsok", midsummer's eve, when traditionally most of Norway seems aflame with Jonsok "bl", huge bonfires. Actually, those are now pretty tightly restricted in forested areas, such as where we were.

- Arrange with personnel at lodge Bestul to provide us with the following food items: fresh caught "Fjeld Orret" (scrumptious mountain lake trout - much like salmon) moose meat, edible wild mushrooms, special Norwegian cheeses, really fresh caught codfish (Torsk), Norwegian lingonberry preserves, etc. And for us to bring in our full duty free quotas, one

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liter per person, of their favorite hard liquors at US prices, which I was amazed to learn were less than one-fourth the domestic Norwegian prices.

- Correct our misunderstanding that Stokke, where Terje Bestul lives, was on the east side of Oslo Fjord, where it would have been very difficult for us to visit, and was really on the west side, which was right on our way from Oslo to Skien by train.

- Arrange with Jan Christensen and Gard Strum for exploratory excursions, accompanied by themselves, or people recruited by them, to the almost a dozen of our ancestral places in each of Luksefjell and Sauherad respectively.

- Learned from Jan Christensen that a bridge on the simplest auto route from Skien to farm Bestul was out for reconstruction, and was due for reopening just before we took the rental of farm Bestul on June 19. So whether we would be able to use that simplest route, or be inconvenienced by a more complicated one, depended on whether that reopening date was met.

- Arranged with Gard Strum to use his email address as a forwarding address for us in Skien for possible email correspondents who we so informed. ■



# Difficult Tuesday Night Technical Questions And Their Answers

**A**H, SUMMERTIME and the Tuesday Night crew turns its thoughts to house cleaning. We found an assortment of questions that looked too hard to handle when they were first asked. So, with some time on our hands, we dug through the archives of the illiminata of Macdom, MWJ, *The Journal for Serious Macintosh® Users*. We asked the gurus three from our pile of questions and got three answers. Now who asked these?

## Font-auto-matic

**Q:** Why can't Suitcase, or ATM, or any other program automatically open fonts that are present on disk but not open when I open a document (for example, if a QuarkXPress file needs a Futura Bold face from Adobe and a Arbitrary font from Emigre). It needs to be automatic, not some setting that opens some suitcase each time a specific program is launched. Where is it?

Well, it almost exists, but not quite. Making fonts available still seems a lot easier than it actually is, and developers can easily run into problems playing with ideas like these, not to say that many haven't tried. You may recall that fonts on the Macintosh have historically been stored as regular Mac OS resources, in the resource fork of (originally) the System file or (later) suitcase files. When a program checks for fonts, it's really checking for available resources of the appropriate kind. Theoretically, then, making more resources available makes more fonts available. Amaz-

ingly, it pretty much works that way.

It's just not easy to make more resources available. Programs that do this have to patch the system heavily enough to open new files in the system's resource chain—otherwise, newly-added font files will show up in one application but not another, since resource chains are separate for each application for old compatibility reasons. This isn't impossible, but it's not trivial and requires some testing. If a utility gets it wrong, you might find that your Futura Bold is available in QuarkXPress but mysteriously vanishes, from, oh, PrintMonitor's sight. That's not helpful.

There's also the closure problem. Since fonts originally were (and without extensions, still are) available from startup to shutdown, many programs take a font inventory when launched and assume (yeah, we know) said fonts will continue to be available. Utilities like Suitcase and Adobe Type Manager Deluxe can force the system to realize fonts aren't available anymore by flushing the font caches (full of pre-calculated character widths, mostly), but if SpudWrite thinks Futura Bold is a valid option, it might try to use it even though it's already gone, and depending on the particular code could crash. (A lot of applications handle this situation more gracefully today than they did when Suitcase was first released a few hundred years ago.) So writing a utility to manage these fonts isn't quite as simple as you might think, but it can be done. Alsoft's Master Juggler and

Symantec's Suitcase (mostly the latter) have been staples of the desktop publisher's trade for many years. Suitcase 3.0 added precisely the feature you don't want—it can open a particular set of fonts every time a given application is launched, but for compatibility reasons, it doesn't close them automatically. It's also scriptable, so you can open any font you want at any time from an AppleScript, which gives some nifty power to the also-scriptable QuarkXPress. But it's not nearly as transparent as what you want, which is for fonts to open automatically if you have them and a program wants them.

It turns out there's a catch here as well, and it again relates to programs that build font lists during startup. This is an eminently reasonable thing to do, because building that list can be time consuming; programs that try to do it only when they need to display it seem unresponsive or sluggish when a click on the "Fonts" menu creates a 15-second pause. Unfortunately, it interferes with things. Suppose you start up FileMaker Pro, which inventories fonts during startup (you can even see it doing so in the splash screen). You open a database whose layouts use Futura Bold, which isn't a currently open font. FileMaker Pro already knows this, because it listed all the fonts during startup time. Since it already knows the font isn't present, it's likely to make a substitution on its own instead of letting the system do it with potentially surprising results. FileMaker Pro never "requested" Futura Bold, so how can a font utility make it available?

Adobe Systems has faced this problem for several years, ever since the first commercial release of "SuperATM," the version of Adobe Type Manager that would supply "substitution fonts" of the right sizes for those missing on your system. This is almost exactly the same technology used in Adobe Acrobat. The substituted fonts aren't supposed to look the same as the missing typefaces; they're



merely supposed to have every character at the same width as the original, so features like justification, word-wrap, centering and other alignment functions all work properly. But again, SuperATM couldn't substitute for a font it didn't know you wanted.

To get around this problem, Adobe started a developer education campaign through some technical documentation. Apple spent years telling developers to store font references by name and not by ID number, since those numbers could change from system to system to avoid conflicts. The Mac OS has a routine that turns a font's name into its ID number, necessary to get QuickDraw to use it. Adobe went one step further and asked developers to call this routine even if they knew the font wasn't currently available. SuperATM intercepted it and created a substitution font if necessary, and everyone was happy.

The same technique works with the new ATM Deluxe 4.0, except it does more. It still provides substitution fonts if the originals aren't present, but ATM Deluxe can optionally open font files it knows about anywhere on your system if a font inside them is requested. It keeps a database of all fonts you have available, and matches all number requests against them, opening as required (or as allowed; it's an optional feature). Like Suitcase, the files aren't automatically closed, because ATM has no idea when any program is "done" with a font. If you go all the way and add Adobe Type Reunion Deluxe 2.0, you'll also get the option of having font menus display all fonts in the ATM Deluxe database, not just those currently available. It patches the system to make programs think all the fonts are available; when you try to use one of them, the application asks for the font number, and ATM Deluxe takes that cue to open the font file. Not foolproof, but pretty nifty, especially

in combination.

The catch (you knew there was one, didn't you)? Not only do the two programs cost bucks when purchased in a bundle, but they also add this font opening feature only to Type 1 fonts. Adobe still has zero interest in making TrueType easier to use (or even possible to use); while both ATM Deluxe and Adobe Type Reunion handle TrueType fonts with others, they do not provide the automatic opening feature for anything but Type 1 fonts. There is no technical reason why this is the case, but there you have it. If you're only working with Type 1 fonts, you won't find this to be a problem, but you might otherwise be surprised to be using Quicken and suddenly find that your QuickType font isn't available even though ATM Deluxe knows all about it. QuickTime and TaxType are TrueType fonts; ATM will let you open them, but it won't do it for you. Adobe supports its own.

### **Katy Bar The Door**

**Q:** How do bar codes work? Is it easily possible for a person to look at a bar code and decode it? **A** If you're one of those people who think it's "easy" to write The Lord's Prayer twenty-five times on a postage stamp, you'll love bar codes. The rest of us will try to do more constructive things. Bar codes are yet another way of encoding information for computer usage.

The most familiar method for most computer users is ASCII, which encodes all of the characters you can type (without using the option key on a US keyboard) into a seven-bit number between 0 and 127. The computer knows which letters correspond to each of these numbers—when a byte of an E-mail message is 65, the computer displays RAS. When it's 70, you see RES, and so forth. Since computers only work with numbers, such an encoding is necessary. There are people who can look at strings of ASCII numbers (in decimal or hexa-

decimal) and read them as if they were decoded, but those people generally don't get out much. While ASCII is designed to facilitate storage, display and transfer of text, bar codes are designed to encode small amounts of information in a printed form that's easily and quickly transformable back into computer-level formats. Think of it like optical character recognition, except faster and more limited.

OCR tries to read most forms of text you can scan in, but bar code readers examine a specific printed format for small amounts of information. The most popular bar code formats, like Code 39 and UPC/EAN (Universal Product Code in North America and European Article Numbering elsewhere, also used for ISBN book numbering), consist of alternating black and white stripes of given widths. Each character in the bar code is composed of bars of a certain width in a given pattern, much like Morse Code consists of sounds in specified patterns.

A bar code reader, typically a laser beam, notes which portions of the bar code are dark and which are light, converting the pattern into a signal which is analyzed and digitized into computer-manipulable forms. As long as the laser beam stretches across the entire bar code, the specific orientation isn't as important. Even if the beam slants across the bar code, the ratios of black ink to white space will remain the same, and that's how these things are measured—if the sizes had to be absolute, then minor variations on product labels would kill grocery store scanners.

But if the code for a letter is something like "five units of black ink, ten units of white and three units of black," those ratios hold even when tilted because all of the bars are tilted. Some bar codes have solid black lines across the top and bottom to tip off scanners that they're out of bounds. The UPC/EAN bar codes also include a checksum digit at the end (they're

entirely numerical codes), along with some control bars on the ends and in the middle, so a scanner can figure out which end is up during a reading operation. The ratios are designed to be easily detectable by scanners, but they're too fine-grained for most people's eyes to discern; the laser can handily record that a thick bar is exactly twice as thick as a thinner bar, but the human eye, without the assistance of a grid, generally couldn't discern between twice as thick and 1.8 times as thick as a thinner bar, and that makes all the difference. That's why you sometimes see printed underneath the bar code, especially with UPC/EAN bar codes. They're simply to assist humans; they represent the exact same digits encoded in the bar code above (try comparing patterns for identical digits and you'll see—although don't be fooled, because UPC/EAN bar codes use different bar code patterns in the two halves of the code).

Deploying bar codes on the Macintosh isn't particularly difficult—if you can get a bar code reader, all you need is a way to print them, and that's easily accomplished in virtually any program with bar code fonts such as those from River's Edge, in both TrueType and PostScript formats. As long as your bar code reader doesn't require special ink or toner, just set up the system with the bar codes you want to use, print them out with the chosen font, and have yourself a laserific time.

If you think the reader may be unreliable enough to require occasionally hand-keying of information, go the UPC/EAN route and print the encoded information beneath the bar code. That's about the only way you'll be able to decipher it without mechanical help.

**Plugging In To Modules Q:** How do plug-ins work with an application? I've heard about entry points in connection with externals and the like but

have no idea what they are.

**A:** Very well, thank you. This is probably not what you had in mind. Suppose you're building a house. You'll generally want to

let people in and out of the house, so you'll want to install a few doors. It's up to you where they go, but you typically want to make things as easy on the residents as possible. You can put the front door on the roof, but you probably shouldn't. If you make it hard to get in and out, people won't want to visit or live in the house; if you make it easy to navigate, people will enjoy their time in the house. The point, however, is that the placement of everything is up to you, the builder. If you have a specific need for a door on the roof, you can do it. You just have to decide how you want it done and do it. In computer terms, you're defining how people will interface with the house.

Every product, be it software, consumer electronics or even automobiles, must define ways to interface with third-party products if such an interaction is to be possible at all. Every car radio must have power, connections to speakers and perhaps a connection to an antenna. If the auto manufacturer doesn't provide those services in a defined way near the place where the radio goes, you're not going to be able to hook up a radio. If a television set has no video input jack, you're not going to feed it sig-



*Most out-of-town MacWorld Expo visitors traveled to New York by train or plane, and may have missed an interesting sight: the New York Police Department has its own tow trucks. Would Washington, DC, be better or worse off with police-operated tow trucks? Photo © 1998 Lawrence I. Charters*

nals from a camcorder. And if software products are not organized to allow interaction with other software, it's not going to happen.

When a programmer decides that allowing third-party code extensions would be a good idea, he has to arrange his code to make room for the modules other programmers will write. He might decide to get the plug-in's names from their file names, so he can display them in a menu. When you pick one of the plug-ins from that menu, he'll load the module itself—but since he's doing the designing, he can specify that format however he wants.

Most plug-ins use TCODEU resources to do the actual work, but some have code in resources of other types (like TXCMDU), and some don't keep code in resources at all. The application programmer defines a way that the module can get control, called an entry point because that's where the flow of control enters the module. The entry point is often simply the first byte of a plug-in; the application program tells the microprocessor to execute instructions at that address, and presto! The plug-in is up and running. The most successful plug-in architectures go quite a bit



farther than just dumping control onto third-party code in a defined way.

Programs like HyperCard and Photoshop also make available many of their own internal routines to the authors of plug-in modules. A Photoshop plug-in might want to work on a selected area of an image, or it might want to operate on the entire image, so it has to be able to get both of those areas from Photoshop. These are sometimes named call-backs, because the application "called" the plug-in module, and the module is calling the application back to get more information or to perform services. HyperCard TXCMDU modules can get HyperCard to parse and execute script commands; Photoshop plug-ins can ask the application to give them standard palettes, windows, image information and much more. If such services aren't provided by the host application, the plug-in authors have to create them and build them into the plug-in, which makes the modules bigger and promotes inconsistency, since any plug-in and the host application might try to do the same things differently.

QuarkXPress makes over 750 internal routines available to XTension developers, so they can really tap the power already built into the program in new ways. But in the end, it's simply a matter of design. Just as a VCR designer has to decide what size the tapes will be, and a removable disk drive designer specifies how big the cartridges are, a software developer creates a framework for hosting third-party plug-in modules, and other developers write plug-in code to that specification.

It's different for every application, and the level of communication between plug-in and host application varies from case to case, but the application programmer gets to make all those decisions. And if he screws them up, the plug-in developers will certainly let him know. ■

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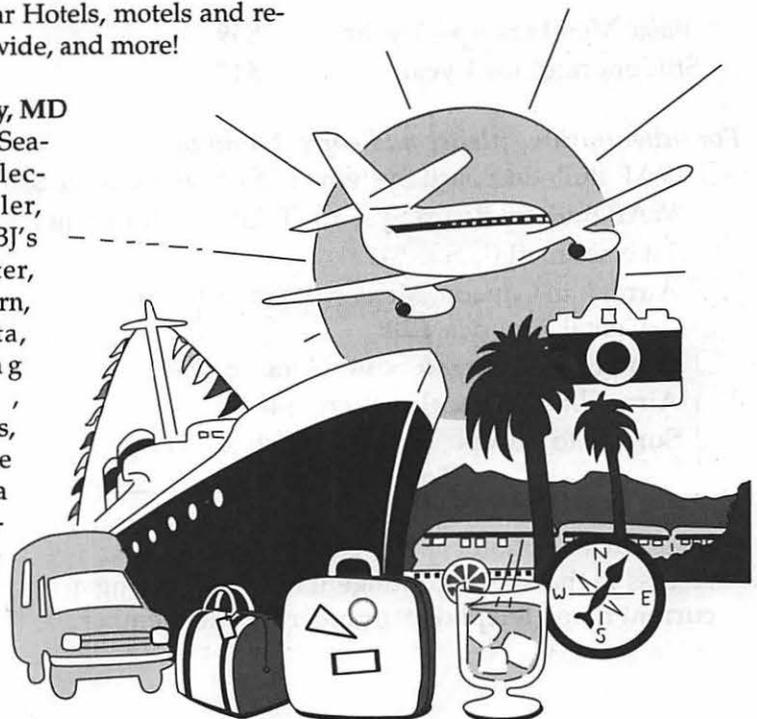
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WAP has many Special Interest Groups (SIGs) and activities. Fill in letter next to area of interest. J=Join Group, V=Volunteer

AppleWorks SIG_____	HOTLINE_____
Apple II GS SIG_____	HyperTalk SIG_____
Apple III SIG_____	Mac Programmers SIG_____
Art SIG_____	
CAD SIG_____	
Database SIG_____	NOVA Educators
Disabled SIG_____	Mac/Apple
Disk Library_____	Users SIG_____
EdSIG (education)_____	QuickTime SIG_____
Excel SIG_____	Stock SIG_____
Game SIG_____	Telecommunications
Genealogy SIG_____	SIG (TCS)_____
<input type="checkbox"/> I can serve as a	Women's SIG_____

Hotline contact for \_\_\_\_\_

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- WAP Bulletin Board System (TCS)\*\* with e-mail \$20
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\*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)

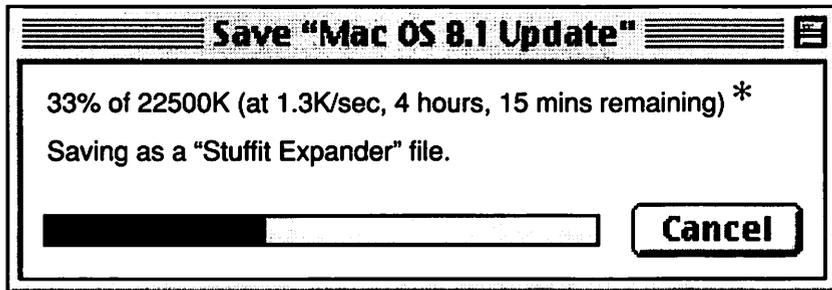
- Apple II
- Apple II GS
- Apple III
- Mac 400k
- Mac 800 k
- Mac 1.44 k

Please circle Yes or No for the 2 items below.

1. My name, address & phone number may be published in the membership director.  
 Yes      No.
2. 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

\_\_\_\_\_  
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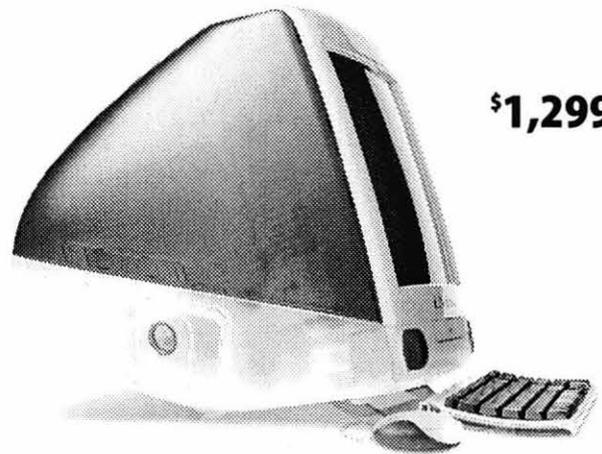
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