

The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 19, Number 1

TCS Explorer Service—16

**Technical Assistance on
Tuesday Nights—20**

**Those Language Translation
Programs—22**

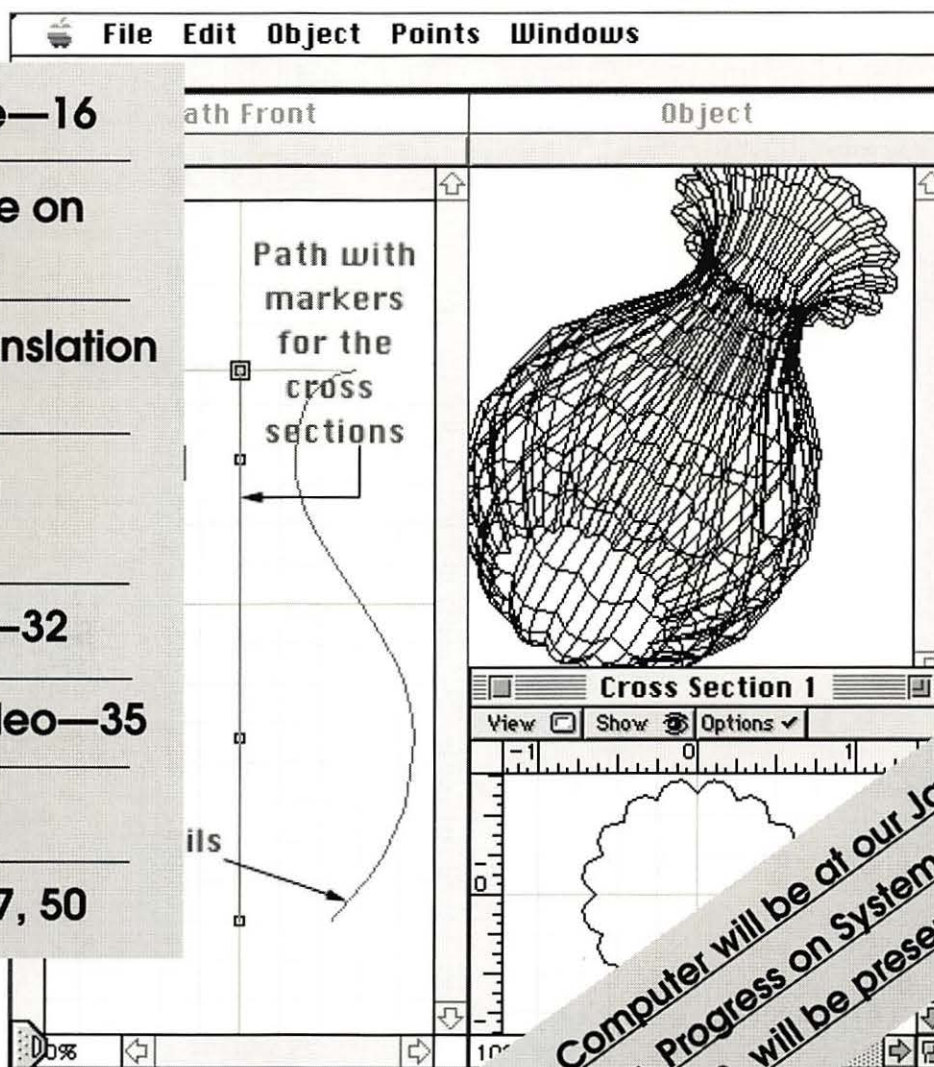
**3M Precise Mousing
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Graphic Tips in 3-D—32

Low-Cost Digital Video—35

Artist on Exhibit—42

Updated Hotline—47, 50



Apple Computer will be at our January meeting. Progress on System 7 and System 8 will be presented.

washington general meetings

Jan. 25, 1997
Apple Computer
(a MacOS clone
vendor)

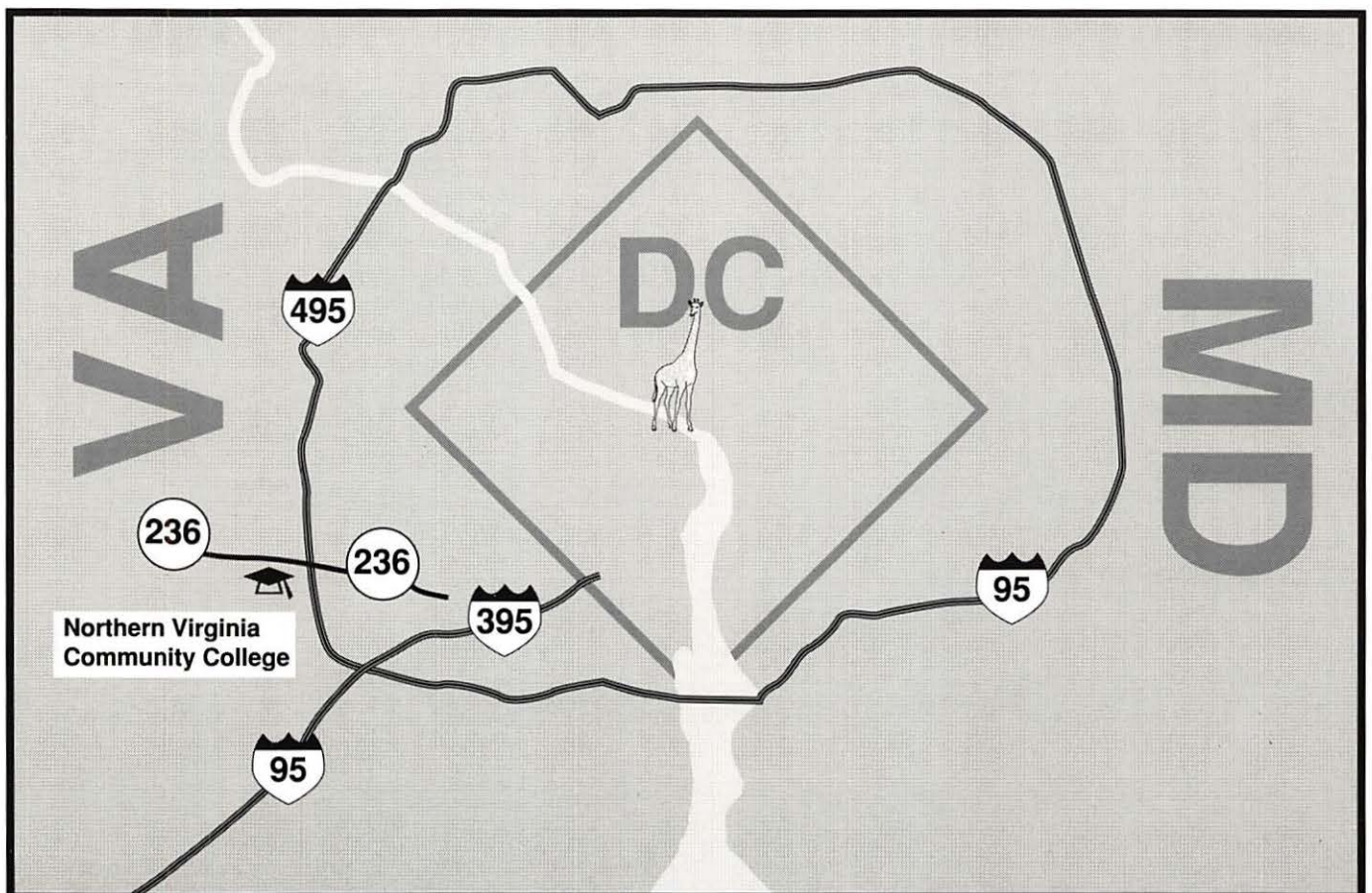
Northern Virginia Comm. College
Community & Cultural Center Aud.
8333 Little River Turnpike
Annandale, VA

Feb. 22, 1997
Mariner Software
(MarinerWrite)
Charles Schwab
(investment software)

Mar. 22, 1997
Aladdin Systems
(of Stuffit fame)

Promises But
No Dates Yet:
Adobe, Claris,
Corel, Microsoft

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



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January / February 1997

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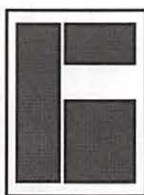
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Advertising in the Journal

Some Orientation Possibilities



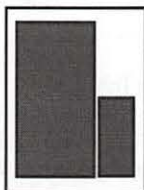
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Sixth Page	\$125	\$106	\$93	\$75

Special guaranteed positions incur a 10% surcharge

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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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Deadlines

Writers' submissions

Mar./Apr. Jan. 18
May/June Mar. 18

Editors' submissions

Mar./Apr. Jan. 22
May/June Mar. 22

Ad space reservations

Mar./Apr. Jan. 18
May/June Mar. 18

Camera-ready ad copy

Mar./Apr. Jan. 22
May/June Mar. 22

★★ *These deadlines have been changed in order to get journals to you earlier in the month. Please plan your article submission accordingly. Thanks.*

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 type-setting at The Publishers Service Bureau.

The page layout program used was PageMaker 5.0, the word processing program was Microsoft Word 5.1; the principal typeface is New Century Schoolbook (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



Macintosh



Apple Disk Libraries



Apple II, IIe, & IIGS



Macintosh Disketeria



Apple III (SARA)



General Interest

Postal Information

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

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

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

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Office hours: Mon., Wed., Fri. 10 am—6pm*
Tues. 7—9 pm, Sat. 10 am —2 pm

* The office will open at 1 p.m. on
 the day of the General Meeting

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Office Staff	John Ruffatto (Saturday)

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Telecomm. SIG	Allan Levy	(301) 340-7839
Three SIG	David Ottalini	(301) 681-6136
	Paul Campbell	(313) 255-6497
Women's SIG	Kathleen Charters	(410) 730-4658

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From the President

Your WAP Membership— A Real Bargain

THE LAST TIME we were here I wrote about the death of the Boston Computer Society (BCS). Clearly something went wrong for them. As I read what I wrote (someone has to), I could see that I told you what was wrong with their mechanicals—and ours—and what each had done about them. A user group can have the smoothest running office and the most cost efficient operation, but if it does not have members, it doesn't last! We both started out as users helping users. One reason BCS disbanded was because members no longer saw value returned to them. I do not want that to happen here.

The Pi is a membership organization that exists for members to help other members. So what is that

we *do* that is of value to you? After all, if we don't provide valuable programs and services to you, things that address your needs, then why bother renewing? Look at what your membership gives you.

Here are the numbers. You pay \$39.00 per year to renew. Add \$20.00 and you get 2.5 hours per day of on-line time to do and go where you want to. Add to that another \$170 the first year (and \$96.00 thereafter) for Internet service. What does that get you?

On-line services

For your \$59.00 you get 900 hours of on-line time a year. You can send a zillion pieces of e-mail and download tons of the Mac and Apple II/III loot we assemble for you on the

bulletin board before you run out of time. For those of you who use an AOL account for e-mail and an occasional wander around glitzland, you shell out \$120.00 for 120 hours. And, it is \$3.00 per hour after that! Hmm, at that rate: 900 hours minus 120 hours times \$3.00 is . . . new \$20.00 rate and instead select the \$5.00 one, you are no better off.

Do you want updates to system software or the applications programs you use? Looking for neat new games or utilities? Try downloading them from a commercial on-line service and watch your credit card debt zoom. Look: System 7.5 Update 2 is 14 disks. Do you want to pay them for over 2 1/2 hours of on-line time, assuming no screwups, or download it from one of our high speed lines at no additional charge. With your membership in the Pi, you don't have to fight the world to get to an Apple Internet site for new software. The Pi has had system updates available to you before those other services had them on-line.

Looking for assistance installing or using the stuff you just down-



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loaded? You stand a good chance of getting faster and more complete assistance from other members of the Pi via our bulletin board than waiting around for the ethers to respond to your plea. Whether you use an Apple II, III or Macintosh, no other service comes close to the value we offer.

Internet

Our rates for Internet are well below any in the area. We work out to \$12.50 per month the first year, \$8.00 the second, etc. Yes, it is true that you only get software that works on Macs, but we guarantee an IP connection or your money back. Darn big of us, ain't it!

Journal of Washington Apple Pi

Sure, the Journal wins awards for looks and content. So what? Well here's what! From tips and hints on the operating of your computer to no fluff reviews of current applications, your Journal is full of useful information written for you by other users like yourself. For example, if you are going to buy an encyclopedia CD for the family, you have a choice of four: Comptons, Groliers, Encarta and Britannica. Actually, if you ask us, you really have a choice between two. You could make an \$800.00 mistake—or read your Journal and bank it. You could pay a dealer big bucks to repair your 'seriously' dead Mac, or read the Tuesday Evening column about how a dead battery can present those same symptoms. The difference in money out of your pocket could easily treat the family to an evening out. And when your brilliance gets the best of you, there is the Hotline page where willing and knowledgeable members are there to help you out of your current mess. Whatever facet of computing interests you, the Journal covers it.

Monthly Meeting

Each month we bring in repre-

sentatives from the computer industry to talk to you about their products. Each meeting is preceded by a question and answer session where any question is a good one. Most of our speakers offer special prices on their merchandise to those who attend and there are always door prizes. Your membership can pay for itself with one purchase from these meetings. Check the inside cover of the Journal for the list of upcoming speakers.

"The Pi is a membership organization that exists for members to help other members. So what is that we *do* that is of value to you? After all, if we don't provide valuable programs and services to you, things that address your needs, then why bother renewing?"

Classes

Whether it is an introduction to the Macintosh, word processing, desktop publishing or the Internet, we offer you classes by practitioners, at members rates. You can pay \$100.00 for a three hour **Intro to the Mac** at some chain store. Our Intro to the Mac is six hours of hands-on instruction from a real Macintosh user, and only costs \$70.00. I'll take six for \$70.00 any time. The same applies to our other classes as well. What am I missing?

Maintenance Night

Can you name the only users group that assembles knowledgeable volunteers to assist you with the installation of software, memory

or general repairs? [I love asking tough questions!] Why I'll bet it is Washington Apple Pi. If you use an Apple II or III, or a first generation Mac, there is no other place to go, period. We have, or know where to find the hardware and software that keeps those machine running. Go out on the street and price the installation of hardware, software, or troubleshooting a recalcitrant hard drive and you will discover the value of your membership. All we request is a donation for our assistance. (Do keep in mind that **Maintenance Night** is not a substitute for those searching for warranty or commercial service.)

Day-in and Day-out

Washington Apple Pi is not just around when the postperson delivers your Journal or just on Tuesday evenings. It is a warm bodied, living, breathing contraption made up of *thems*. *Thems* contribute answers on the bulletin board; *thems* pitch in at general meetings to help new members with their tentative questions; *thems* find parts and software for seriously old machines; and, *thems* volunteer time to organize our Special Interest Groups and staff our booth at shows and conferences.

You don't have to be a computer expert to help. There are lots of ways, fun ways, you can help, from stuffing envelopes, to answering the phones, to delivering membership flyers to your neighborhood store, to just inviting your friends to meetings. Helping us helps both of us grow. Any contribution from you of any amount of time is gratefully accepted; and then you become a *them*.

Do you want me to add all this up—or are you getting the picture? If the answer is yes, tell others about us.

(I think we should include a copy of this list of benefits with each renewal notice—don't you?)

Lorin

Washington Apple Pi Board of Directors Meeting October 9, 1996

THE START OF the meeting was delayed until 8:13 p.m. due to the late arrival of several members who were at a dinner that Not All Of Us Attended. Not that we noticed.

Beth Medlin, Pi Office Manager, promptly put the Board to work, assigning the entire body the task of folding brochures. Next month: origami swans.

Directors present: Lawrence Charters, Blake Lange, Charlie Froehlich, Dave Ottalini, Jim Ritz, Lou Dunham, Dale Smith, Jon C. Thomason, XWXWX (presumably Tom Witte), Lorin Evans, J. David Mudd

Directors absent: Ron Evry, Don Essick, Dave Weikert

Members present: Henry Ware, David Harris

Old Business

Dave Ottalini moved, with a second by Dale Smith (among others), that the minutes to the previous meeting be accepted. The motion passed.

The December Computer Show and Sale (Garage Sale) was discussed at length.

- There was a consensus that it would be nice to have commercial vendors or representatives, in addition to the usual garage sale vendors. Tom Witte and David Mudd said they would investigate.
- Tom Witte stated he was re-

searching a Washington Apple Pi customized coffee mug that could be offered for sale.

- No Board decision for pricing was determined, but Tom Witte suggested \$6 for non-members, \$5 for members, with a discount offered for those who brought in a coupon from the Pi Web site.
- David Mudd and Tom Witte said they would canvas for volunteers to work the show on the TCS and elsewhere.

David Mudd discussed the coupon discount books to be offered for sale to Pi members through both an ad in the Washington Apple Pi Journal and an ad on the Pi web site. He showed samples of the coupon books for DC, Maryland and Northern Virginia.

New Business

Lorin Evans offered a status report on the computers purchased for the tutorial rooms. After talking with a number of sources, he eventually put together a package of seven Power Macintosh 7200/75 computers with 16 megabytes of RAM, 500 megabyte internal hard drives, fifteen-inch multisynch monitors, and assorted keyboards for slightly more than a thousand dollars per machine. The machines were slated to arrive in roughly two weeks.

The death of the Boston Computer Society was discussed. BCS was roughly the same age as the Pi, though it had a different focus and

structure. Several other user groups are in danger of disappearing as well. The examination revealed an interesting paradox: user groups were founded by technically savvy people to learn more about their computers. Now, with computers a commodity item (rather than electronic exotica), there is a greater need for user groups than ever, yet the less savvy customers buying computers do not even know user groups exist.

Lorin Evans summarized the situation: "We are an insurance policy that accepts back-dated checks." The Pi needs to recruit, and retain, members *before* they turn to us as a last resort, after their warranties and tech support policies have expired.

Tom Witte moved, with a second by Lou Dunham, that the meeting be adjourned. The motion passed at 9:26 p.m. ■

Save Your Giant and Safeway Receipts!!

We are collecting receipts from Giant and Safeway and donating them to Washington area schools. Please save yours and send them here to the office. We'll be able to assist local schools to purchase much-needed computer equipment.

Washington Apple Pi

Board of Directors Notes October 1996

Meeting Summary:

Directors present: Lawrence Charters, Blake Lange, Charlie Froehlich, Dave Ottalini, Jim Ritz, Lou Dunham, Dale Smith, Jon C. Thomason, Tom Witte, Lorin Evans, J. David Mudd

Directors absent: Ron Evry, Don Essick, Dave Weikert

Members present: Henry Ware, David Harris

Plans for the December Computer Show and Sale (Garage Sale) were discussed. Among other things, Tom Witte expressed an interest in creating and selling a Washington Apple Pi coffee mug at the show, and David Mudd outlined plans for selling coupon discount books both before the show (through an ad in the Journal) and at the show.

President Lorin Evans offered a status report on the computers purchased for the classrooms. The machines were slated to arrive in roughly two weeks. [The machines have since been delivered and installed.]

The death of the Boston Computer Society was discussed. BCS was roughly the same age as the Pi, though it had a different focus and structure. Several other large groups are also on rocky ground, at the same time record numbers of novices are buying computers and needing assistance.

Lorin Evans summarized the situation: "We are an insurance policy that accepts back-dated checks." The Pi needs to recruit, and retain, members *before* they turn to us as a last resort, after their warranties and tech support policies have expired. ■

(Cyberdog, Live Objects, etc.) at Apple. Don't miss it!

This month's meeting opened as usual with the Question and Answer Session, ably hosted by Tom Witte and Lawrence Charters. This is always one of the most interesting parts of the meeting because you find out that you are not the only one having a particular problem and often you get the fix from our Mac Gurus or other audience members. Of particular interest at this meeting's session was the discussion of the change in AOL's policy. If you are an AOL member, be sure you are enrolled in the pricing plan most advantageous to you. The three plans are a "flat rate" \$19 per month plan, a "limited use" plan and an "Internet" plan. There is some confusion as to how the latter two options work. I'll try to get the official word on these and publish them.

After the announcements, we launched directly into this month's presentations. Once again this month we were graced with two excellent presentations. A flip of the coin gave Cyberflix, Inc. the first slot. Rand Cabus of Cyberflix gave us a brief overview of the product line and development environment used in making the software.

The company was founded in 1993 by Bill Appleton of Supercard fame. They are located in Knoxville, Tennessee and can be reached via e-mail at cyberflix@cyberflix.com. They also have a web site at <http://www.cyberflix.com>. Their telephone number is (423)546-7846.

Their popular CD-ROM games include DUST: A Tale of the Wired West, JUMP RAVEN, LUNICUS and the game that was presented at the meeting, TITANIC: Adventure Out of Time.

According to Rand, almost 2 years, much of it research into the Titanic and its history, went into this game. In fact, the result was so accurate that it was used during some

November General Meeting Report

by Don Essick, Vice President, Macintosh

WOW, THE LAST GENERAL Meeting of 1996 is here already. Next month is the Computer Show and Sale, (Better known as the Garage Sale), on December 14. In January, Jack Quattlebaum of Apple's Atlanta office has promised to return to update us on the progress of System 8 and to let us know what is happening with New Media,

of the salvage dives on the Titanic to show the divers what to expect! The game is so detailed it comes on 2 CD's. It includes a "Tour" option which lets you tour around the Titanic without playing the game.

The premise of the game is that you are a British Intelligence agent who receives "Her Majesty's regrets that your services are no longer required." As you ponder your fate in your London Flat, the neighborhood is bombed and you go "out of time" back to the Titanic. You have a chance to change the outcome of the future by winning the game.

The graphics are stunning, the game looks like a fun challenge and the entire experience looks extremely interesting. I can't wait to try it myself. You had to see this one to believe it. (Hint, hint - you need to attend the meetings.) We also got to see a short preview of coming attractions, a new Pirate adventure game coming next year.

Elsewhere in the Journal you will find a special offer from Cyberflix via GTE Entertainment, the publisher of Cyberflix games. You get almost 50% off the price of the game if you mention Washington Apple Pi and say the secret phrase.

Aaron Bird of DataStream Imaging Systems, Inc. of Lexington, KY (<http://www.datastream.com>) was next up with a demo of WildRiverSSK, a suite of seven "plug-ins" for Photoshop or other plug-in compatible image manipulation tool such as Canvas 5, PhotoDeluxe, Fractal Design Painter, and Color-it, to name a few. According to Aaron, these effects are enhanced versions of some popular filters available on the Internet known as "Sucking Fish." The Japanese author of the filters apparently wanted the new product to be called "Super Sucking Fish" but the marketing people in the U.S. thought it would be best to use another name.

They settled on WildRiverSSK, the SSK standing for Super Sucking Fish (the K is from the Japanese word for Fish which I didn't catch.)

Trying to describe this one in words is next to impossible. You really did have to be there. I'll try anyway. The seven filters allow you to add some really fantastic effects to your text and graphics. I've always wondered how some of the interesting graphic effects I've seen on web pages were done, and now I know.

The first filter is called DekoBoko. Deko is the Japanese word for convex and Boko is the word for concave. This filter lets you give a raised, 3-D effect to an image or text. It is also great for making buttons or other graphics look raised from the surface of the page.

MagicCurtain, the second filter allows you to build custom color texture wave patterns. Impossible to describe but beautiful to behold. Chameleon, the third filter is a color manipulation tool. Suppose you decided to remove all of the red from your image. You would simply select the portion of the spectrum you wished to change and the color you wanted in its place and presto! it's done!

TileMaker is a tool for posterizing and tiling images. You can make a mosaic out of any graphic or image. TVSnow allows you to make portions of a graphic look like they are experiencing "snow" or interference on the screen. It allows you to choose the beam types, length and brightness of the "noise." Finally, MagicFrame lets you create multi-colored frames or borders around images. Aaron called up a picture of the World Trade Center in New York and made an instant gold metallic frame ap-

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pear around the picture. Great stuff for you webmasters in the audience. WildRiver SSK is available for \$99.95 from Datastream at (800) 889-7781.

We concluded the meeting with the drawings for the door prizes thoughtfully supplied by our presenters and other vendors. Winners of software and books are strongly encouraged to write a review for the Journal. It's fun and easy and your fellow Pi members want to know what you think.

Lou Dunham and Walter Forlini won copies of Titanic: Adventure Out of Time. Dust: A Tale of the Wired West was won by Glenn Rounsevell and Julia Wickerham. Richard Cross and Mary Ellen Jehn were winners of Time Lapse. Titanic T-shirts went to Susan Lawrence, Robert W. Moore and Jim Hays.

Time Lapse T-Shirts were presented to Steven Thorpe and David Wilson. Carl Bednar, Larry Ichter, Henry Ware and Greg Knott won Dust T-shirts. FWB Hard Disk Toolkit software was won by John DiBella, Grace Gallagher and Richard Goodwin. A Claris Amazing Animation CD-ROM went to Thomas Berens, John Hyland and Jim Kelly. The ever-popular Apple Services drink bottle left over from MacWorld Boston went to Edward Miller and the Code Warrior T-shirt went to Lou Ward. Books, books, and more books: Internet Explorer Kit to Roger Hirschy, Walking the World Wide Web to R. Ketchel, Sex, Lies and Video Games to Olin Bockes, What's On the Internet to Andy Werthmann, The Internet for Macs

for Dummies to Susan Ware and Free Stuff from the Internet to Bill Wydro.

Thanks to all of you who attended, and special thanks to GTE Entertainment, Cyberflix and Rand Cabus and to Aaron Bird and Datastream Imaging Systems. Many, many thanks to Proxima and Bonnie Allen for the loan of the super projection system that adds so much to our meetings each month. My personal thanks to Beth, Lawrence, Tom, Lorin, my son David and to all of the other Pi volunteers who help make it easier for me to put these meetings together every month. Don't forget: Garage Sale December 14 in the NOVA Gymnasium right across the hall. See you next meeting when Apple Computer will return. Have a happy holiday season. ■

ary 23rd Women's SIG meeting will feature information and discussion about genealogy.

Anyone who is using genealogy software or working on their own family history and has some hints about genealogy research is encouraged to contact Kathleen. A book entitled *Family Gathering* published by the Latter Day Saints which sells for about \$50 and is written for Macintosh users was recommended. It was also mentioned that *Reunion*, genealogy software, can be downloaded from the Internet.

Under New Business, anyone who can carpool to Columbia is encouraged to contact Kathleen for names of others to ride with. It was also mentioned that the Lake Forest Library is offering classes for the Mac on the Internet.

We had a visitor from AOL, David Lawrence, a computer talk show host who wrote the book, *Learn HTML on the Macintosh* with co-author Dave Mark. The book comes with a CD that has lots of software for use on the Internet including BBedit Lite, Fetch, Web Map, and Now Software. He's working on another book presently called *Creating Cool Web Sounds*. He can be reached at learnhtml@aol.com or Lawrence@aol.com.

After David's introduction everyone gave their favorite URL. Here are a few:

<http://www.onsale.com> to see offerings of computer hardware for sale
<http://www.nos.noaa.gov> National Oceanographic AA
<http://www.worldpages.com> world phone books and maps
<http://www.usatoday.com> good for its resources
keyword Opra on AOL
<http://www.veggiesunite.com> for vegetarians
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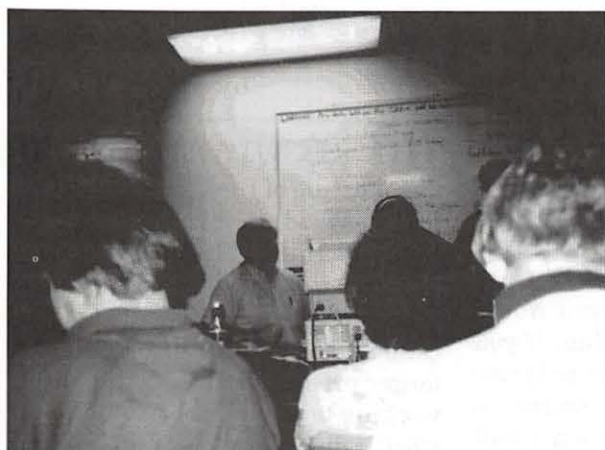


Women's SIG Notes

by Nancy Seferian

THE NOVEMBER 1996 Women's SIG meeting began, as usual, with a delicious dinner catered by Grace Gallagher, giving us all a chance to catch up with each other on our recent computer projects and questions for each other.

After dinner the meeting was chaired by our incoming Chairperson, Kathleen Charters because Tayloe Ross was unable to be there. Old Business included announcements that the Directory isn't finished yet due to problems getting it copied; the semi-annual WAP Computer (Garage) Sale will be on Saturday, December 14 from 9:00 AM to 2:00 PM; and the Janu-



This picture doesn't do the meeting justice. Had you been there you would have seen Lykara and Kathleen, assisted by Lawrence, present a clear, concise and witty introduction to creating Web pages, with over 30 people in attendance.

The topic for our meeting tonight was "How to Write Your Own Web Page". Our youngest member, Lykara Charters shared with us the process she used to create her own Web pages last year in completion of a 5th grade Social Studies project. She was assisted by her mother and father, Kathleen and Lawrence Charters. To begin, she surveyed her classmates to answer the question, "Why don't kids like Social Studies?" Her conclusions, based on the survey were that: 1) they don't much like to read or write, but like reading more than writing; 2) and they especially don't like to study the Revolutionary War. This survey led to the topic for her Web pages, which were designed to use the preferred way of learning in combination with the popularity of computers and the Internet in plan to teach a Social Studies subject.

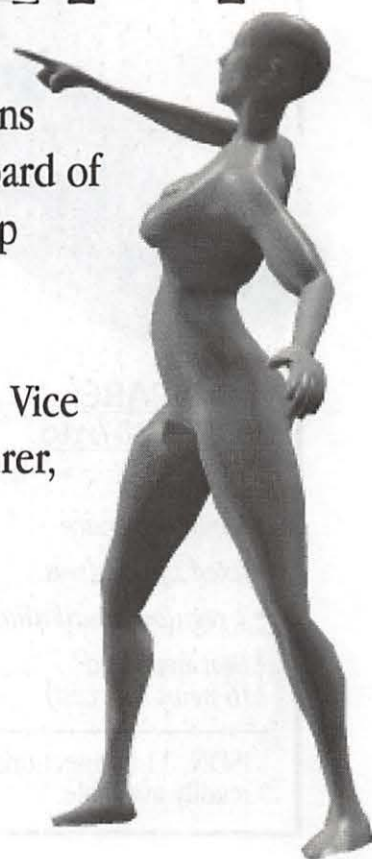
Lykara began by gathering information about her topic from the Internet and wrote the text for the three areas she wanted to cover: the battles and events, a time line, and issues and topics. She eventually wrote the text in ClarisWorks 4.0 because that program allows the user to save text as an HTML (Hyper Text Markup Language) file.

The next step was to open the HTML file in BBedit, a program for writing Web pages that allows you

to easily add tags to your page. Then Lykara created Gifs of red and blue which she added to the time line to differentiate winners from losers. She then searched the Internet for pictures for use in illustrating her pages. Alta Vista (<http://www.altavista.digital.com>) was the preferred search engine because of the ease of use and huge capability. Lower case letters were used for the descriptors because when they're used upper case is included. Using quotes when more than one word is used, for instance, "revolutionary war" ensures both words will be included in the finds. It was emphasized that Web page authors be sure

washington pple pi

is looking for a few good nominations for the May 1997 Pi elections. All Board of Directors positions are open, so help lead the Pi into the next year by nominating someone today for: President, Vice President Macintosh, Vice President Apple II, Secretary, Treasurer, and the ever popular 10 Director positions. Nominations are due by Feb. 22, 1997.



to include title tags for their pages, since they're needed by search engines in order to categorize the page.

The last step was to open Netscape and view the pages from within that browser to see what it would look like. In conclusion, we viewed the pages on the monitor and a printout of the pages was passed around to us. This was a great demonstration and we're all ready to go out and write our own pages now!

A very special part of the demonstration was poetry reading by Lykara and Kathleen from *Joyful Noise, Poems for Two Voices* by Paul Fleischman. Other books that were recommended on the topic of Web page authoring were *Home Sweet Home Pages* by Robin Williams,

HTML for the WWW by Elizabeth Castro, published by Peachpit Press, and finally an engrossing book about the origins of the Internet, *Where Wizards Stay Up Late* by Hafner and Lyon.

Our next meeting will be on the fourth Thursday of January, the 16th, 1997, and the topic will be genealogy.

We would love it if you would join us at our next meeting. If you can attend please R.S.V.P. to Grace Gallagher (703) 222-4570 (Metro) so we can plan for dinner, which is still only \$2.00. Call Kathleen Charters (410) 730-4658 if you would like to be on the mailing list, if you have any ideas for meetings, if you want to help in any way, or if you can carpool from Columbia. ■

QT SIG Meeting

by Stuart Bonwit

THE REGULAR second Tuesday meeting of the QuickTime (QT) SIG was held on November 12, 1996 in the Pi Tutorial Room.

Karen Ackoff showed a number of segments of a multimedia presentation made with Director, part of a larger presentation that she's been working on for school having to do with Indian powwows and wildlife in Montana. The presentation chronicles a seminar she attended in July entitled, "Sharing Place." First, Karen explained a little about Director, a multimedia authoring package. The most significant thing is the steep learning curve!

A segment typically starts with a video clip with voice over. The clip ends in a freeze frame and remains on the screen. A new video clip appears next to the first one and repeats the process, followed by a third clip.

The voice over track occasionally had a bird call in the background which seemed quite appropriate. Karen could have claimed she mixed multiple sound tracks, but, in fact, it was one of her own pet birds singing while she was narrating!

Tom Witte showed some tricks with MoviePlayer: (drop menu) File > Present Movie presents the movie in the center of a black screen; Control key plus mouse cursor on the fwd/rev screen control buttons creates a fwd/rev speed control. He also gave a quick demo of Open Doc from a CD-ROM. This is the answer to Microsoft's 15-pound software packages! Open Doc is a "shell" that uses "Live Action" modules to create the software



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package you need, i.e. a basic word processor, a table creator, a graphics creator, etc. Saving the project saves a list of the modules and allows the modules to be used again on other projects in other combinations.

Tom Witte and Stuart Bonwit showed a number of QuickTime clips from the TCS and the Internet.

A Big Discussion followed on the good-old Mac/PC problem: why everybody knows the Mac is better but the execs, who don't know anything, keep buying PCs because that's what we always had.

The meeting ran way overtime, but nobody seemed to mind!

The next QT SIG meeting will be on Tuesday, Dec. 10, 1996 at 7:30 pm in the Pi Tutorial Room. ■

StockSIG November Meeting

by Morris Pelham

WELL, OK, it did snow the day of our November meeting. And, yes, there was ice. It was cold, too. And dark. So there were only a few of us.

But the other news is good. The Dow hit a new high the day we met, up 38.76 to close at an all time high of 6313.00. For a stock market group, that is great good news. We own many of these Dow stocks.

Mark Pankin now runs a "Two year combined" portfolio of Dow stocks, containing all 5 of the Dow stocks on our 1995 list as well as all 5 of the Dow stocks on our 1996 list. Mark reports this portfolio is up 27.8% from Dec 29, 1995 to 10/31/96.

Mark also brought us a new Dow stock strategy he found on the Motley Fool. All you need to do is buy

two of our Beating the Dow stocks. If you bought the right two each year starting in 1961 with \$10,000 you would now have \$8.29 million after 35 years. Or a little less if you had to pay any taxes or commissions along the way. If I had known this in 1961 when I graduated from High School, and if I had \$10,000 then...

Ah, well, I probably would have bought a car. Or two. In 1961 you could have bought both a new Porche and a new Corvette with that much money, and had lots left over for gas.

Getting back to stocks, my Dow portfolios are also doing well. I bought one more lot of AT&T into the 1996 model portfolio in November at \$34 1/2 because the price of this stock has dropped about 10% since it was added to the portfolio in August. I brought copies of my 1995 model portfolio for everyone, showing a profit of 58.57% to October 7, 1996 and how we got there.

Turning to our Fidelity Select portfolios of mutual funds, Mark reports his accounts are up 30.03% in 1996 so far. Mark also showed us his list of all the possible 1996 purchases, showing a return of 26.4% as of 11/11/96.

My Fidelity Select portfolio is not doing so well, but is profitable in the second half of 1996 and that is a big improvement.

You too can be a participant. Bring your questions, bring your results, show us how well your strategy works!

Thanks to all!

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

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Special note:

There was a problem with the Artist on Exhibit article in the November/December 1996 journal. Please see pages 66-68 to see the complete and correct version.

AOL

by Don Essick

At the November General meeting during the Question and Answer session, there was some discussion about the differences between the TCS, America Online, CompuServe, etc. and the Internet. Part of that discussion related the details of America Online's new pricing policy. Here is a quote from AOL's press release regarding the new pricing:

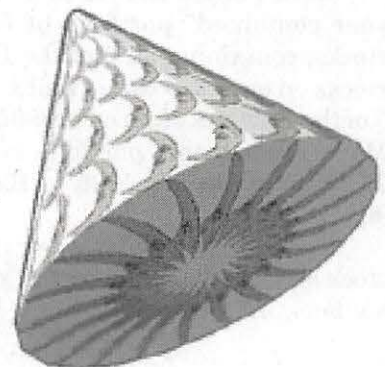
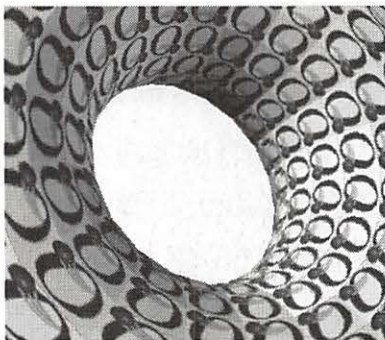
"DULLES, VA, October 29, 1996 -- America Online, Inc. today announced a new competitive pricing structure, a new fall programming lineup and additional "best-of-breed" technology features and design advances aimed at strengthening the company's position as the world's most popular Internet online service and clearly distinguishing AOL as the leader in value, content and service.

The company today unveiled new pricing plans designed to appeal to a broad range of consumers, providing them with unlimited access to the Internet as well as the full selection of services available on America Online for as little as \$9.95 per month. The combination of a com-

petitive price and superior product and service positions AOL to win existing online customers who prefer unlimited pricing for Internet access but also desire the full range of AOL content, programming and features, while capturing the next generation of "mass-market" consumers just entering the market with a compelling proposition. Two unlimited pricing tiers provide a "comfort factor" for heavy and medium users, while a \$4.95 plan offers a starter price for light users.

The pricing plans include:

- a standard monthly plan of unlimited use of AOL and the Internet for \$19.95
- advance payment rates of \$14.95 per month for customers who pay in advance for 2 years, and \$17.95 per month for those who pay in advance for 1 year
- a "bring-your-own-access" rate of \$9.95, offering unlimited access to the thousands of unique AOL features to the people who already have an Internet connection, particularly at school or work
- a light-usage program offering 3 hours of AOL per month for just \$4.95, with additional time priced at \$2.50 per hour."



See pages 32-34 for an article on shareware that makes these 3-D forms.



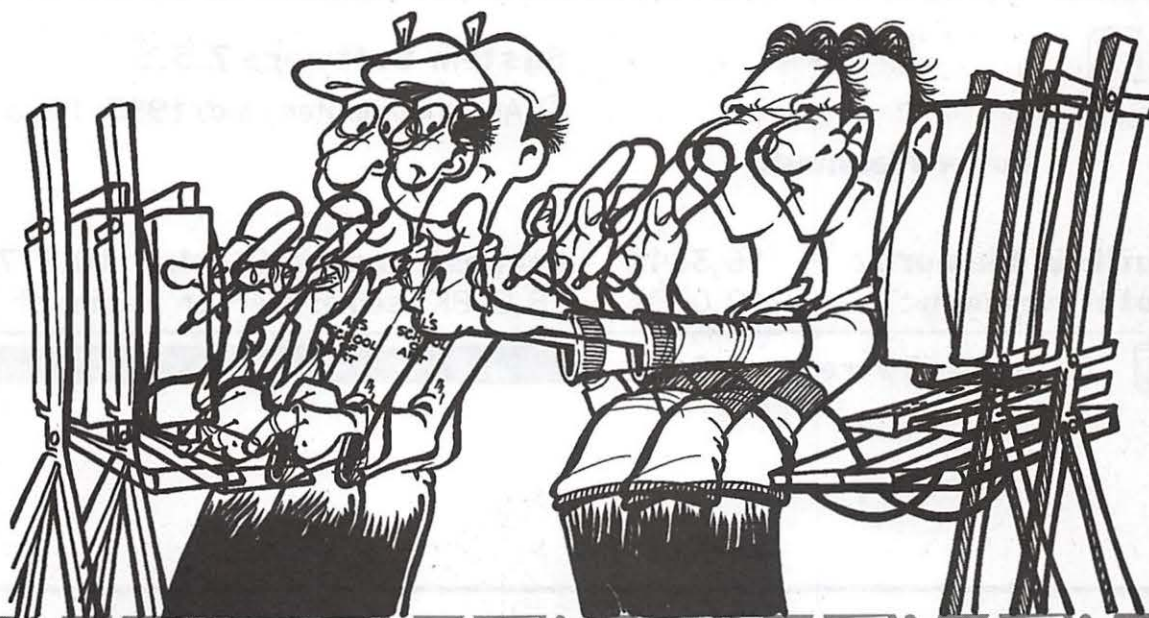
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TCS Explorer Service Open Transport PPP Installation Instructions

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GREETINGS, FELLOW TCS EXPLORER!

If you connect to the Internet using Washington Apple Pi's TCS Explorer Service, and especially if your Macintosh or clone is based on a PowerPC microprocessor, then please read carefully. For the greatest reliability and speed it is important that you use at least Mac OS 7.5.5, with Open Transport 1.1.1 and Apple-supported dial-up PPP software. This package will assist you in configuring your system for TCS Explorer Service, provided your system meets these requirements.

Please be aware that as of this

writing (November, 1996) the current version of Mac OS is 7.5.5. A future version of Mac OS, expected in January, will render much of this document obsolete. If you are running a version of Mac OS greater than 7.5.5, skip ahead to the included "TCS Explorer and OT/PPP" document.

Mac OS System 7.5.5

Before installing the software that came with this package, be sure that you are running Mac OS 7.5.5 or later. To see which version you are running, quit to the Finder, pull down the Apple menu, and select

"About This Mac" or "About This Computer". The upper right corner of the window states which version is in use.

If the displayed version is 7.1.2 or earlier, go no further. These instructions are only for people running System 7.5 or later. Contact Apple to be put in touch with a distributor who will sell you System 7.5 (see Figure 1.).

If the displayed version is 7.5, 7.5.1, or 7.5.2, you need to upgrade using Apple's System 7.5 Update 2.0. This update is available on CD-ROM from Apple, or on fourteen floppy disks from Washington Apple Pi. It is also available online on the TCS, on Apple's Internet FTP servers, and on America Online.

If the displayed version is 7.5.3 or 7.5.3 Revision 2, you need to upgrade using Apple's System 7.5.5 Update. This update is available on three floppy disks from Washington Apple Pi, or online at the locations mentioned above.

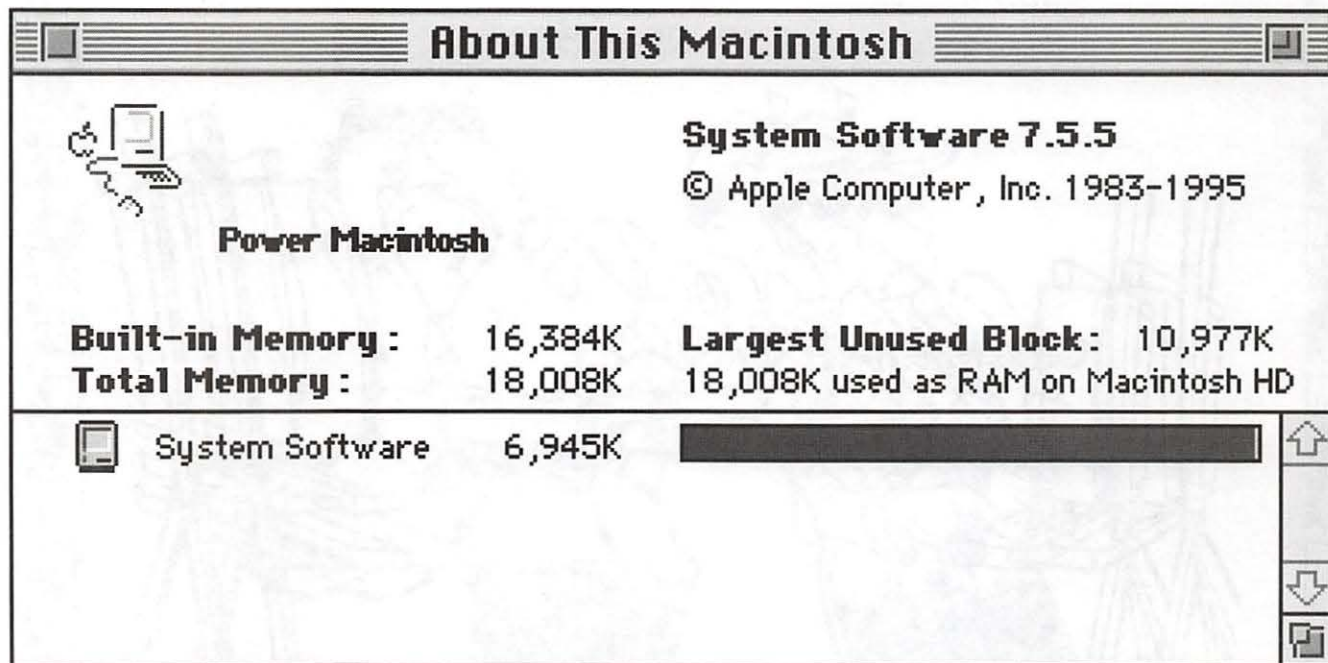


Figure 1.

"If you run into trouble when configuring any of this PPP software, don't panic. That's what the TCS, and your Pi membership, are for. Post a message on the TCS Explorer Board (Conference 1, Board 30) explaining what failed, what exactly showed on your screen, and how your system is configured..."

Open Transport 1.1.1

Now that you know that you have System 7.5.5 running, you need to see that Open Transport 1.1.1 or later is installed. A normal installation of System 7.5.5 includes only Open Transport 1.1. To see which version of Open Transport you are running, open the TCP/IP control panel and press Info. The bottom pane of the window states which version is in use (see *Figure 2*).

If the displayed version is not 1.1.1 or later, you need to install Open Transport 1.1.1. This update is available on four floppy disks from Washington Apple Pi, or online at the locations mentioned above.

Open Transport PPP 1.0

The TCS Crew recommends the use of Apple's special PPP software written specifically for Open Transport. If you are using a version of Mac OS greater than 7.5.5, you probably already have this software installed. (Tell-tale signs include two control panels named PPP and Modem.) As of this writing, OT/PPP 1.0 is newly-released, however the TCS Crew has been extensively testing prerelease versions with

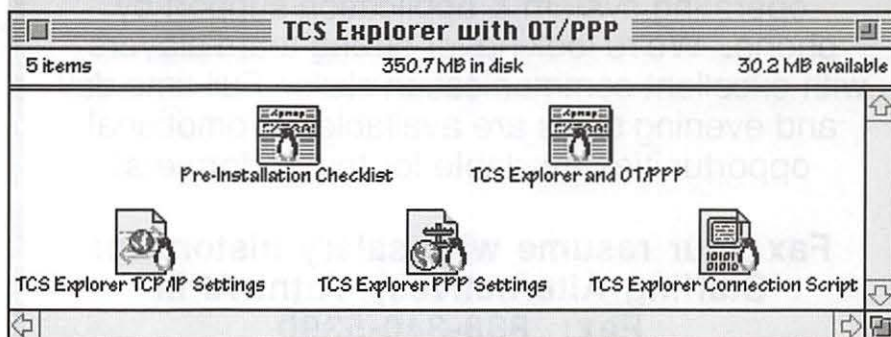
Washington Apple Pi volunteers have created a unique, home-grown, low-cost but full-featured Internet service strictly for club members. This service, called TCS Explorer Service, is designed specifically for Mac users, for home or hobby use.

TCS Explorer Service is successful in part through its reduction of support costs. Rather than paying the substantial costs of a commercial technical support staff, the service leverages the extraordinary skills of regular Pi members through the TCS, the Pi's traditional bulletin board system.

On November 12, 1996, Apple released Open Transport PPP 1.0, software which replaces years of work in Apple's and third partys' prior efforts at dial-up Internet networking software. Within a few hours of this event, the Pi's TCS Crew had uploaded simple and explicit step-by-step instructions on how to install, configure, and employ this new software for TCS Explorer Service.

The TCS Crew's initial instructions can be found in the Explorer Essentials file transfer area on the TCS. It consists of five files: a checklist of system software needed, three preconfigured settings files, and a step-by-step explanation of how to apply those settings files to an already-installed system.

The contents of the first document are provided here for your convenience. The rest of the archive can be found online in area 18, in a file named "TCSEXPOTPPP.SIT". Enjoy!



TCS Explorer Service.

If you don't have this already installed, you will need to get a copy. OT/PPP 1.0 is available on floppy disk from Washington Apple Pi, or online at the locations mentioned above.

Configuration of OT/PPP should take another ten or fifteen minutes, and then you'll be online. Step-by-step instructions are included in this package, in a file called "TCS Explorer and OT/PPP".

In Case of Trouble

If you run into trouble when configuring any of this PPP software, don't panic. That's what the TCS, and your Pi membership, are for. Post a message on the TCS Explorer Board (Conference 1, Board 30) explaining what failed, what exactly showed on your screen, and how

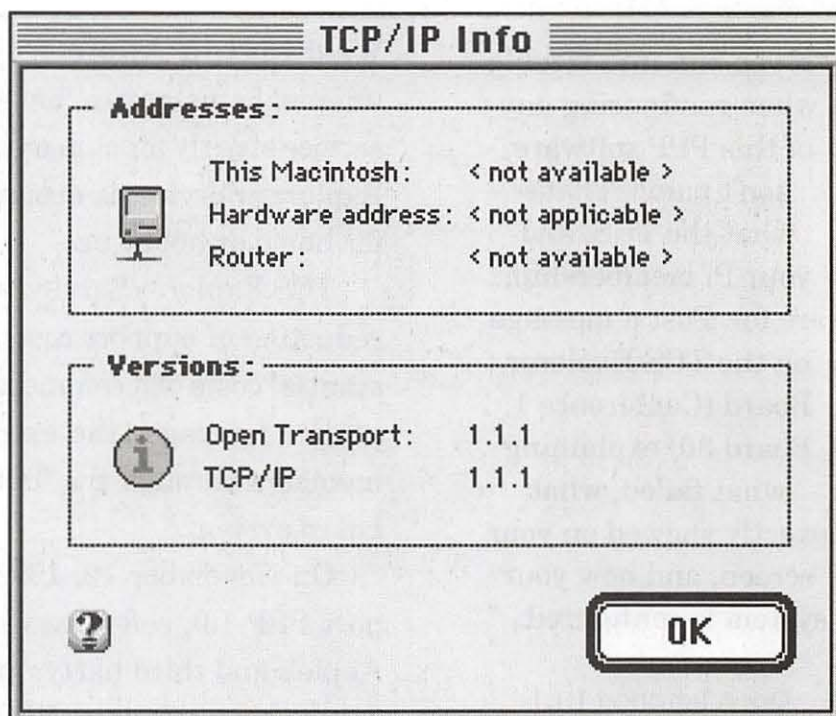


Figure 2.

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your system is configured: brand and model of Mac, brand and model of modem, and versions of software as explained above. Chances are, given that much information, someone will recognize what's going on and can help you.

Similarly, if you run into problems installing the Mac OS system software listed above (and can still use your machine!) leave a message on the Mac OS System Software board (Conference 3, Board 13) with specifics. If, perish the thought, the problem is such that you can no longer start up your machine, flip open your Washington Apple Pi Journal to the Hotline section, in the middle, and call one of your fellow members in the evening before 10:00 PM.

Of course, the software you're installing has been installed by many other people with experience similar to yours. Some stumbled a bit, others had no trouble whatsoever. Best of luck to you! ■

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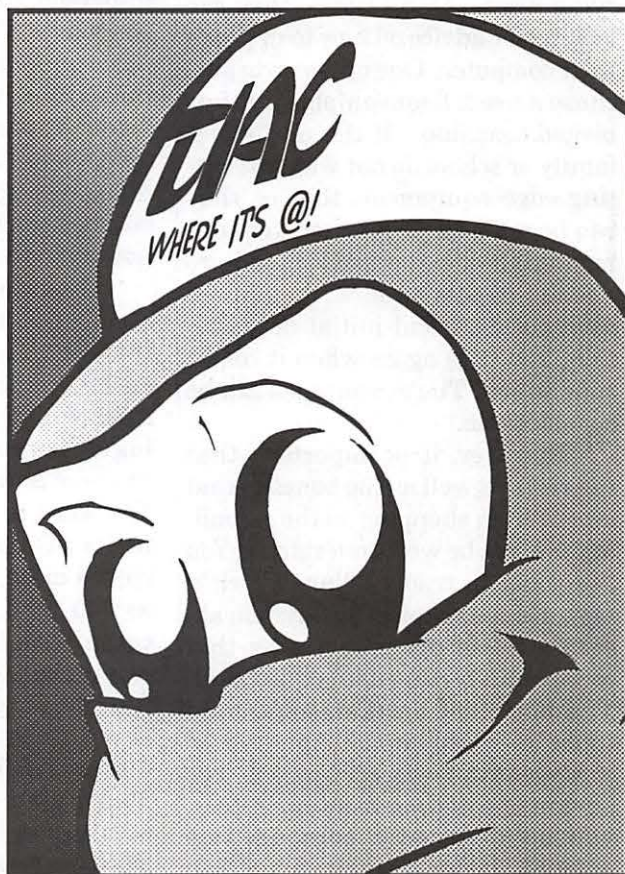
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Tuesday Night— Technical Assistance at the WAP Office

by Lorin Evans

MEMBERS WHO come to the office on Tuesday evenings are not always carrying woes. Many times, they are looking for advice on how to upgrade their computer. One option is to purchase a used, floor sample, or refurbished machine. If the needs of a family or school do not warrant cutting edge equipment, that is, they can be realistic about their requirements, it becomes possible to acquire needed capabilities with a lower cash outlay, avoid initial depreciation, and save again when it comes time to sell. The advantages can be considerable.

However, it is important that the risks as well as the benefits that accrue from shopping on the secondary market be well understood. You are going to trade dollars for risk: for a reduced capital outlay, you absorb more of the uncertainty that comes with buying used equipment. The downside is that something could go wrong within the limited or nonexistent warranty period. The advantage is that if nothing does, you have saved a considerable amount. There are things you can do to increase your confidence in the items you are thinking of purchasing as well as reduce out-of-pocket expenses should, later on, something go wrong.

If this is a commercial transaction, understand the limits of the

warranty, usually 30 to 90 days. Always test all features of the item upon its arrival. If this is a person-to-person transaction, test before you leave. This kind of transaction normally carries a curbside warranty. Once possession changes, it's yours. There are some simple ways for you to check out your newish Macintosh toy. And remember, just because you have come this far, does not mean that you have to buy it.

Essentially you want to make certain that the device can do everything it was built to do. Ask for all cables, cards, and accessories that came with the item. If you are buying a monitor, examine its focus, range of adjustments and linearity. You want to test the major components of a computer: format and eject a disk; listen to the hard drive as you read and write to it; make certain the external SCSI port works; and, check all the keys and functions of the keyboard or mouse. Bring along a blank disk or two; a disk with Disk First Aid, Simple- or Teach-text and the Apple HDSC setup; and, if possible, an external SCSI device and interconnect cables.

When you think about it, right behind that shiny new computer in the store advertisement is the next generation of computer entering production, with still another entering preproduction prototyping. There are great bargains out there, if you

don't have to ride the top of the performance curve — and you follow the suggestions made here. For example, it was just last Tuesday night when

Refurbished?

A Pi member brought in a refurbished PowerMac 7200. Apple Computer takes its demonstrator and returned computers and refurbishes them for resale. They are available through several national chains and the User Group Store. The brand name is synonymous with quality; nevertheless, it can happen that you get one that was reassembled on Halloween eve. This was one. Nothing seemed quite right. To start with, the power supply sounded like the family meow got its tail caught in a door jam. We borrowed a power supply from another unit and pressed on. We formatted/ejected both 800k and 1.44m disks. You would have thought we were formatting sandpaper. We wrote to and read back from the hard drive and played inane games directly from the CD-ROM drive. Nothing unusual there.

Computers refurbished by Apple carry a 90-day warranty. We send the family to the nearest Apple warranty service center where they received a new power supply and disk drive. They could have called 800/SOS-APPL, but the Washington, DC area is fortunate to have some fine Apple service centers. The family also has the option of putting the unit under AppleCare and gain a one year warranty; if they wait until the 91st day, a dealer may request that they bring the computer in for a diagnostic for which a fee is usually charged. There is also the option of purchasing a third-party warranty from one of the local Apple retailers. Whichever option they choose, the savings are well worth their slightly bumpy start.



Wrong Resolution

An exasperated desktop publisher walked in with her 20 inch multiscan monitor and computer. That wall of glass she was carrying would not perform. It did, but now it doesn't. What changed we asked. Nothing, she replied. All she tried to do was change the resolution on the screen. For her troubles, she got garbage and when she tried to go back to the original settings, the computer was not interested.

The monitor was maybe a month old. At the same time the monitor was purchased, more video RAM was acquired. We connected the monitor to another computer and it worked just fine. Now, not all optional resolutions are supported by all monitors. As long as we picked a resolution that was supported by her monitor, it was happy. So much for a bad monitor. We replaced our video RAM with hers and it worked just fine. It would be very rare for the video RAM to be bad. It can happen and you should check different resolutions options of your monitor with any new video RAM just to be certain.

We then asked our computer to generate a resolution not supported by her monitor; the screen went boink. Here is how to unboink the computer:

- clear the parameter RAM by restarting the computer while you hold down the `<command><option><p>` and `<r>` keys. After the fifth bong, release the four keys, but immediately hold down the `<shift>` key. You should see a line on the screen that "Extensions off". Release the `<shift>` key.

- when the computer has finished booting, go into the Preference folder in the System folder and throw away the display preference file. The computer will generate a new one.

- restart the computer.

Slow Motion

The family brought in their LC-III because it was getting lethargic. Actually it wasn't getting — it was, big time. There were two clues:

- folders opened at a snail's pace. When you open a folder, it appears to pop open. Actually the opening is made up of several folders each slightly larger than the last. Normally you are not aware of this; and,

- we could watch each letter in the title of a folder appear on the screen as if it had just been typed.

A classic case of preventative maintenance neglect. First we made the family a Disk Tools disk from which they could boot their computer. We showed them how to use Disk First Aid and rebuild a desktop. We then looked at the hard drive with a commercial utilities program and found serious fragmentation, the byproduct of years of programs and games being installed, removed, and replaced, and documents created and recreated.

After a serious house cleaning, the computer acted as if we had installed fresh batteries. Rebuilding the desktop and checking the directory structure of a hard drive with Disk First Aid are simple tasks. Running those two programs once a month or quarter is not too onerous a task.

Inky Gunk

This is the second time we have visited this story. The symptoms are different,

but the cause and cure are the same. Dad brought in the family StyleWriter 2400. We are told it doesn't work. We turn it on and the printer sounds like someone was trying to shift a manual transmission without depressing the clutch. See, it didn't do that yesterday! Seems Dad took to a repair shop. They told him to just replace it; rebuilt ones cost \$150 and are a good buy. He decided to try us instead.

The StyleWriter series (except for the StyleWriter Pro) are pretty bulletproof. Simple mechanicals, straight-through paper feed and inkjet cartridge with the printhead in the cartridge. The family claimed that nothing unusual had happened to the printer. But when we got to the beveled gear train that both

WANTED



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In Federal Plaza on Rt. 355
1/2 mile North of Montrose Rd.
Adjacent to Bennigan's



feeds paper in and runs the belt that moves the printhead, it was full of black ink. Clearly an ink cartridge had broken inside the printer. The family must have cleaned up what they could and promptly forgot that it happened. However, slick nylon gears and lots of printer ink don't go well together. The gears could not mesh; instead each tried to ride atop the other creating that wonderful grinding sound.

We use an ammonia base spray cleaner for messes like this. Once reassembled, the printer was its usual quiet self. Some things are hard to hide from the Tuesday night sleuths. The donation offered was accepted; we don't tell a soul.

Out Out Gray Stripes

It is hard to believe that we have an answer that is missed by the 'for profit' crowd. Try this one. Take one DuoDock 280, add a 20 inch monochrome monitor and several three inch wide stripes that run vertically on the screen and you have the recipe for a visual headache.

The "repair" shop found nothing wrong with the monitor (correct) and concluded that a Duo 280 does not have enough video RAM to run such a large monitor (wrong). They could have done what we did. Go into the Control Panel folder in the System folder. Open the Monitor control panel and change it from 16 bit color to black and white.

Poof went the vertical stripes. Oh well, I wonder if our member can get a refund on the fee he paid that shop?

If you have a question about your Apple II or Macintosh computer that you would like the Tuesday Evening crew to address, send it via e-mail to <info@tcs.wap.org>, or snail mail it to the WAP office (attention Editor). You are also welcome to join us any Tuesday evening.

Those Language Translation Programs...

by Dan Wages

FOR ABOUT THE past year I have seen software programs on the shelves of computer stores, at quite low prices, which purported to be able to translate foreign languages into English and vice versa. I resisted all temptations to buy one, assuming that they would be pretty much in the vocabulary drill category. A few weeks ago, however, curiosity got the better of me and I plunked down

\$49.95 for a program called *French Assistant*.

Capsule review: after spending a few hours with *French Assistant* I went back to the computer store and plunked down another \$49.95 for *German Assistant*. Based on my experience to date with these two programs, I expect that I will get more bang for my software buck than I have with any other programs I have bought in the past few years.

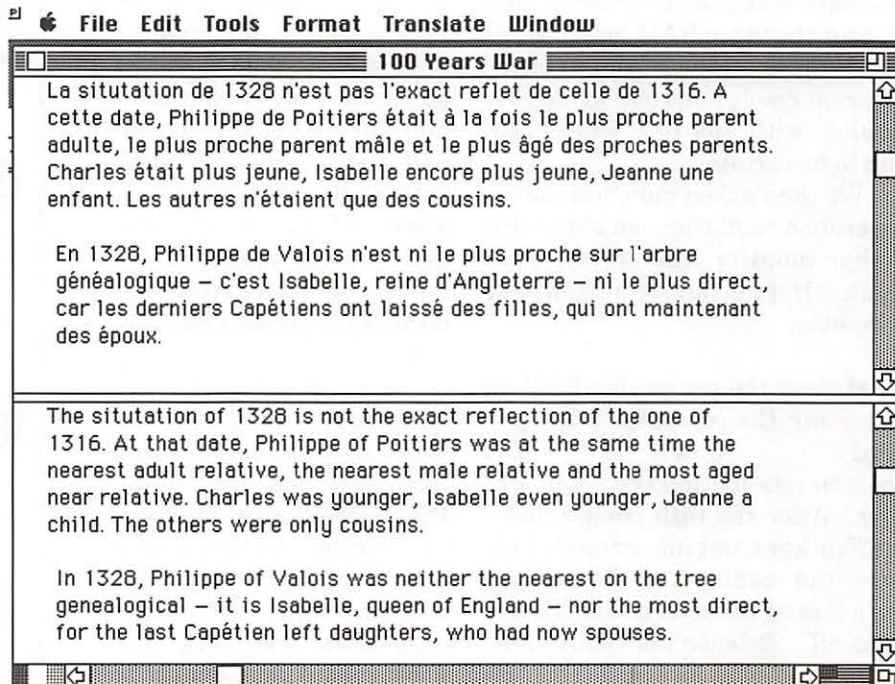


Figure 1. This passage of 99 words I ran through the Word Scan. The 6 words not recognized by the dictionary were all proper names, and I marked them as such and then had the program translate automatically. I then made one change: the French word "parent" can mean either "parent" in our sense or simply "relative," and the program used the first meaning. From the context the proper English rendition is obviously "relative."

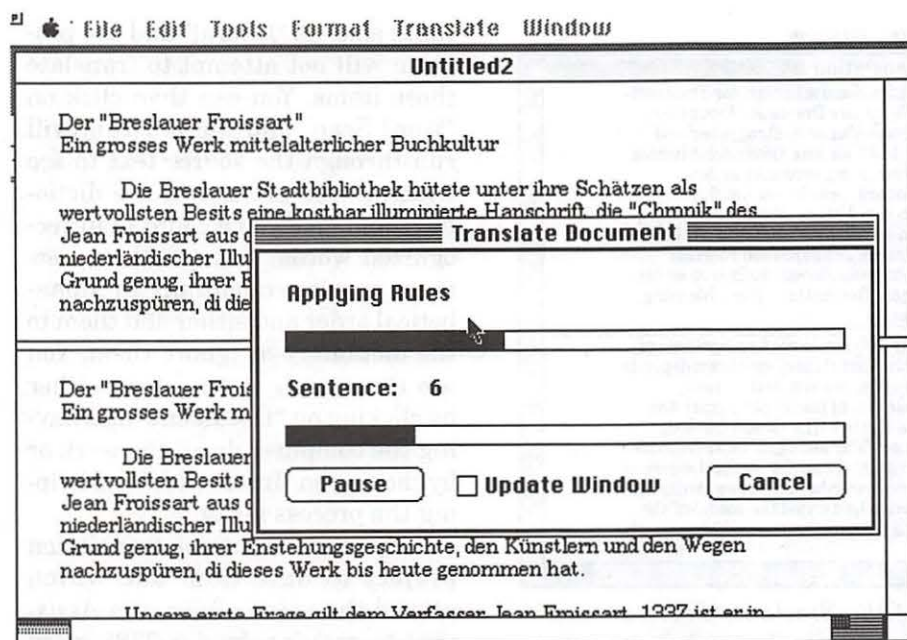


Figure 2. German Assistant in the process of translating the Breslauer Froissart article. You can watch it as it puts each word in and checks its meaning, and then pauses every few minutes to "apply the rules." This all takes quite some time, and unless it's a very short source document it's better to go off and let the computer work by itself.

The old story about computer translators rendering the phrase "The spirit is willing but the flesh is weak" as the equivalent of "The whiskey is good but the meat is underdone" is still more or less true. But if one accepts the basic limitation that translation is never a word-for-word substitution, the language programs can be highly useful.

French Assistant and *German Assistant* are almost identical in operation, but my use of them is quite different because of the vast gap between the level of my French ability and that of my German ability. I read French fairly easily, only occasionally having to resort to a dictionary. My writing ability, however, when I must write letters, is pretty iffy. While I can usually make my meaning reasonably clear, I always have the feeling that my efforts will appear to a native speaker to be those of a semi-literate. My German is worse. I can, if it's absolutely nec-

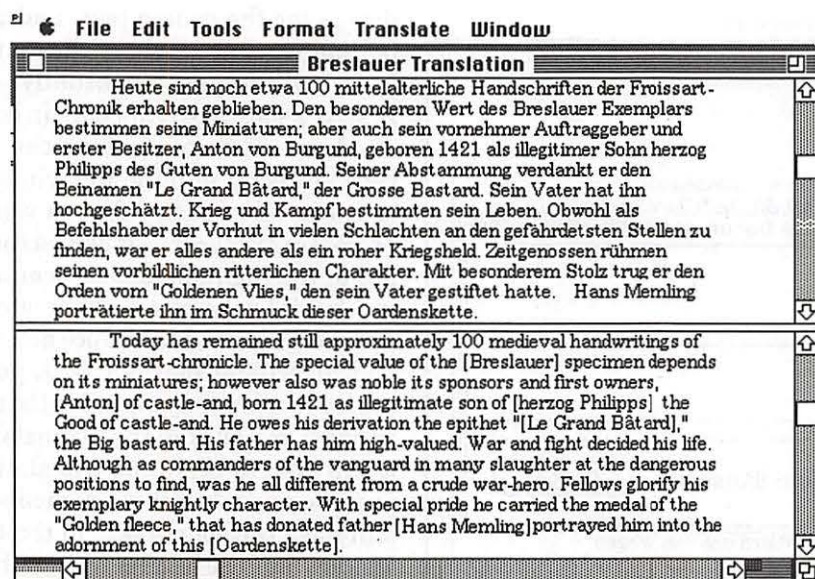
essary, laboriously go through a German passage, looking up every second word, and eventually puzzle out the meaning—often having to confer with my wife to clarify sections that have completely defeated me. Unfortunately, I fairly often run across references to articles in German that I want to read, and I collect them—putting off reading them because of the sheer drudgery involved in the process. It would never occur to me to attempt writing even a simple letter in German. The *French / German Assistant* programs have changed all that.

The programs are quite easy to use. The documentation is excellent—well organized, straight-forward instructions that are clear, and it has an adequate index. When you open the program, a double window appears and you click on a menu item to choose whether you are translating from English to foreign language or vice versa. The top win-

dow is for the source text, and the bottom window is where the translation will appear eventually—at first, the source text appears in both windows. The source text can be typed directly into the top window, or it can be imported from a word-processing program. (It can, according to the manual, also be scanned in—but it has to be a scanner which will recognize and reproduce accents and diacritical marks.) With your source text properly placed in the top window, you click in the "Translate" menu item to begin the translation process, and when it is finished you still have the source text in the top window, but the bottom window has been translated (Figure 1).

There are two basic levels of involvement by the user in the translation process. If you click on "Document" the computer goes through the entire text without any input from the user, making the best translation it can using the primary meanings in its dictionary. If the text is long, this can take some time, and you can go off and rake leaves or do the dishes or something while the computer does its work. This automatic translation leads to some rather strange phraseology of "The whiskey is good" type, but this is inevitable when primary dictionary meanings are applied throughout.

The second level of involvement comes about if you click on "Interactive" in the translate menu. Here the program translates a bit at a time—by the sentence, phrase, or word—giving the user the opportunity to choose the best rendition. A special interactive window appears, showing a small window with the text under consideration, a second small window where the rough translation will appear, and a third larger window in which the dictionary entries for the word or phrase currently being examined are shown. When this process is completed, the interactive window dis-



appears and the regular project window shows you the results of the translation so far. This translation will be somewhat different from that seen in the interactive window, for after the user has checked his choices from the dictionary entries the program applies grammatical rules. The translation appears with all the words not found in the dictionary in brackets. (Many of these turn out to be proper names.)

century kings of France—Valois—was translated as “Be worth.” Checking the dictionary, I discovered that “valois” is the singular imperative form of the verb “valoir.” (I can think of no conceivable circumstance in which anyone would *ever* use the imperative form of “valoir,” but the dictionary did its work properly.) In a German passage the proper name Anton von Burgund (Anton of Burgundy) appeared. Anton, as a proper name, was not in the dictionary and was in brackets; however, von Burgund—since all these elements appeared in the dictionary—was rendered as “of castle-and.”

thing else) as "Literal" and the program will not attempt to translate those items. You can then click on "Word Scan" and the program will run through the source text to see which words are not in the dictionary and give you a count of unrecognized words. You can then view these words sequentially in alphabetical order and either add them to the dictionary or ignore them. You are then ready to translate, either by clicking on "Document" and having the computer do all the work or by clicking on "Interactive" and helping the process along.

My most ambitious translation project to date (and one which proved the value of *German Assistant* to me) involved a 2785 word article which I had Xeroxed at the Library of Congress several months ago from a German scholarly quarterly. (For purpose of comparison: this review is about 2300 words.) The article is a brief analysis of what is known about a 15th century illuminated manuscript of Froissart's *Chronicles* which is in the Breslau Museum in Germany. The manuscript had originally been commissioned by Anton of Burgundy (or Anton of castle-and, if you like) and produced in Bruges. I was very much interested in reading this, but the thought of spending 10 to 15 hours laboriously translating it with a paper dictionary had put me off.

I first typed the text, umlauts and all, into *MSWord*, which took about an hour, and I imported it into *German Assistant*. I did not bother to mark proper names as Literal, since I would recognize them anyway, but I did mark some passages written in medieval French as Literal so the program would not try to translate them. I then ran Word Scan to see which words were not in the dictionary. (The Word Scan operation took probably between 30 and 45 minutes; I started it and went away and did something else



while it was working.) The result: of 2785 words the computer failed to recognize 328. Going through the list, I found that 32 were typos I had made in *MSWord*, 46 were foreign words, and 76 were proper names; leaving only 174 "legitimate" words not in the dictionary. This is only about 6%, not bad when you consider that the article was on a rather specialized subject.

I did not enter any new words in the dictionary, but instead clicked on "Document" and went away for a couple of hours while the computer did its thing (Figure 2). The translation was complete when I came back; although I do not know exactly how long it took, I suspect—based on later experiments—it probably took most of the 2 hours.

The document I printed out would certainly win no literary prizes for elegant English—it was full of awkward phrasing and still had unrecognized German words

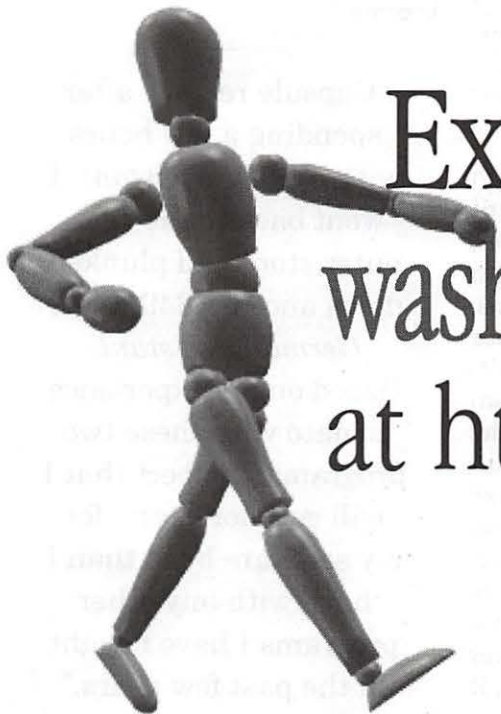
"The programs are quite easy to use. The documentation is excellent—well organized, straightforward instructions that are clear, and it has an adequate index.

When you open the program, a double window appears and you click on a menu item to choose whether you are translating from English to foreign language or vice versa."

scattered throughout, each enclosed in brackets (Figure 3). However, I could read it and understand it—

some of the German words I knew and the meaning of others was obvious from the context. There were only three or four passages that required me to go to the paper dictionary for clarification. The chore I had been putting off because it would have meant 10 to 15 hours of drudgery I had accomplished in an hour and a half, plus perhaps as much as 3 hours of unattended computer time.

Both programs—and probably translation programs in general—will do a better job of translating if the user can control the source text by avoiding idiomatic expressions, contractions, and words which have multiple meanings. This is, of course, impossible if you are translating from a foreign language an article or part of a book—you have to put in what the writer has written. For a native English speaker attempting to use the program to translate English into the foreign



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at <http://www.wap.org/>

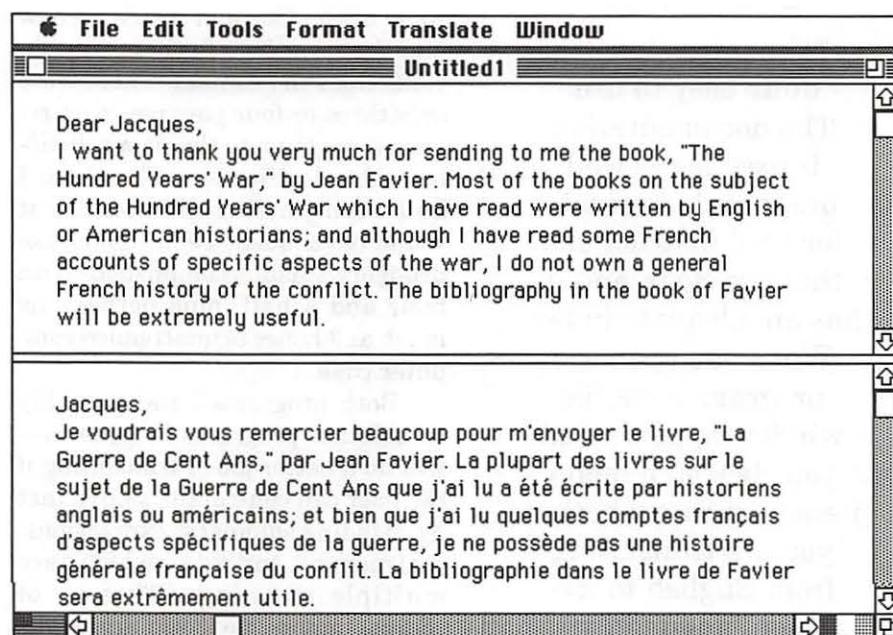


Figure 4. In translating from English to the foreign language, planning the English wording carefully will lead to a better translation. As written above, the first sentence is translated more accurately than the more natural "Thank you very much for sending me the book..." I made three changes in the above short passage from the version French Assistant automatically produced: (1) I inserted the "vous" in the first sentence—I have no idea why the program left it out; (2) the program translated "a general French history" as "un général histoire française," getting the gender and word order wrong; and (3) it translated "the Hundred Years' War" as "La guerre de Cent Années." The word "year" can be either masculine or feminine in French, but I have forgotten, if I ever knew, how one decides which to use. However, the Hundred Years' War is always "La Guerre de Cent Ans." I have not checked this translation out with a French language expert, but it looks okay to me.

language, however, it is possible to tailor the language to the abilities of the program (Figure 4). The *Assistant* program manuals have three pages of excellent suggestions on the types of things to avoid and things to be sure and include.

Parenthetically, it seems probable to me that English-to-foreign language translations also work better because of differences in the size of the languages themselves. English has about three times as many words as either French or German, and as a result English often has half a dozen synonyms or near-synonyms for situations in which the foreign language makes do with one

or two words. Usually the English synonyms have slightly different connotations for the native speaker, and the poor computer is faced with a bewildering choice of translations. A case in point in the Breslauer Froissart article: in English the literal meaning of the words "handwriting" and "manuscript" is the same, but we use the terms in different senses. Germans use "Handschrift" for both senses, and as you might guess *German Assistant* made the wrong choice. Since in English-to-French or English-to-German translation the computer normally has fewer word choices, it seems reasonable to assume there

will be fewer almost-but-not-quite-right words.

For one who uses foreign languages frequently, the dictionaries themselves are worth the price of the software—and that is actually what I will use most in the French version. It is much easier to type a word in the computer and almost instantaneously get the definition than to leaf through a paper dictionary trying to read its small type. In addition, the computer dictionary will find words in their various forms. For instance, if you run across the word "moult" in a French text, you won't find it at all in any paper dictionary I have. The computer dictionary immediately informs you that it is the present third person plural form of the verb "moudre" (Figure 5). You might find it in a paper dictionary if you looked under "moudre"—but if you knew enough to look under "moudre" you probably would not need to look it up at all. The dictionary is, of course, limited, but since you can make additional entries the longer you use the program the more efficient the dictionary will become.

"Capsule review: after spending a few hours with *French Assistant* I went back to the computer store and plunked down another \$49.95 for *German Assistant*.

Based on my experience to date with these two programs, I expect that I will get more bang for my software buck than I have with any other programs I have bought in the past few years."

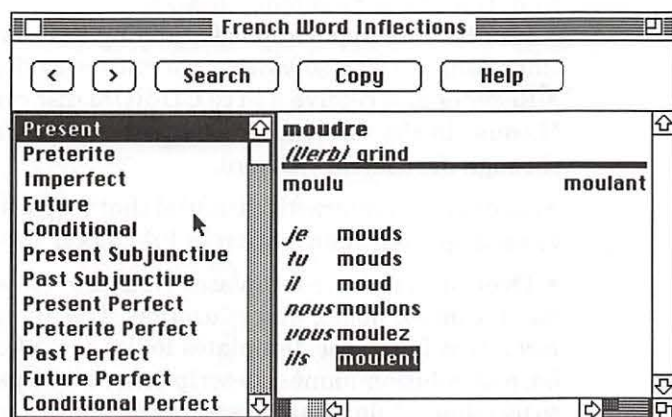


Figure 5. The dictionaries are very useful just for ordinary reading—no matter which form of a verb you look up, the program will find it if it's listed in the dictionary. In this case I looked up "moulent" and the dictionary shows the entire present tense of the verb "moudre." By clicking on the other tenses listed, you can get those as well. This is true, of course, only for words in the original dictionary. It will not work for words you add to the dictionary unless you yourself enter all the inflections.

My enthusiasm for the two programs stems from the fact that I find them both very useful for my own particular needs. But it should be emphasized, if it is not obvious from the above, that they do not produce anything approaching error free translations, and it is unlikely that they would be useful at all to someone totally innocent of any knowledge of the language in question. They should be very helpful to anyone learning a language, and I expect that my own knowledge of French and German will improve as a result of working with them.

How could these programs be improved? Well, a foreign language spell checker would be nice and would have eliminated some of the 32 typos I made in putting the Breslauer Froissart article into MSWord. An even bigger dictionary—the current one is said to have about 100,000 words—would also

help, and it would reduce the number of additions I have to make. But for \$49.95 I have no complaints about the programs as they come out of the box. ■

Dan Wages, a Pi member since 1984, is a retired U. S. Government employee who spends much of his time these days in the Middle Ages. He also works with a fairly medieval Macintosh.

French Assistant and German Assistant, Globalink, Inc., 9302 Lee Highway, Fairfax VA 22031. (703) 273-5600. They also produce Spanish Assistant and Italian Assistant. Each program costs \$49.95. System requirements: 68030 microprocessor or better, System 7.0 or later, 4 MB RAM, and 5 MB hard disk space.

Review: FileMaker Pro 3.0

by Paul Gerstenbluth (ArieFound@aol.com)

Question: Why bother to trade up?

Answer: For the customized FileMaker Pro templates, RIMUG members.

What do the FileMaker Pro templates contain?

The relational databases that organizes and puts all your vital information at your fingertips. Has over 40 ready-to-run business, education and home solutions.

BUSINESS portion:

Relational Databases (15 files in 4 folders)

*Expenses System with Employee Expenses, Employee Names and Expense Line Items.

*Inventory System with Product Inventory, Product Line and Items Product Sales.



*Projects System, Project Tasks and Projects.

*Integrated Solution, Activity Log, Contacts, Invoices Letters, Line Items, Main Menu, Phone Numbers and Products.

BUSINESS (Flat Files)

Asset Management	Frequent Flyer Database
Bid Comparison	Identification Badges
Business Cards	Job Application
Cash Receipts	Names and Addresses
Club Membership	Personnel Records
Employee Leave	Product Brochure
Equipment Rental	Purchase Orders
Expense Report	Time & Service Billings
Fax Cover Sheets	Timecards
Buy vs. Lease	Messages

EDUCATION (Flat files)

Certificates	Loans
Event Schedule	Memorandum
Faculty Staff	Student Records
Field Trips	To Do List

HOME (Flat files)

Check Tracker	Job Search
Film & Videos	Photo Album
Home Budget	Recipes
Home Inv.	Video Database
Collection	Music Database
Family Medical Records	
Party & Wedding Planning	
Wine Cellar	

What are the new features in FileMaker Pro 3.0?

- Relational database capability and improved networking
- Enhanced calculations and ScriptMaker enhancements
- Browse and Find mode improvements
- Editing enhancements and field definition improvements
- More flexibility with value lists and new options in Layout mode
- More powerful file handling and automatic database creation
- Expanded import and export
- New ways to limit user access

Why should you buy the FileMaker Pro CD-ROM disc?

The "goodies" in the FileMaker Pro CD-ROM disc contain:

- The FileMaker Pro application and related files. Bonus database files to help you get started with

FileMaker Pro.

- It contains database of tips from Claris technical support and a database of solutions and solution providers from the Claris Solutions Alliance.
- Membership applications for joining the Claris Solutions Alliance as a software or service provider.
- Register and receive a Free CD-ROM disc containing "Leonardo the Inventor" (Complete) and "Pathways through Jerusalem" (Demo).
- An on screen interactive tutorial that teaches you how to manage your information in FileMaker Pro.
- Over 40 database templates that provide solutions for business, home, and education. The Template Information file in the Templates folder provides a database of solution names, descriptions, and tips on how to use them. A database of sample buttons that you can copy and reused within your own files.

Indexing

In FileMaker Pro 3.0, fields are not indexed as part of the conversion process. FileMaker Pro 3.0 will create an index for a field the first time it is needed, and then subsequently keep it up-to-date. For example, create an index the first time you use Find to search for data in a field. Recommend that you let FileMaker decide when to build the index. This process will happen without any special action on your part. However, since you may experience a short delay while the index for a field is being built, you may want to index certain fields in advance.

FileMaker Pro Memory Problems

When you are experiencing problems viewing the help files due to lack of available memory, try decreasing the amount of memory allocated to the Claris Help Viewer application. The Claris Help Viewer application is installed in the Claris folder in your System folder. From the Finder, select the application, choose Get Info from the File menu, and decrease the minimum and preferred size for the application. You can quit other running applications to make room for the viewer.

Pro

Why bother to trade up to FileMaker Pro because you can tailor the databases to your working needs. FileMaker Pro contains professional templates for ready-made solutions. Online help and automatic phone dialing are only a click away. You can add, change or remove formulas, fields or layouts at any time.

New FileMaker Pro has relational database efficiency and a powerful ScriptMaker. The maximum files you can open are increased from 16 to 50. You have com-



plete compatibility between Mac and Windows environment.

Con

FileMaker Pro's well-written users manual only contains 10 pages of information on templates. Missing are illustrations on what the templates contain. The file converters need improvement for AppleTalk Network, ClarisWorks, DIF (AppleWorks files), DBF and MacIPX. Some times the file converters do not work properly. FileMaker Pro 3.0 will convert files in the FileMaker Pro 1.x and 2.x formats. However, they do not support conversion of files that have been improperly tampered with. For example, FileMaker Pro files modified using password tampering software may not convert to the 3.0 format properly.

System Requirements.

FileMaker Pro 3.0 works on any Power Mac and computers using System 7.1. Also, you need CD-ROM drive or 1.4 High Density Drive with 4 MB or 8 MB (Power Mac) of RAM.

Available by mail order from Apples' Claris Corporation, Santa Clara, CA. **Cost: \$199.95, previous versions and competitive upgrades: \$99.95** ■

REMEMBER

Get your nominations in by February 22nd All Board of Directors positions are open. See notice on page 11.

3M Precise Mousing Surface: More Than A Funny Name

by Washington Apple Pi Labs

THIS IS A TALE of a world-class computer peripheral (sorta), the 3M *Precise Mousing Surface*, that has been almost completely ignored. When it arrived at Washington Apple Pi Labs (WAPL) the peripheral was overlooked for a time as a press release, stacked with other press releases in the Recycle pile (along with such gems as "We are sure all the Macintosh users at Washington Apple Pi will be delighted with our new release of Toenail Clipping Tracker, newly released for Windows NT!" and "You, too, can make millions of dollars in real estate through contract fraud!").

After a couple of days someone noticed that *Precise Mousing Surface* was not a funny press release, but an actual computer peripheral (sorta), and three different individuals agreed to write a review, and all three found it delightful. And didn't write a word.

WAPL has an exacting process for screening items for review in the *Washington Apple Pi Journal*. New items come in, mostly unsolicited, and are sent out to subject matter experts ("That looks neat! I'll write about it!"). This process works fairly well. But not for the *Precise Mousing Surface*.

One reviewer reported, verbally, that it was "the best mouse pad I've ever used. And it makes a nice indoor Frisbee." Another begged to keep it for another few years for test and evaluation; "I can't live without

it; I'm spoiled."

The most brazen offered to buy it: "How about I just give you \$10?" "No deal; they run between \$12.95 and \$19.95." "Yeah, but it's used." All these reviewers were sacked. Eventually the *Precise Mousing Surface* fell into the hands of a confirmed rodent hater. This person is known to have hung a dozen dead mice from an overhead planter hook in their office, the poor pathetic plastic corpses festooned with a sign saying, "The only good mouse is a dead mouse."

This person, who normally thinks a trackball is the *only* way to control a computer, loved it. And could even explain why:

- It is flat. Really flat. So it doesn't bend your wrist back.
- It is easy to clean.
- It keeps the mouse ball clean, too.

"After a couple of days someone noticed that *Precise Mousing Surface* was not a funny press release, but an actual computer peripheral (sorta), and three different individuals agreed to write a review, and all three found it delightful. And didn't write a word."



- The mouse never "skids," but always goes where you point it.

- It is really small, and takes up little desk space.

Let's take the first claim: flatness. When it arrived in WAPL, the *Precise Mousing Surface* was dismissed as a press release because it ships in a thin cardboard envelope that looks like it might hold a sheet of paper or two. While not exactly "paper thin," the *Precise Mousing Surface* is close: it would take a stack of 20 to 50 of them to match the thickness of more conventional mouse pads.

Many mouse pads build up a coating of grime after a while, but not the *Precise Mousing Surface*. The textured surface doesn't attract oils from the hand and other more unidentifiable things that seem to coat mouse pads. If you do spill something on it, just rinsing it with

cold water seems to take care of any problems.

The envelope for the *Precise Mousing Surface* is also an advertisement and instruction manual of sorts. It explains that the textured surface also helps keep the mouse ball clean, and this proves true. The surface of the pad is formed from thousands of tiny pyramids, and since only the "peaks" of the pyramids touch the mouse ball, there is far less chance of gunk coating the mouse ball or the internal rollers. Cleaning a computer mouse is about as emotionally uplifting as cleaning an oven, so anything which helps eliminate this chore is a definite boon to civilization.

Mouse performance on the *Precise Mousing Surface* is outstanding. Those little pyramids, as 3M puts it, make sure WYPIWYG (Where You Point Is Where You Go). Movements

on screen match movements of the mouse, without skips or "skids." On a conventional mouse pad, if you run off the pad the mouse falls off into oblivion, and the pointer on the screen appears to freeze because the mouse ball is suspended in air, trapped between the high plateau of the mouse pad and the lower elevation of your desk. This *never* happens with the *Precise Mousing Surface*; the pad is so thin that the mouse is still functional if it runs off the pad; you never even consciously note that you've adjusted by pulling it back where it belongs.

Two things about the *Precise Mousing Surface* are peculiar, besides the name. First, there is the color, a variegated, irregular pattern of deep purple, lighter purple and black. WAPL assumed there might be other colors, but a quick search of retailers revealed no

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other colors. The color scheme is inoffensive and unobtrusive, especially since you never look at a mouse pad while you are using your computer. If someone comes by and asks, "What's that purple thing on your desk" (and someone will), lie creatively.

The shape is also unusual. Completely abandoning the idea of square or rectangular mouse pads, 3M made the *Precise Mousing Surface* an unusual shape that looks sort of like that of a painter's wooden palette, only without the finger hole. The odd shape turns out to be ideal, matching as it does the normal tracking motions, curves and arcs of an active computer mouse. This shape also permits 3M to trim off all the square corners, greatly reducing the size of the pad and the amount of desk space it requires.

3M claims the *Precise Mousing Surface* is "the biggest improvement in computer mousing technology since...the mouse itself." WAPL tried to dismiss this as nothing but hype. We failed.

If you must mouse, get a *Precise Mousing Surface*. Both you and your rodent will be delighted.

If you don't mouse, take a look at 3M's Web page for the pad; it has the funniest URL we've seen in weeks. ■

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Precise Mousing Surface

\$12.95 to \$15.95, at the whim of the retailer

3M Consumer Stationery Division

P.O. Box 33594

St. Paul, MN 55133-3594

<http://www.mmm.com/market/consumer/pms/>

Take advantage of the updated hotline Also, you can add your name to the list and assist fellow members with advice

THE HOTLINE has been updated and the new listing is in this month's issue of the Journal. We contacted (or tried several times to contact) all persons listed in the June 1996 issue of the Journal who were on one of the hotline pages. Unfortunately we were unsuccessful in contacting some people after several attempts and they were dropped from the listing. *If this has happened to you* and you wish to be listed on the hotline, please contact us. We checked to see what topics each person wished to remain listed for and any new topics they wanted to add. We have made those changes, and they are many. There are many new names and items on the hotline.

Most importantly the names and telephone numbers are up to date. Called the listed number will put you in contact with a fellow member who is willing to help in that time of confusion of simple need.

If you wish to add your name to the list of existent topics or add a new topic which you would like to be listed under were you can help your fellow members please do so. Simply call the office, snail mail in the information or e-mail Jim Ritz at <jim.ritz@tcs.wap.org>.

1997 General Meeting Dates

Mark your calendar!!!

January 25

July 26

February 22

August 23

March 22

September 27

April 26

October 25

May 31

November 22

**June 7—
Garage Sale**

**December 13—
Garage Sale**

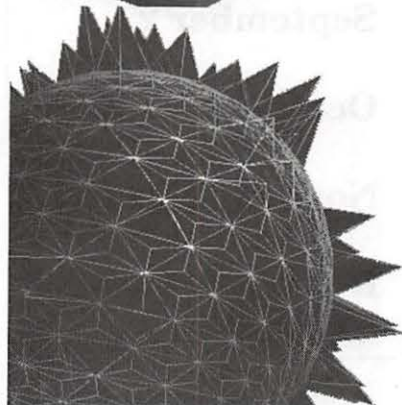
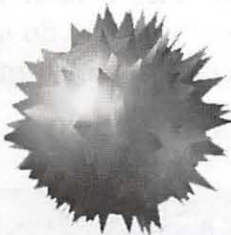
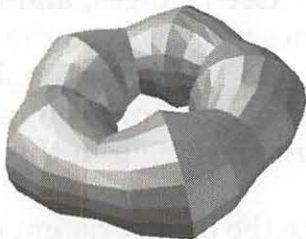


3D Graphics Are Not Difficult

About 3-D Modeling: Freeware and Infini-D

by Carol O'Connor

**The Mutatron
is a freeware
application!**



To begin.
**If it's fun and free I'm
surprised and delighted...**

...because in the computer graphics world it is normally expensive to pursue a joyous romp. Well, not always. Keep reading.

Today's article is about beginning serious 3-D modeling for fun and/or profit. But one thing this graphic person has enjoyed recently is a free application for 3-D modelers. It is called The Mutatron.

So First: The Mutatron. Jazzy Freeware

Imagine you are sitting next to me... Let's get a golden torus (donut) on screen. It is moving! Now if I push it a bit, it will rotate on a different axis. With my finger (mouse driven) I can nudge it so that it spins faster or slower on any axis at all. All the facets reflect the light in shifting patterns, as they would in space. I will make the facets disappear and make the torus gleam as if made of smooth polished gold.

Where did this thing on screen come from? As it turns out, it is freeware and I found it in the disk that came with the November issue of MacAddict magazine. The name of the application is The Mutatron, authored by Dale M. Greer of Dallas, Texas (<http://web2.airmail.net/dmgreer/>).

The Mutatron: More

It amazes me that this freeware application will do any more than I demonstrated. But, it does. For instance, there are fourteen built-in

mesh objects to select in the Geometry Menu, but you may open any other mesh object which is formatted as a 3DMF file. You can apply a pict file of any kind to all the facets of any mesh object very quickly, or you can map it to the whole object. You can save what you make as a Pict file. The Mutatron has an amazing spike maker and spike editor and an equally amazing bananoid editor.

So, if you do not have a Gee Whiz 3-D application you can still play like the Big Boys.

Why is 3-D imaging good for the soul?

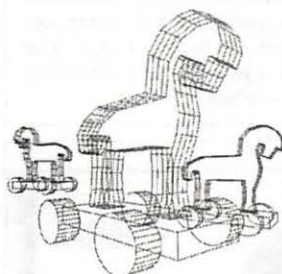
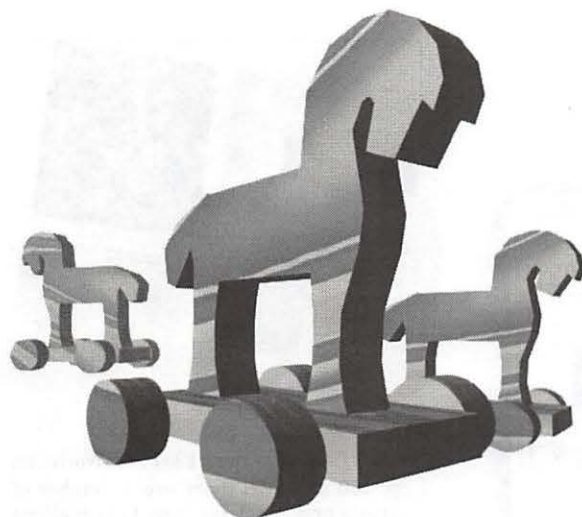
Did you ever use your Crayolas to draw your daddy's face? Did you turn the page over to see if you could see the back of his head? Did you ever sweat a drawing of the Lincoln log cabin for a history project and then wish you had drawn it turned around a little to show Lincoln's bedroom window? Well, the miracle of 3-D is that you can do exactly that: erect a row of houses and then actually move down the sidewalk and turn the camera to snap different images of the same street. You can animate the camera too, and make a movie.

Doing the formerly impossible thing is good for the soul. You may quote me (with credit).

System requirements to Run The Mutatron

The Mutatron cannot run without QuickDraw™ 3D 1.0.3. QuickDraw 3D only runs on Power Macs with System 7.5.1 with at least 16MB of RAM.

If you cannot use The Mutatron yet, keep praying for a new Mac, as I have done for years. In the meantime learn some useful stuff about 3-D and when your prayers are answered you will be ready for 3-D delights.



This little horse is a simple extrusion. This extrusion requires the artist to

draw the outline of the horse and then tell the computer to make it thick, as if cut out of a board.

The toy is made with three extruded shapes: horse, platform and wheel. The horse is set up as a parent object and the wheels and platform are child objects. This means that if I grab the horse, the wheels and platform will move along to wherever I reposition the horse. If I grab a wheel alone, I will be able to move it independently of the platform. It doesn't break the child-parent link, however. If I move the wheel out an inch and then move the horse, the wheel will move with the horse, one inch out from the platform.

Three hors

0:00:01.00

Stop

Play

Fast Forward

Fast Reverse

Reset

Object Name

Camera

Light

Prism

Cube

Cylinder w/hole 3

Cylinder w/hole 2

Cylinder w/hole 1

Cylinder w/hole 4

Prism 1

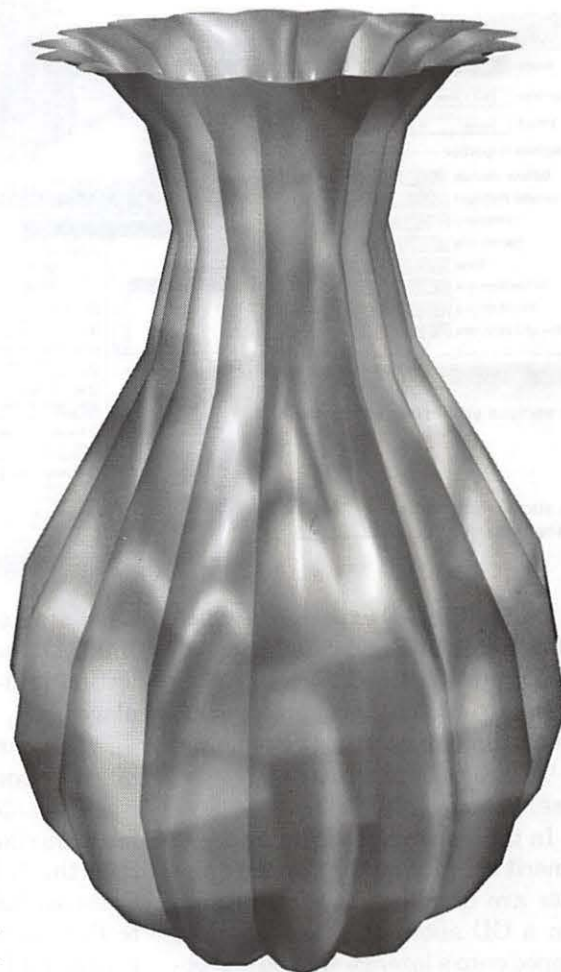
Prism 3

TIP: Use the sequencer window to visually drag links into subsets, in order to see graphically how links are set up as you set them up. The toolbar has linking tools, but I prefer to use this window, for ease of use and better understanding of what I've done.



This vase is a special kind of extrusion with identical cross-sections of different sizes. As you can see from the window image below, the cross-section itself is complex. I created it in Adobe Illustrator and imported it. The different sized cross-sections appear along the central path at the places shown with small boxes.

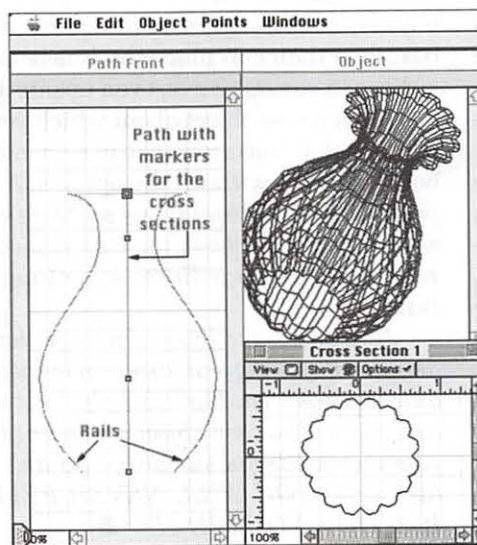
But, it is even simpler than that! If the cross-section is put into place

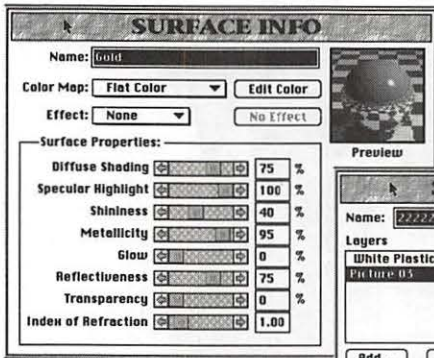


once, at one size, it is possible to draw the rails only, and the cross-sections resize themselves automatically, as it were. They do not even appear in the cross-section window.

However, you may choose to manually insert cross-sections at places along the path. If you look in the cross-section window, you will see a cross-section for each of the places where cross-sections were marked along the path.

Look what happens when I choose one of those specified cross-sections and change the shape. The cross section in the 'belly' of the vase is no longer fluted and has become much wider.





The surface properties of the shelf

The surface properties of the lozenge.



TIP: In the January 1997 MacWorld, on pp. 180 and 181, there are a number of superb and inspiring tips for excellent surfaces. The work is by Javier Roca who has done some special work for computer magazine covers. Be sure to buy, beg or steal this issue if you are often searching for the perfect surface.

Part of the 3-D experience which makes for drama and convincing realism is surface rendering.

In my opinion, this subject is extremely difficult and time-consuming.

To make the matter clear, I present the example above.

In the upper right is an image of no merit except that the surface properties are excellent. A screen dump from a CD about the Lost Maya is mapped onto a lozenge shaped 3-D object. The lozenge is imbedded on a shelflike plane which has the properties of a mirror. How did all this attractive surface rendering come about?

In the Surface Info box, above, you will see that the surface for the shelf or plane has a name: gold. That name will show up on the pull-down menu as you assign a surface to the plane. This dialog box makes the surface "gold" have all the properties listed above as percentages.

These eight properties can each be set at a hundred points, so when you do the math involved in calculating how many options you have, the results suggest you may experiment into old age and not yet see all the possibilities.

Go slowly and steal like crazy to build a set of surfaces you will use often!

I think I arrived at this combination by trial and error, but I may

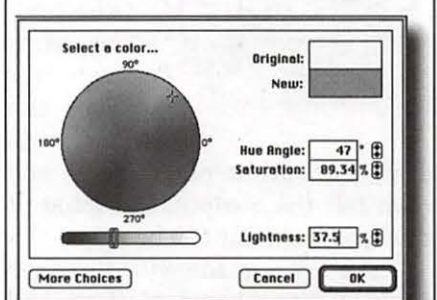
have started with a surface in the Infini-D tutorial or from my little collection of 3-D objects from assorted places.

The surface for the lozenge is a bit more complicated.

The object has an automatic default surface called white plastic. (See the Layers list in the Surface Composition Box above.) In addition to that, a layer is applied which is actually a PICT image, in this case, from the screen dump mention earlier. Clicking the Add button allows for the standard search routine for the image desired here. Once the image is in place, one must choose from multiple mapping options, multiple mapping modes and also the various percentages of highlights, bumps, reflections, etc. indicated in the box. One then can place the image on the surface in various ways, even upside down.

With a new object about which you are emotionally concerned, you can spend may hours playing with all the options. As you play, you will discover many surfaces which are not suitable now, for this object, but which would be terrific for something else. But...

It is one of the laws of nature that the details of your great discoveries will be quickly forgotten. For example, next week, as you create a new object and want to assign the wonderful surface you didn't need last week, YOU WILL NEVER REMEMBER HOW YOU DID IT. ■



TIP: For a wonderful Gold color in 3-D or anywhere else, try these settings in the standard color control window.

Hue Angle 47degrees
Saturation 89.34
Lightness 37.50

Carol O'Connor is a graphic artist / designer who also teaches classes for WAP. You may contact her at 703-430-5881 or on AOL at Graphicsss.aol.com.





Low-Cost Digital Video Returns to the Mac

miro's miromotion DC20 QuickTime Board

by Dennis R. Dimick, ©1997
For the Washington Apple Pi

SINCE THE DEMISE of the SuperMac/Radius Spigot series boards, there's been a vacuum in the lower-cost arena for Mac video capture and output to tape tools. Of course Apple's been selling models such as the PowerMac 8500 with built-in video capture and output to tape ability, and several vendors such as Targa, Radius and Data Translations have been all along selling \$4000-plus add-in board solutions. But these offerings have been either limited in quality or too expensive for shallow-pocketed digital artists seeking a way to create and print to tape high-quality video from a Mac.

Now that PCI has replaced NuBus as architecture for adding performance-enhancement cards to PowerMacs, we've started seeing a crop of comparatively low-cost, high-performance QuickTime video capture boards. Arriving first has been the miromotion DC20 from German firm miro Computer Products AG. Introduced at \$999 retail, this card in August 1996 dropped to \$799 and at this price has offered unprecedented quality in Mac digital video.

Performance Details, Please

The miro board produces 30 frames-per-second, 640x480 (full-

screen) 60-field (NTSC standard) video capture to disk and output to tape in S-Video quality. Caveats include: no onboard audio support—audio must come from your PCI Mac; you need ample real RAM (24

megs minimum) installed; and you must have multiple gigabytes of very fast hard drives installed, preferably via a SCSI accelerator card.

Translated, this means you can create quality videos on your Mac at less cost than before, print to videotape, and pretend you are a high-dollar Hollywood or network producer. Or, at the least, you can produce attractive videotape presentations to dazzle friends and family, impress potential employers, demanding teachers, or anyone with a TV and VCR who needs to see and hear your message.

Quality from the miromotion is not broadcast, but with adequate hardware support from your Mac, video output can look about as good as what Hi-8 video cameras generate (Hi-8 produces 400 lines of vertical resolution where VHS produces 240 lines.)



Control Strip Setup: Apple's desktop control strip serves for choosing video output destination from the miromotion DC20 card. It's possible to view movies either on an attached NTSC (TV) monitor, preferred, or on the RGB monitor as seen here. Playback performance on the RGB monitor is slower and less smooth than on a TV monitor.



What's in the Box

The miromotion DC20 comes as a 7-inch PCI card and fits into the new-generation PowerMacs supporting PCI slots. miro says the card works in the PowerMac 7200, 7500, 7600, 8500, and 9500, and is also compatible with some of the new clones. A limited edition of Premiere, Adobe's video editing program, is part of the package. miro's accompanying software drivers include extensions and control strip modules for the Mac system folder, and a couple of presets for the Premiere plug-ins folder.

The version (1.0) of miro's drivers that came with my card was months outdated, and a quick trip to miro's web site (www.miro.com) allowed me to download and install

the current version 1.1 drivers. QuickTime 2.1 also came on disk with the miro card, but it too is not recommended for use with the board now.

QuickTime 2.5, which Apple released in July 1996, includes version 3.2.1 of Apple's Sound Manager that has been improved to optimize synchronization of audio and video when using video-only capture boards such as the miro. The new Sound Manager works to keep audio from the Mac CPU in step with video signals incoming via the separate miro card, which runs on its own clock separate from the CPU.

In short, if you plan to use the miro card, install QuickTime 2.5 and miro's version 1.1 drivers. My own experience with this setup has

shown that audio has stayed in synch with video on capture to disk, even in situations where critical lip-synch has been part of the content.

My tests have shown the miromotion board will keep audio and video in "lip-synch" for about four minutes during video capture. This is at 640x480, 30 frames-per-second, with audio via the 8500's logic board at 16-bit, 44.1kHz stereo. If you need better performance, you'll have to consider a \$2,500-\$5,000 capture board that has audio built-in.

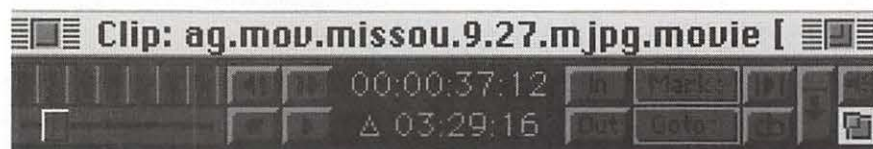
A Life Premiere

The version of Premiere 4.0 that comes with the miro card is what's called "LE," limited edition. What LE lacks compared to the full Premiere is external device control, motion control for special effects, SMPTE timecode support, trimming window, batch movie-making, and support for Illustrator file import, among others.

If you want to upgrade to the full Premiere 4.2, it will cost you \$149 from Adobe. Even at this price, this is a good deal. Thorough analysis of Premiere, which I like very much as a program, is left to other articles. The miro card comes with several presets files that allow for optimal capture performance using Premiere. Suffice to say I have been able to use other QuickTime editing programs with the miro card, specifically VideoFusion, and have been able to print to video via the miro card using Apple's Movie Player 2.5.

Card Installation and Setup

Installation in my 8500/120 was straightforward: install the card as you would any other PCI card, just beware the cheap plastic tabs on the CPU chassis that may break off. A small Y-cable hooks into the center connector on the back of the miro card and is meant for attaching RCA connector (composite) cables for



Preview



Play Movies on Monitor: This is what Premiere's Preview window on your RGB monitor will look like if you have chosen "Play Movies on Monitor" in the Control Strip for miro playback. Opening "QuickTime clips collapsed" in Premiere will open clips in the Preview window or on the NTSC monitor.

video in and out. The miro card also has connectors for S-Video in and out. Be very careful about where you attach the supplied Y-cable, as placing the composite Y-connector in the S-Video connectors can disable the card. Software drivers for the miro will install into the extensions folder and the control strip folder. Presets files for Premiere must be manually placed in the Premiere plug-ins folder.

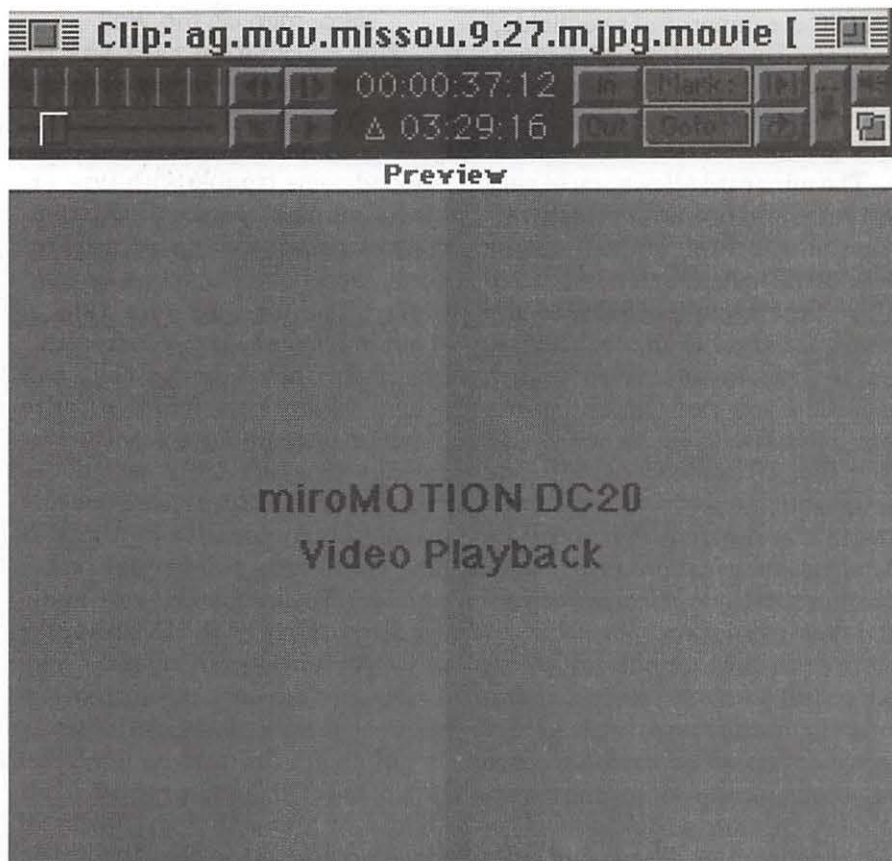
The RGB desktop control strip is sole location for controlling destination of the miro card's output. A pop-up module determines whether the card output will be to your RGB monitor or to an external NTSC (TV) monitor. If you choose NTSC as output device and you restart your Mac, the miro will default to RGB as destination, so you will have to manually re-select video via control strip as destination at the start of each working session.

If you plan to use the miro card to potential, you must have an NTSC (TV) hooked up to the miro's video out. It is possible to view movies in small preview windows on your RGB monitor, but they will be small and jerky. The optimal setup for your video editing suite is to have a VCR and TV hooked up to the video output from the miro.

Drives at the Heart of miro

For success you must have large capacity fast hard drives attached to your Mac when using the miro card for digital video capture, editing, and output. If you have a one gig internal drive with your system and application programs, and you also intend to capture video to this disk, you will be disappointed. You will never be able to attain optimal smooth rates at full frame size. Further, your disk will fill up very fast as video captures can take upwards of three megs per second.

I'd recommend a minimum 5400 RPM two gig external or internal



Open Clips Collapsed: The trick to optimal playback in Premiere is to set program preferences to "Open all QuickTime clips collapsed." This will cause all clips to open either in a preview window, shown, or on the NTSC video monitor if you have chosen that option with the control strip.

drive added to your system exclusively for use as an AV data capture drive. The internal SCSI bus on some PCI Macs is faster than the external, and you can add a drive internally that should allow decent capture and playback. I have successfully captured to an external 5400 rpm two gig drive (APS MS4221AV) on an 8500 as long as I limited data rates to disk on capture to less than 3 megs per second.

Optimally, a fast and wide 7200 rpm drive (68-pin connector) attached to your Mac via a PCI SCSI accelerator card, or even a RAID array of two drives will get you optimal performance when capturing video to disk. miro recommends you use drives that can sustain 50 percent higher capture rates per second

than the data rate of your movies. For example, if you plan on creating full-screen movies with data rate of 3 megs per second, install a drive system that can sustain 4.5 megs per second transfer rates.

Variable Data Rates: Key to Quality

The miro card does its work by compressing incoming video streams using what is called "Motion-JPEG." This is a QuickTime codec similar to the "Photo-JPEG" that comes built-in to QuickTime, but in the case of the miro card and others, onboard chips provide "hardware assistance" to compress incoming video streams into a series of JPEG images at rates up to 30 frames per second. Each video frame



in NTSC is composed of two "fields," hence the specification, 30 frames, 60 fields per second, when performance of QuickTime video capture cards is cited.

The miro card allows you to vary data rates and frame sizes and resolution on capture. You can choose 640x480 full resolution, 640x240 half vertical resolution, 320x480 half horizontal resolution, or 320x240 quarter resolution. Within each resolution you can choose quality from low to best just as with most other QuickTime codecs. The odd configurations above, 640x240 and 320x480, still give full size frames on output, they just produce images with one-half the vertical or horizontal detail (resolution.)

You can, for example, digitize to disk at full 640x480 resolution, but limit incoming data rates to 2.0 megs per second or even 1.5 megs per second, and could change resolution on capture to 640x240 and get even smaller files. These variables allow control over file size and lower the data rate demand on hard drives, but the consequence is lower video quality.

The maximum data rate to disk the miro card apparently allows is approximately 3.4-3.5 megs per second. Even at that rate, I have had trouble with dropped frames even when capturing to an 8 gig array of Promax Conner (Seagate) 4207W drives. It's not the drives that are dropping frames, the card just cannot sustain data throughput higher than about 3.4 megs per second.

On the other hand, in recent tests, I was impressed with the quality presented by 640x480 captures limited to just 2.0 megs per second. What this means is that you can successfully make smoothly-playing movies on a slower PCI Mac with slower (e.g., 4500 RPM) hard drives as long as you keep data rates low, or on single drives attached to external SCSI ports.

miro, miro on the Wall

The miromotion card has its limitations, but as long as you work within them, it's possible to create quite good-looking movies on tape. I've had some trouble with type artifacts via the board's JPEG compression using scrolling titles in Premiere, and have stayed away from them. The top-end data rate of about 3.4 megs a second is frustrating if you have drives that can achieve higher transfer rates. (miro is said to be readying a new card for release in early 1997 called the miromotion DC30. It will provide better synchronization to the PCI bus, thus offering higher data rates to disk.) Any problems with audio synchronization on the DC20 appear to be fairly well-controlled as long as you use version 1.1 of miro's drivers in concert with QuickTime 2.5.

All in all, the miromotion DC20 is a breakthrough product that should improve the popularity of video production on the Macintosh. If you are in the market for good-quality full-screen digital video tools, take a look at the miromotion DC20. Combined with the right CPU and hard drives, it can enable you to become a video publisher at a price point far below what was previously required using desktop video publishing tools.

P.S. You should also take a look at the recently released Bravado 1000 card from TrueVision. I have not seen it, but have read that it provides similar performance to the miromotion. The Bravado is said to "bus-master," this meaning the board can sustain higher data rates than the miromotion DC20. However, recent postings from TrueVision on their web site indicate the Bravado board does not work well with SCSI accelerator boards or disk arrays. Single drives mounted internally are said to be the best capture option for Bravado. TrueVision's Bravado card costs a bit

more than miro's, but you get the full version of Adobe Premiere 4.2.

miromotion DC 20
miro Computer Products
Inc.
955 Commercial Street
Palo Alto, CA 94303
Phone (415) 855-0940
Web: [http://](http://www.miro.com)
www.miro.com
Retail Price: \$799; street
price \$700-750

System Requirements: A PCI PowerMac with empty PCI slot, 16 megs RAM (24 recommended,) Hard Disks: a two gigabyte drive will hold about 11 minutes of M-JPEG compressed video data at 640x480 resolution (3 megs per second data rate,) plan accordingly; System 7.5.2 or later, QuickTime 2.5 and miro software drivers version 1.1 or later. Highly recommended: an NTSC (TV) monitor and VCR. The miromotion DC20 supports NTSC, PAL, and SECAM standards. ■

Dennis Dimick has written for the Washington Apple Pi Journal on a variety of QuickTime tools over the years, including Sigma Designs' Movie Movie, SuperMac Spigot II Tape, Movie Cleaner Pro, the future of QuickTime, and the digital video prowess of Apple's PowerMac 8500. Besides the TCS he can be reached via Internet e-mail: ddimick@aol.com



Eric's Ultimate Solitaire: A Menace to Civilization

by Washington Apple Pi Labs

NOT ALL OF US use our computers to change the world, make millions of dollars, restore the land and purify the waters, and bring universal peace. And why not? Washington Apple Pi Labs (WAPL) dared to ask this question, and we found an answer: *Eric's Ultimate Solitaire*.

If you bought a Macintosh with System 7.5 on a CD-ROM, or you purchased a shrinkwrap version of System 7.5 on CD-ROM, you may have found, floating in with the "extras," a sample version of *Eric's Ultimate Solitaire*. The sample version is so compelling and addicting that many people never cared to discover there was a bigger, brighter, even more addictive commercial version available.

In fact, many people, after playing the sample version, never cared

about eating, drinking, working, or any other activity, and only stopped playing because their electricity was cut off for non-payment, crashing their computers and bringing an end to the game. WAPL has also heard that *Eric's Ultimate Solitaire* is a great way to stop smoking, stop drinking, lose weight and attain enlightened celibacy. (Enlightened celibacy?)

Understandably, WAPL took the utmost care in evaluating *Eric's Ultimate Solitaire*, passing it on to three successive reviewers. Working out of carefully isolated facilities located throughout the United States, the reports they sent back were — chilling.

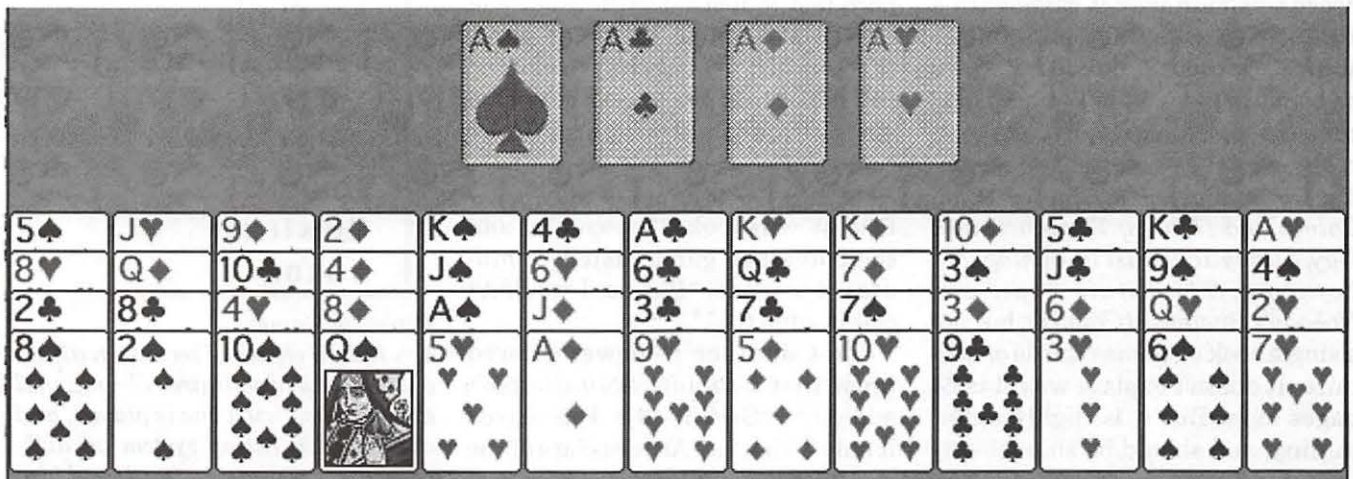
On the surface, *Ultimate Solitaire* is "just" a solitaire game. Actually, it is 17 different solitaire games, the number derived, as the

manual states, because "that's how many fit in the menu of a Mac Plus without scrolling." It runs on any Mac with at least two megabytes of memory, running System 6.0.5 up to the latest version of System 7.

Unlike virtually every other

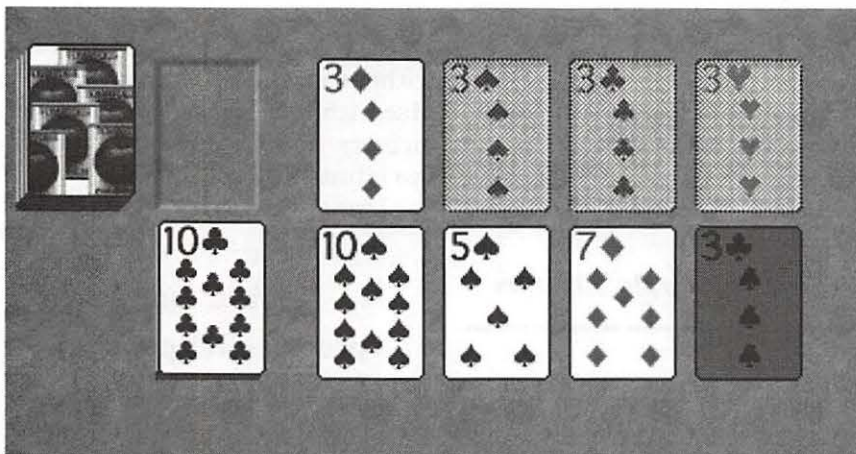
"In fact, many people, after playing the sample version, never cared about eating, drinking, working, or any other activity, and only stopped playing because their electricity was cut off for non-payment, crashing their computers and bringing an end to the game."

Mac manual, you want to read this one. Reading isn't required; virtually anyone on the planet will be able to



Ultimate Baker's Dozen

Eric's Ultimate Solitaire has a nice, clean design, with attractive, easy to read cards and user-selectable backgrounds (table tops?).



Ultimate Canfield

The manual explains how to "cheat:" cards that can, or should be moved, are shaded.

install and run the game without ever looking at the manual. But the manual is very funny: it makes fun of games, of license agreements, of troubleshooting, of manuals, of lawyers, of Windows for Workgroups. Of everything.

You can even learn things from the manual, like how to cheat. But you won't learn everything; it doesn't tell you, for example, that if you play *Ultimate Solitaire* on Martin Luther King, Jr.'s birthday, a small tribute to King is shown on the screen. (Similar things happen on other special dates, all undocumented.) It doesn't explain why it came with a slip of paper saying the game is shipped without a box to cut down on solid waste — even though it *did* come in a box. It doesn't explain, really, why the Recommended Reading list includes *The Tao of Pooh*, *Calvin and Hobbes*, *The Macintosh Way*, *Surely You Must Be Joking*, *Mr. Feynman*, *The Strait Dope*, and *Nobody's Business If You Do*, but not a single book on games, cards or solitaire. It doesn't explain why it is 64 pages long. But it is highly entertaining, and should be shamelessly imitated by every other software publishing company. Especially the Evil Empire.

Getting back to the game: one reviewer reported that it is "not the least bit addictive," but is "definitely fun to play." *Ultimate Solitaire* has "intelligent cards" that "fly" across the desktop if you "toss" them where they are supposed to go; you don't have to drag cards around. This makes it "much easier to play, allowing you to concentrate on the game." But the fact that they'd spent over a thousand hours playing the game (the game keeps track of the time) "doesn't mean it is addictive."

Another reviewer reported that a specific game, Eight Off, was a superb test of mental skill. Since you can always win an Eight Off game, this puzzled us, but they explained the *real* challenge was seeing how *quickly* you could win, and if you could raise or lower your average time. After 600 hours of play, their fastest win took 37 seconds, and their average game lasted 2 minutes, 4 seconds. "But no, I wouldn't call it addictive."

Yet another reviewer offered proof that *Ultimate Solitaire* isn't addictive. "See? It says I've played it only 30 hours." An associate of the reviewer privately confided the real story: while on hold for technical support from the Evil Empire, the

WAPL staff member decided to play to pass the time, and *Eric's Ultimate Solitaire* froze on launch. Throwing out the Preferences file from the System Folder eliminated the problem, and also eliminated all evidence that the game had actually been played for at least 1,200 hours.

After realizing that the WAPL technical staff had, collectively, spent almost 120 full days playing the game, without writing any reviews and, possibly, without eating, drinking, working, sleeping or other activity (celibacy??) we sacked them

Game Players

Choose Game...

Baker's Dozen
Black Hole
Bristol
Calculation
Canfield
Carpet
✓ Eight Off
Forty Thieves
Golf
Klondike
Montana
Poker Square
Spider
Spiderette
Towers
Westcliff
Yukon

Ultimate Games

You have a choice of seventeen different versions of solitaire. The manual explains how each one is played, and also offers a rating system on difficulty (very easy to very hard) and idea of how much time they take (very fast to very slow).



Options	Game	Players
Play Up		⌘A
Sound		
Always Winnable		
Choose Background...		
Look at Statistics...		⌘L
Preferences...		
Help...		⌘H
Shortcuts...		

Ultimate Options

Since it seems all too common that people will be playing Eric's Ultimate Solitaire when they should be working, or sleeping, the Options menu allows you to turn off the sound as well as change backgrounds.

all. We also came to a conclusion:

Do not buy Eric's Ultimate Solitaire. It is a Menace To Civilization.

A deluxe CD-ROM version may be available by the time this appears in print. Assuming, of course, the Editor doesn't discover it first...

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Eric's Ultimate Solitaire

\$49 (available at \$30-\$45, at the whim of the retailer)

Delta Tao Software, Inc.

760 Harvard Ave.

Sunnyvale, CA 94087

(800) 827-9316

<http://www.outland.com/deltatao/>

WebArranger Update

by David L. Harris

IN THE LAST Journal I wrote about my experience using WebArranger 2.0 to organize some Web site URLs. There are some shareware alternatives to using WebArranger for this purpose which have some advantages, including lower cost. The WebArranger package comes with WebWhacker, which enables you to get whole Web sites for later viewing offline. A similar (but not identical) thing can be accomplished by using the \$8 shareware Netscape History from Claudio Potenza (mc4924@mcclink.it). This uses the already existing cache files that Netscape creates on your hard disk when it visits sites. Netscape History organizes those cache files so you don't have to search through them and their cryptic names; it presents a summary Netscape page showing all the recent sites you've visited. You can click on its links to see offline those sites again, or if online go directly there. Unless you've gone to all the pages of a Web site, though, it doesn't capture the whole site as WebWhacker can.

The other thing that WebArranger does which can be duplicated with a shareware program is URL validations. As I mentioned in the earlier article, I found WebArranger took 40 minutes to check all the links in my list of user group Web pages. Big Brother does the same thing in about 10 minutes, including several minutes at the end when it waits for servers that aren't responding. Whereas WebArranger checks each URL in sequence, Big Brother does up to 20 simulta-

neously (both without your having to run your Web browser).

There is one disadvantage to using Big Brother: it presents its results as bare URLs, while with WebArranger you can annotate URLs so you don't have to interpret which sites they refer to; your added notes can be in plain English. And with WebArranger you can select the suspect URL and go there directly with your Web browser. On the other hand Big Brother can save its report as a Web page, so you can also use that to check the links by clicking on them. With both programs you will want to "manually" check suspect sites, as the error indications are not foolproof. (In fact both programs consistently report the same couple of pages as non-existing when Netscape has no trouble going there.)

Big Brother has one other advantage besides its much faster checking: you can use any Web page directly as BB's source. Thus it will validate all the links in the page I have created of all the user group sites. In WebArranger I have to manually add a new URL Note for each site.

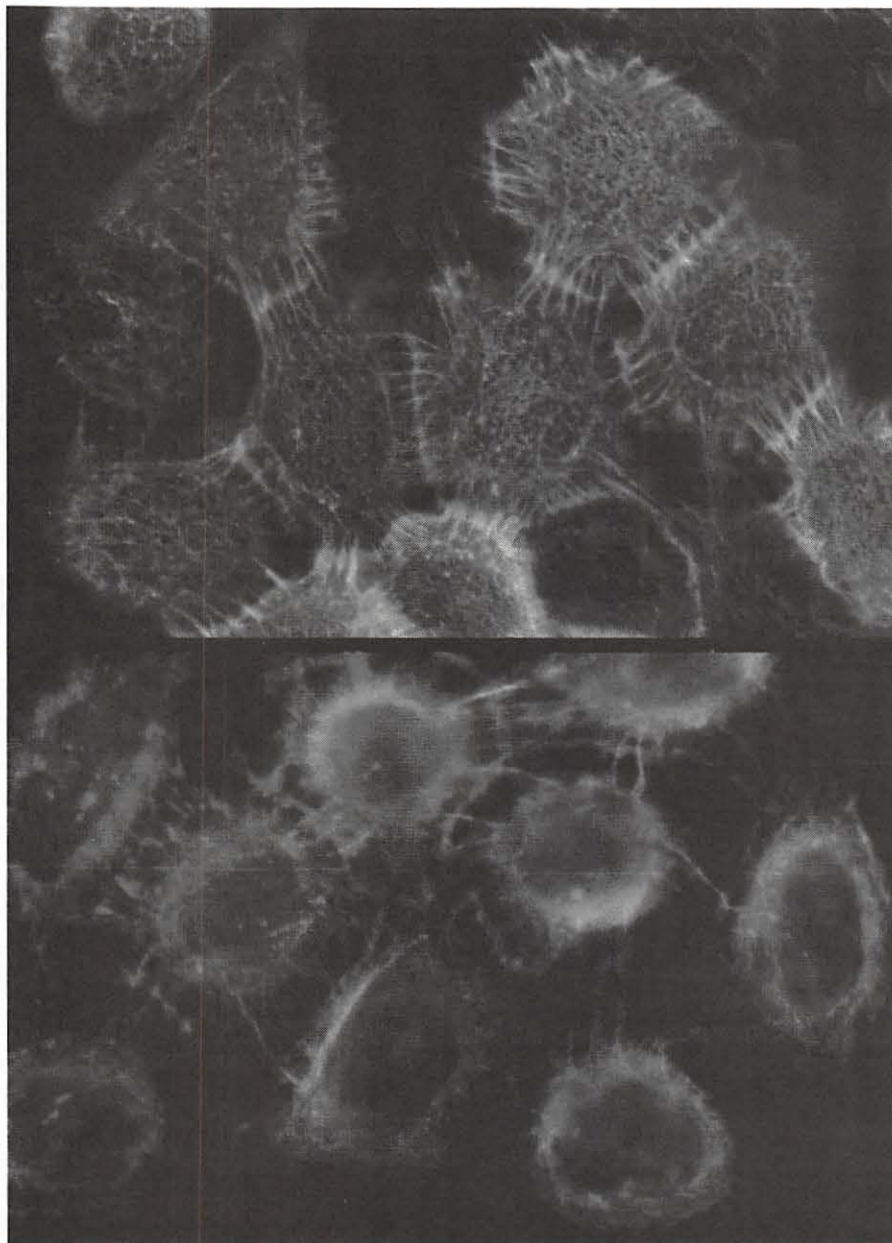
I still use WebArranger to check *changed* Web sites, but to validate links I have replaced it with Big Brother (who wants to wait 40 minutes?).

Big Brother is \$10 shareware from François Pottier (pottier@kagi.com), author of Disk Wizard and other good programs. Both Big Brother and Netscape History can be found in the TCS's File Transfer area (natch). ■

Artist on exhibit

by Blake Lange

This column looks at the art and artists of the Washington Apple Pi and the techniques and tools used to create the art.



This is an example of cells that have been transformed from the binding state to the loose state.

Pierre Savagner is a scientist at the National Institute of Health. Calling him an artist is probably a bit of a stretch, but in the competitive world of scientific publishing the Macintosh with its graphic capabilities is definitely the best tool for giving his articles a professional appearance. Pierre's laboratory is tucked away in Building 30 of the large NIH complex in Bethesda, Maryland. After finally finding the building and making it up to the fourth floor I walked down a hallway with glazed tile walls looking curiously into every doorway. Each one was filled from floor to ceiling with laboratory equipment and books with barely enough room to walk around.

Pierre, a French citizen, works as a Special Volunteer and is actually paid by the French government, not the NIH. His first degree was a Veterinary Doctorate from the Maison-Alfort in France. He then went on to earn a PhD in Developmental Biology while working in Paris.

Pierre shares his laboratory with a couple of his colleagues. During the interview he was actively involved in conducting experiments, all the while showing and explaining what he was doing. As I could understand it, he is currently studying the mechanisms by which cells bind together to form tissue like skin or become loose like those in blood. Cells with these two mechanisms are called epithelial cells and mes-

enchymal cells, respectively. More specifically he is studying how cells can switch from the one type to the other type. This takes place both during development and during cancer.

In cancer, he explained, many cells form which bind together to form a tumor, then some of the cells become loose to migrate to other parts of the body to start new tumors. Because it spreads in this way, which when diagrammed looks something like the body and legs of a crab, it got its name from the Astrological sign of Cancer, the crab.

By studying and being able to artificially trigger the transformation of cells between the states of binding and loose, Pierre hopes to contribute to the body of understanding that will lead to effective treatments.

I had the opportunity to take a hands-on look at his computer which was a PowerPC 7100/80 with 32MB of RAM. I was surprised to see that his system had the latest System software and was obviously set up by a power user. The internet applications were completely up-to-date which shouldn't be surprising since educational and scientific organizations have been plugged in to the Internet early on. Pierre said that he has been set up for e-mail for over eight years. After looking over his system and deciding on some graphic files to use for this story we quickly sent them off as Internet attachments. Unfortunately, my system choked on their size and I sent him a request later that night to resend the files addressing the size issues more carefully.

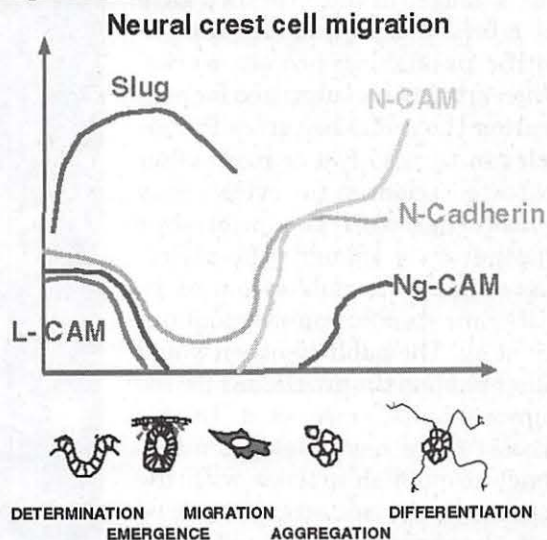
These graphics were prepared in ClarisDraw for presentations.

RESULTS

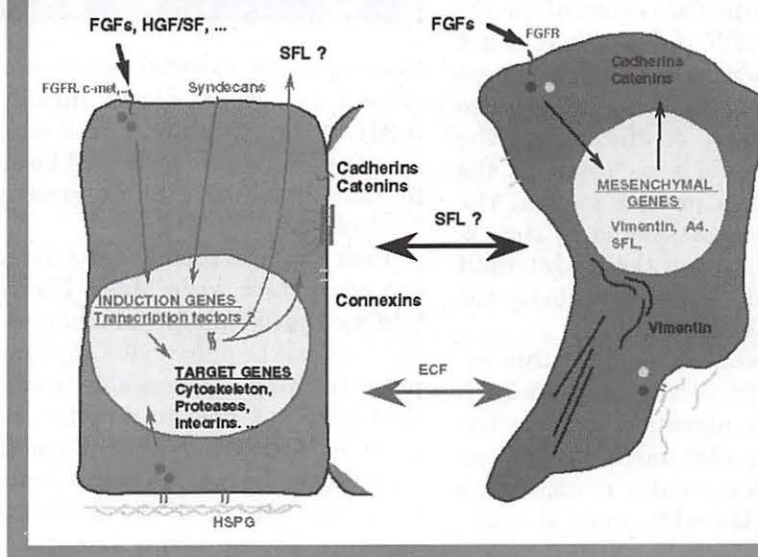
1) SLUG, a promising EMT gene candidate

Slug is a zinc-finger protein related to the Snail family originally described in *Drosophila*.

It was originally described in chick embryos to be expressed at the time of gastrulation and neurulation by cells going through phenotype transition. Antisense oligonucleotides from slug disturbed neural crest cell emigration.



EMT/MET RELATED GENES

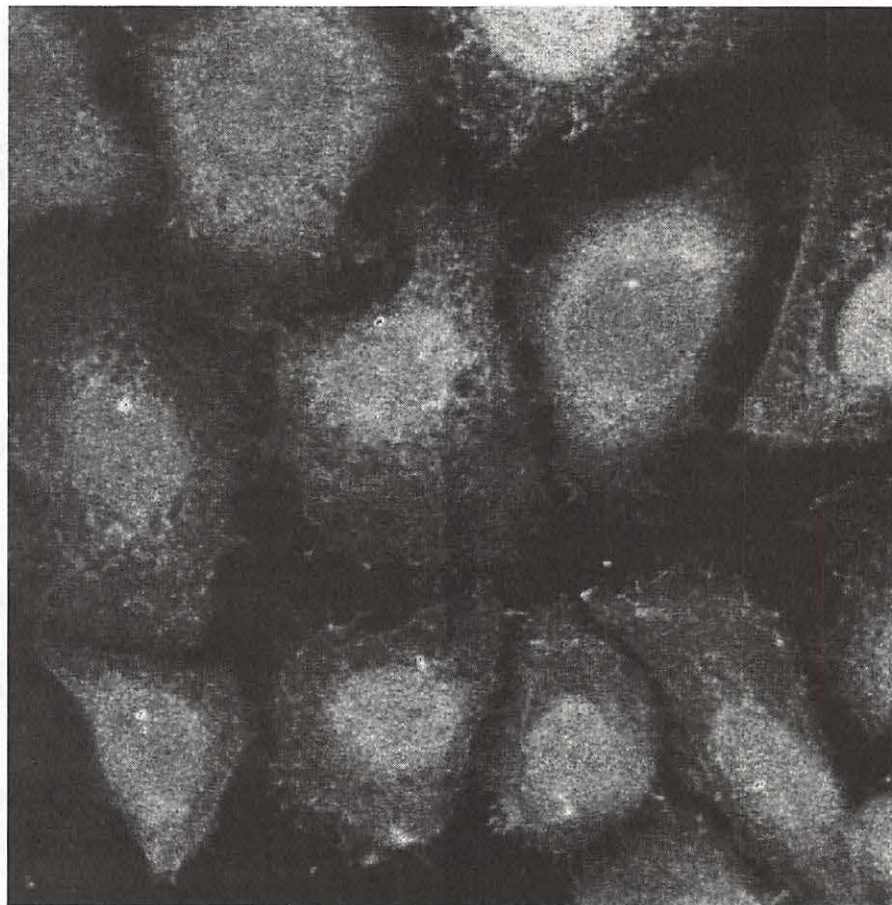




The graphics programs Pierre uses are Photoshop for preparation of photographs, and ClarisDraw and PowerPoint for posters and presentations. When I asked whether or not he used Photoshop to manipulate the images to bring out the detail he said that he did but that there was a danger in that. He then gave me a brief overview of how the scientific publishing process works. When articles are submitted for publication the publisher gives the articles in turn to two or more other respected scientist to review. They would then tell the publisher whether they thought the article was suitable for publication as is, with some specific improvements, or not at all. The publisher then would either publish the article, ask for the improvements, or reject it. In this process there has developed a tendency to publish articles with the better graphics, sometimes resulting in the less scientifically sound article being published.

Pierre then showed me an experiment where the results look like gray smudges. By measuring the size and location of the smudges one can determine the results of the experiment. The problem is that not only are there gray smudges where one is looking for them, they are also at other places on the image. The tendency would be to "clean up" the dirty looking images so that the reader is not distracted by the extraneous data, but that puts a limit on the reader's ability evaluate the data for themselves.

In my walk-through of this experiment from test tube, to Petri dish, to cell migration in an electric field, to a specialized darkroom, and finally to a computer room, I got a glimpse of the wide range of equipment available to the NIH scientists. There were flatbed scanners and



slide scanners, a special laser microscope that outputs digital files directly to the computer, and a variety of printers from standard laser, to color laser, to a photo-quality Tektronics.

I am happy to report that most of the computers were Macs. Pierre told me that he preferred using the Mac because he didn't have any computer training and was able to easily figure out how to do what he wanted. With Windows it is not so easy he has heard. He pointed out, however, that one of the disadvantages of everyone having a computer that makes it easy to choose their

printer is that out of laziness a lot of black and white text printing is done on the high-end color printer that costs over a dollar a page. Confirming what he said, next to the Tektronics Phaser II sdx were a scattering of text pages.

If you want more information about Pierre and his work you can visit him on the web at URL www.nidr.nih.gov/ohres.htm then follow the links Basic & Clinical Health Research; Laboratory of Developmental Biology; and Developmental Mechanism and Disorders Section. ■



Top Ten Hotline Tips

by Tom Witte

#1 Think. Be nice.

The people that may help you are not paid. (Your dues pay for the 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 are seeking. Remember who you are speaking to. Try not to call the same helper three times in a row for advice just because their name is listed more than once on the Hotline list. Also, if you have call waiting—use *70 to turn it off before you call. It is unproductive and irritating to interrupt your help session unnecessarily.

#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 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. Rather than have our office manager continually telling people to call the hotline she could be spending her time making sure the Journal gets out on time or setting up a tutorial classes or meeting sites.

[If you really think we should have help on demand at the office, that is great. Just 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. Know your 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 helper to call you back collect. [If you don't leave the above info 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 back to the machine 4 times to complain that I never returned his call.]

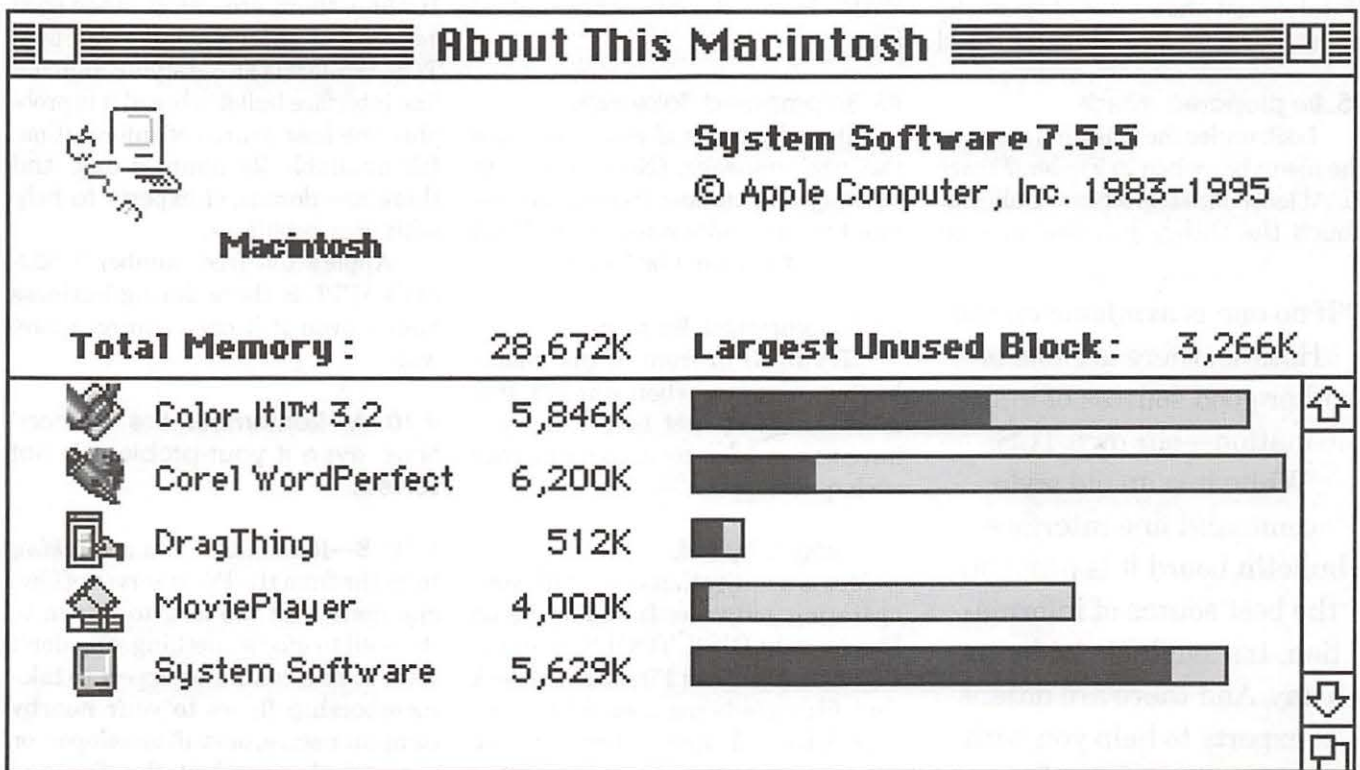


Figure 1.

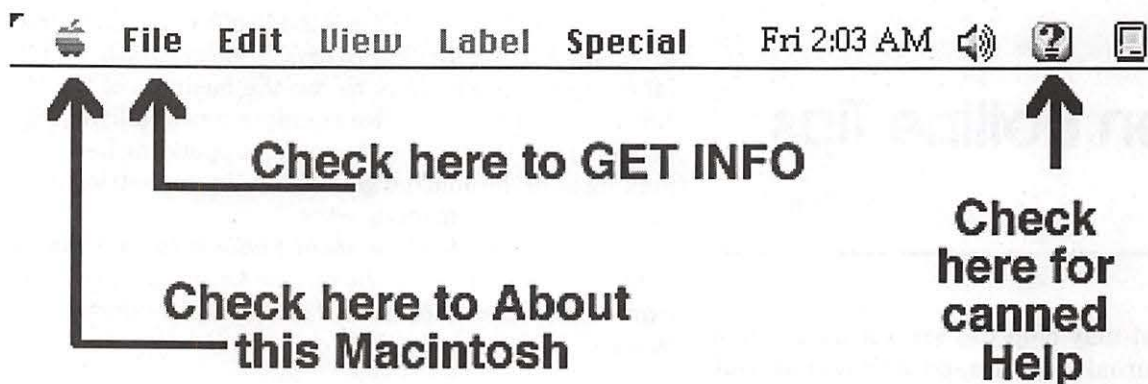


Figure 2.

#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. (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 Macs model number look for a name on the case.]

#5. Be prepared. Words.

Look under the Question mark on the menu bar when in Finder. (Figure 2). At least once select Show Balloons. Touch the things you see on your

"If no one is available on the Hotline, there are lots of other good sources of information—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."

desktop—learn what word Apple uses for them. Words like Folder, File, Hard Drive, Window, Dialog box and menu bar work 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 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. Don't sweat it if you can't or forgot.

#7. Be prepared. Be close

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

#8. Thing to try first.

—Mos is a utility that came with your operating software. It should be on Floppy title DISK TOOLS or Apple CDROM. Use Disk First Aid to check that files are being stored (on your hard drive or floppies) where they are suppose to be.

—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—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 with your problems.

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

10. A—Remember. Life will continue even if your problem is not solved.

10. B—Remember. You are taking from the 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 night clinic or ■

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

Mac or Apple	Name	Telephone #	Heading	Subjects
Apple	Bob Sherman	305-944-2111	Communications	DBMaster
Apple	Ron Evry	703-490-1534	Hypermedia	Hyperstudio
Apple	Bernie Benson	301-951-5294	Miscellaneous	Ile Card for the LC
Apple	Harvey Levin	301-299-9380	Programming	Apple Script
Apple	Eric Sheard	908-782-6492	Spreadsheets	Advanced Visicalc
		(eves) 908-782-6492 (days) 908-782-2242		
Apple	Allan Griff	301-654-1515	Spreadsheets	Apple Works
Apple	Eric Sheard	908-782-6492	Spreadsheets	Visicalc
		(eves) 908-782-6492 (days) 908-782-2242		
Apple	Ken DeVito	703-960-0786/87	Telecommunications	
Apple //	Bernie Benson	301-951-5294	Accounting Packages	Apple SSC (Super Serial Card)
Apple //	Dale Smith	301-762-5158	Apple II	Communications
Apple //	Guy Durant	202-575-0414	Apple II	Epson Printers
Apple //	Ron Evry	703-490-1534	Apple II	General
Apple //	Guy Durant	202-575-0414	Apple II	Hard Drives
Apple //	Guy Durant	202-575-0414	Apple II	Hardware
Apple //	Ron Evry	703-490-1534	Apple II	Hyperstudio
Apple //	Bob Sherman	305-944-2111	Apple II	Laser Printing
Apple //	Morgan Jopling	410-721-7874	Apple IIe	Upgrade
Apple //	Neil Laubenthal	703-691-1360	Apple IIGS	General
Apple //	Allan Griff	301-654-1515	Apple Works	General
Apple //	Ken DeVito	703-960-0786/87	Apple Works	General
Apple //	Paul Campbell	313-255-6497	Apple Works	General
Apple //	Ray Settle	410-647-9192	Apple Works	General
Apple //	Allan Griff	301-654-1515	AppleWorks	General
Apple //	Ken DeVito	703-960-0786/87	Beagle Buddies	
Apple //	W. T. Cook	410-995-0352	Beagle Buddies	
Apple //	Don Avery	202-362-1783	Beagle Buddies	
Apple //	Allan Levy	301-340-7839	Communications	ProTerm
Apple //	Allan Griff	301-654-1515	Database	Apple Works
Apple //	Morgan Jopling	410-721-7874	Database	Apple Works
Apple //	Milt Goldsamt	301-649-2768	Database	Apple Works
Apple //	Ken DeVito	703-960-0786/87	General	
Apple //	Ron Evry	703-490-1534	Word Processing	AppleWriter
Apple //	Allan Griff	301-654-1515	Word Processing	
Apple //	Dick Grosbier	301-898-5461	// GS	
Apple //	Ken Carter	301-834-6516	//, GX	
Apple //	Harold Polk	301-662-6399	General	
Apple ///	Steve Truax	304-263-5749	Apple III	3 Easy Pieces
Apple ///	Dave Ottalini	301-681-6136	Apple III	General
Apple ///	Paul Campbell	313-255-6497	Apple III	General
Apple ///	Paul Campbell	313-255-6497	Apple III	Repairs
Apple ///	Steve Truax	304-263-5749	Apple III	Stemspeller
Apple ///	J. Carey McGleish	313-332-8836	Apple III	Word Juggler (evenings)
Apple ///	David Jernigan	703-822-5137	Integrated Packages	3 Easy Pieces
Apple ///	Joan Jernigan	703-822-5137	Integrated Packages	3 Easy Pieces
Apple ///	Seth Mize	410-766-1154	General	
Apple //GS	Rich Sanders	703-450-4371	Drawing/Graphics	Deluxe Paint II
Apple //GS	Rich Sanders	703-450-4371	Word Processing	Multiscribe GS
Apple //GS	Eric Grupp	410-315-8331	General	
Apple //GS	Seth Mize	410-766-1154	General	
Cross Platform	Ken DeVito	703-960-0786/87	Transfers	MS/DOS-Apple-Mac
IBM	Louis Saunders	301-648-7332	Hardware	Troubleshooting & Repair
IBM	Etana Finkler	301-891-2821	Illustration	General best to call 9 PM to Midnight

Mac or Apple	Name	Telephone #	Heading	Subjects
IBM	Louis Saunders	301-648-7332	Network	Connectivity
IBM	Louis Saunders	301-648-7332	Printers	Connectivity
IBM	Tom Cavanaugh	301-627-8889	Printers	General
IBM	Louis Saunders	301-648-7332	Printers	Trouble-shooting & Repair
Internet	Dan White	301-843-3287	General	
Internet	Walt Francis	202-966-5742	General	
Internet	Curt Harpold	301-762-0887	Programming	JAVA
Internet	Craig Contardi	410-674-2752	World Wide Web	Netscape Navigator
Internet	Seth Mize	410-766-1154	World Wide Web	Sailor
Internet	Jaque Davison	703-644-7354	World Wide Web	Web Site Builder
Internet	Will DeKrone	410-626-7716	General	
Mac	Nancy Seferian	202-333-0126	Art & Video	General
Mac	David Jernigan	540-822-5137	Biblical/Language	Flashworks
Mac	Thomas Snowberger	410-757-4656	Contact Managers	Now Contact/UTD
Mac	Mort Greene	703-522-8743	Database	File Maker Pro
Mac	Tom Parrish	301-654-8784	Database	File Maker Pro
Mac	Bill Waring	410-647-5605	Database	Filemaker Pro
Mac	Rick Shaddock	202-321-2110	Database	FoxPro
Mac	Harvey Levin	301-299-9380	Database	Helix
Mac	Mort Greene	703-522-8743	Database	MS-File
Mac	Tom Parrish	301-654-8784	Database	Overvue
Mac	Elizabeth Mangan	703-750-2710	Database	Pro-Cite
Mac	Blake Lange	301-942-9180	Desk Top Publishing	PageMaker
Mac	Mort Greene	703-522-8743	Desk Top Publishing	PageMaker
Mac	Paul Schlosser	301-831-9166	Desk Top Publishing	Quark Xpress
Mac	Eric Grupp	410-315-8331	Desk Top Publishing	Quark Xpress
Mac	Ron Johnson	410-315-8764	Drawing/Graphics	Adobe Illustrator 3.0
Mac	Nancy Seferian	202-333-0126	Drawing/Graphics	Aldus Freehand
Mac	Bill Baldrige	301-779-8271	Drawing/Graphics	Canvas
Mac	Tom Parrish	301-654-8784	Drawing/Graphics	Canvas
Mac	Lloyd Olson	410-544-1087	Drawing/Graphics	ClarisDraw
Mac	Etana Finkler	301-891-2821	Drawing/Graphics	Freehand best to call 9 PM to Midnight
Mac	Bill Baldrige	301-779-8271	Drawing/Graphics	General
Mac	Nancy Seferian	202-333-0126	Drawing/Graphics	General
Mac	Neil Laubenthal	703-691-1360	Drawing/Graphics	General
Mac	Etana Finkler	301-891-2821	Drawing/Graphics	General best to call 9 PM to Midnight
Mac	Blake Lange	301-942-9180	Drawing/Graphics	Illustrator
Mac	Etana Finkler	301-891-2821	Drawing/Graphics	Illustrator best to call 9 PM to Midnight
Mac	Tom Parrish	301-654-8784	Drawing/Graphics	MacDraw
Mac	Mort Greene	703-522-8743	Drawing/Graphics	Photoshop
Mac	Blake Lange	301-942-9180	Drawing/Graphics	Photoshop
Mac	Mort Greene	703-522-8743	Drawing/Graphics	SuperPaint 2.0
Mac	David Jernigan	703-822-5137	Foreign Languages	Greek/Hebrew Languages
Mac	Allan Levy	301-340-7839	General	
Mac	Dan White	301-843-3287	General	
Mac	Neil Laubenthal	703-691-1360	General	
Mac	Tom Cavanaugh	301-627-8889	General	
Mac	Tom DeMay	410-461-1798	General	
Mac	Bill Baldrige	301-779-8271	General	

January 1997

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Office Closed 1	2 Columbia Slice	3	4
5	6 Intro to the Mac- Part 1	7 Intro to PhotoShop Advanced PhotoShop	8 WAP BoD	9 Stock SIG	10	11 Frederick Slice
12	13 Intro to the Mac- Part 2	14 Intro to Illustrator QuickTime SIG	15 ClarisWorks-Intro Excel SIG	16 PI SIG	17	18 ClarisWorks- Intro ClarisWorks- Intermed. Annapolis Slice
19	20 Intermed. Mac- Part 1	21 Internet-Part 1	22 Word-Intro Part 1 Retired SIG	23 Women's SIG	24	25 NoVa ComCol WAP General Meeting
26	27 Intermed. Mac- Part 2	28 Internet-Part 2	29 Word-Intro Part 2	30	31	

February 1997

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 Intro to the Mac- Part 1	4	5	6 Columbia Slice	7	8
9	10 Intro to the Mac- Part 2	11 QuickTime SIG	12 WAP BoD	13 Stock SIG	14	15 ClarisWorks- Intro Annapolis Slice ClarisWorks- Intermed.
16	17 Office Closed Intermed. Mac- Part 1	18 Internet-Part 1	19 Word-Intro Part 1 Excel SIG	20	21 Election Nominations due by the end of Saturday's meeting	22 NoVa ComCol WAP General Meeting
23	24 Intermed. Mac- Part 2	25 Internet-Part 2	26 Word-Intro Part 2 Retired SIG	27	28	

The New, Updated Hotline

THE HOTLINE has been updated and the new listing is in this month's issue of the Journal. We contacted (or tried several times to contact) all persons listed in the June 1996 issue of the Journal who were on one of the hotline pages. Unfortunately we were unsuccessful in contacting some people after several attempts and they were dropped from the listing. *If this has happened to you* and you wish to be listed on the hotline, please contact us. We checked to see what topics each person wished to remain listed for and any new topics they wanted to add. We have made those

changes, and they are many. There are many new names and items on the hotline.

Most importantly the names and telephone numbers are up to date. Called the listed number will put you in contact with a fellow member who is willing to help in that time of confusion or simple need.

If you wish to add your name to the list of existent topics or add a new topic which you would like to be listed under where you can help your fellow members please do so. Simply call the office, snail mail in the information or e-mail Jim Ritz at <jim.ritz@tcs.wap.org>.

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

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.

Mac Programmers' SIG

1st Wednesday; 7:30 PM; WAP office.

Newton Developers' SIG

Call Ed Palaszynski for meeting news—301-963-5841

NoVa Education (Ed) SIG

Last Wednesday; 7:30 PM; Walnut Hill Ctr.,
7423 Camp Alger Ave., Falls Church, VA.

Programmer's Interface (PI) SIG

Meetings are announced on the Announcements Board of the TCS. Call Gerry Wright at (301) 422-4286 for details.

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

1st Tuesday; 7:00 PM; WAP office.

WAP Garage Sale—June and December.

WAP General Meeting

4th Saturday; 9:00 AM; Northern Virginia Community College, Annandale Campus, Community Cultural Center Auditorium. December is the Garage Sale.

Women's SIG

Upcoming date: January 23 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.

Mac or Apple	Name	Telephone #	Heading	Subjects
Mac	Tom Witte	703-683-5871	General	
Mac	Louis Saunders	301-648-7332	Hardware	Troubleshooting & Repair
Mac	Jerry Iler	410-987-5432	IIsi	General
Mac	Bill Geiger	703-237-3614	Integrated Packages	ClarisWorks
Mac	Sandy Kowalczyk	410-268-3149	Integrated Packages	ClarisWorks
Mac	Ray Settle	410-647-9192	Integrated Packages	Clarisworks
Mac	Joan Jernigan	703-822-5137	Integrated Packages	ClarisWorks
Mac	Jim Ritz	301-770-1405	Integrated Packages	MSWorks
Mac	Ray Settle	410-647-9192	Integrated Packages	MSWorks
Mac	Tim Childers	301-997-9317	Integrated Packages	MSWorks
Mac	Dave Weikert	301-963-0063	MacDisketeria Library	
Mac	David Jernigan	703-822-5137	Mail List Manager	My Mail List Manager
Mac	Mort Greene	703-522-8743	Miscellaneous	File Transfer & Backfax
Mac	Sandy Kowalczyk	410-268-3149	Miscellaneous	HyperCard
Mac	Blake Lange	301-942-9180	Miscellaneous	Hypercard
Mac	Tom Witte	703-683-5871	Miscellaneous	Hypertalk
Mac	Jeff Dillon	301-434-0405	Miscellaneous	MX-80
Mac	Rick Chapman	301-989-9708	Miscellaneous	Hypercard
Mac	Tom Witte	703-683-5871	Miscellaneous	Hypercard
Mac	Peter Combes	301-445-3930	Multi MediaDirector	
Mac	Joan Jernigan	703-822-5137	Multi MediaGeneral	
Mac	Peter Combes	301-445-3930	Multi MediaLanguage	
Mac	Mort Greene	703-522-8743	Multimedia	Image Studio
Mac	Mort Greene	703-522-8743	Multimedia	Macro Mind Director
Mac	Stuart Bonwit	301-598-2510	Multimedia	Quicktime
Mac	Tom Witte	703-683-5871	Multimedia	Quicktime
Mac	Mort Greene	703-522-8743	Multimedia	Video Works
Mac	Jerry Iler	410-987-5432	Older Claris	General
Mac	Jerry Iler	410-987-5432	PB180C	General
Mac	Lester Morcerf	410-987-0685	Performa 550	General
Mac	Thomas Snowberger	410-757-4656	Performa System	General
Mac	Rick Shaddock	202-321-2110	Personal Contact Manager	ACT
Mac	Mel Benson	410-647-6873	Personal Finance	Dollars & Sense
Mac	Bill Geiger	703-237-3614	Personal Finance	Manage Your Money
Mac	Mel Benson	410-647-6873	Personal Finance	Manage Your Money
Mac	Clarence Goldberg	410-263-5189	Personal Finance	Quicken
Mac	Louis Saunders	301-648-7332	Printers	Connectivity
Mac	Louis Saunders	301-648-7332	Printers	Troubleshooting & Repair
Mac	Tom Cavanaugh	301-627-8889	Printers	General
Mac	Walt Francis	202-966-5742	Printers	General
Mac	Michael Hartman	301-942-3717	Programming	"C"
Mac	Michael Hartman	301-942-3717	Programming	General
Mac	Harry Erwin	703-758-9660	Programming	General
e-mail at herwin@gmu.edu				
Mac	Michael Hartman	301-942-3717	Programming	Pascal
Mac	Lloyd Olson	410-544-1087	Spreadsheets	Excel
Mac	Charles Schindler	410-437-4624	Spreadsheets	Excel
Mac	Walt Francis	202-966-5742	Spreadsheets	General
Mac	Roger Burt	301-424-6927	Spreadsheets & Charts	ClarisWorks
Mac	Mark Pankin	703-524-0937	Spreadsheets & Charts	Excel
Mac	Dick Byrd	703-978-3440	Spreadsheets & Charts	Excel
Mac	Mort Greene	703-522-8743	Spreadsheets & Charts	Excel
Mac	Rick Shaddock	202-321-2110	Spreadsheets & Charts	Excel

Mac or Apple	Name	Telephone #	Heading	Subjects
Mac	Tom Cavanaugh	301-627-8889	Spreadsheets & Charts	Excel
Mac	Bill Waring	410-647-5605	System	General Mac Help
Mac	Neil Laubenthal	703-691-1360	System	Mac OS
Mac	Lloyd Olson	410-544-1087	System	Mac OS
Mac	Allan Levy	301-340-7839	Telecommunications	Modems General
Mac	Bernie Benson	301-951-5294	Telecommunications	Modems Hayes Smartmodem
Mac	Allan Levy	301-340-7839	Telecommunications	Practical Peripherals
Mac	Jaque Davison	703-644-7354	Virtual Reality	Alien Skin Texture Shop
Mac	Jaque Davison	703-644-7354	Virtual Reality	Bryce 2
Mac	Jaque Davison	703-644-7354	Virtual Reality	Specular Logomotion
Mac	Jaque Davison	703-644-7354	Virtual Reality	Virtus - 3-D
Mac	Jaque Davison	703-644-7354	Virtual Reality	Virtus
Walkthrough Pro				
Mac	Tom Parrish	301-654-8784	Word Processing	Think Tank-More
Mac	David Jernigan	703-822-5137	Word Processing	Word Perfect
Mac	Eric Grupp	410-315-8331	Word Processing	WordPerfect
Mac	Charles Schindler	410-437-4624	Word Processing	WordPerfect
Mac	Walt Francis	202-966-5742	Word Processing	General
Mac	Tim Childers	301-997-9317	Word Processing	Hebrew
Mac	Tom Cavanaugh	301-627-8889	Word Processing	MS Word
Mac	Harris Silverstone	410-435-3582	Word Processing	MS Word
Mac	Dick Grosbier	301-898-5461	General	
Mac	J. Russell Robinson	301-739-6030	General	
Mac & Apple	Joan Jernigan	703-822-5137	Educational	All MECC
Mac & Apple	Joan Jernigan	540-822-5137	Hypermedia	Hyperstudio
Mac & Apple	Ginny & Mike Spevak	202-244-8644	Miscellaneous	Dvorak Keyboard
Mac & Apple	Allan Levy	301-340-7839	Telecommunications	General
Mac & Apple	Bob Sherman	305-944-2111	Telecommunications	General
Mac & Apple	Dale Smith	301-762-5128	Telecommunications	General
Mac & Apple	Allan Levy	301-340-7839	Telecommunications	TCS
Mac & Apple	Dale Smith	301-762-5128	Telecommunications	TCS
Mac & Apple	David Harris	202-966-6583	Telecommunications	TCS
Mac & Apple	Nancy Seferian	202-333-0126	Telecommunications	TCS
Mac & Apple	Paul Schlosser	301-831-9166	Telecommunications	TCS
Mac & Apple	Joan Jernigan	703-822-5137	Word Processing	The Writing Center
Networking	Louis Saunders	301-648-7332	Mac	Connectivity
Networking	Douglas Ferris	301-924-4180	Networking	Novel
Networking	Douglas Ferris	301-924-4180	Networking	Windows

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.

Telecommunications Help Sheet

A quick reference sheet for use while on the TCS

TCS Phone Numbers:

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

Main Menu

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

File Transfer Menu

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

File Area Menu

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

Editor Menu

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

Change Conference Menu

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

Conference Menu

<A> Adjust Pointers
<C> Change Conference

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

Bulletin Board Menu

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

User Preferences

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

Electronic Mail Menu

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

Please see page 47 for the TCS Help Hotline phone numbers.

Macintosh Tutorials

VOLUNTEERS 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 someone who can offer training on the Internet. Call me if there is a subject that you are qualified to teach.

I am very pleased with the response to our requests for volunteers. We have a very bright and enthusiastic group of volunteers working to bring you the best possible classes and programs. We encourage and welcome additional support for the training program. Graphic designers, desktop publishers and illustrators—we could use your help in promoting our programs with brochures and fliers. For further information call Beth Medlin at the Pi office, 301-984-0300.

Macintosh Tutorials

The Macintosh tutorials are two two-part classes, Introduction to the Macintosh and Intermediate Macintosh, designed for beginning users or those desiring to brush up on their skills. The primary focus of these courses will be on the System, Desktop, Icons, Windows, and basic concepts in System 7, but System 6 hangers-on are welcome and encouraged to participate. Their issues and concerns will be addressed. Please try to take all four parts; this is the most beneficial arrangement.

Introduction to Macintosh, Part I

You should go through the Guided Tour disk that comes with your computer or system upgrade kit before you come to class. You'll learn: how to safely turn your Macintosh on and off; what the basic dos and don'ts are; 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 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 nonmembers).

Dates: Jan. 6, 7-10 p.m. [Course #M010697];
Feb. 3, 7-10 p.m. [Course #M020397]

Some Specifics

■ **Where:** Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 12022 Parklawn Drive, Rockville, Maryland.

■ **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.

January and February Tutorials—2 types of 2-part classes.

Each 2-part class must be taken as a 2-part class. Both parts must be taken in one month.

—**Intro to Mac 1** 01/06/97 (M010697) or 02/03/97 (M020397)

—**Intro to Mac 2** 01/13/97 (M011397) or 02/10/97 (M021097)

—**Intermediate Mac 1** 01/20/97 (M012097) or 02/17/97 (M021797)

—**Intermediate Mac 2** 01/27/97 (M012797) or 02/24/97 (M022497)



Introduction to Macintosh, Part II

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, 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 about the Chooser, peripheral devices, and how they are connected to the Macintosh. This is 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 nonmembers).

Dates: Jan. 13, 7-10 p.m. [Course #M011397]; Feb. 10, 7-10 p.m. [Course #M021097]

Intermediate Macintosh, Part I

Intermediate Macintosh, Part I will follow up the concepts in Introduction to Macintosh. You will learn more advanced Macintosh skills and terminology about the system software and 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 about how to buy hardware and software, how to upgrade, and what kinds of software are available for your Macintosh. This is 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 nonmembers). **Dates:** Jan. 20, 7-10 p.m. [Course #M012097]; Feb. 17, 7-10 p.m. [Course #M021797]

Intermediate Macintosh, Part II

How to maintain and troubleshoot your Mac. Topics will include: organizing and managing your hard disk; backing up and back-up strategies, archiving, disk formatting, defragmentation and optimization; manag-

ing 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 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 nonmembers).

Dates: Jan. 27, 7-10 p.m. [Course #M012797]; Feb. 24, 7-10 p.m. [Course #M022497]

Introduction to Photoshop

This is an introductory class with a fiery finish to make the student feel competent to perform enough dazzle to impress the family. BRING THREE NEW FLOPPIES and receive in return three floppies filled with Photoshop goodies, including tips about using filters for special effects. **Date:** Jan. 7, 3-6 PM. Call office for February dates.

Advanced Photoshop Techniques

This is an advanced class. Subjects covered will include working with layers and channels. Reading and manipulating histograms, levels controls and other delicate global controls to enhance your image. BRING THREE NEW FLOPPIES and receive in return three floppies filled with Photoshop goodies, including tips about using filters for special effects. **Date:** Jan. 7, 7-10 PM. Call office for February dates.

Basic Adobe Illustrator Techniques

This is an introductory class covering fundamental material, but the class will deliver enough glitzy stuff to let the student get a decent little early-portfolio started. BRING THREE NEW FLOPPIES and receive in return three floppies filled with Illustrator goodies, including reviews of some material presented in this class. **Date:** Jan. 14, 7-10

PM. Call office for February dates.

Advanced Adobe Illustrator Techniques

This is an advanced class. Subjects covered will include working with layers and using a wide range of filters. Learn to use some special type techniques. Understand Pathfinder and make masks and complex gradients. BRING THREE NEW FLOPPIES and receive in return three floppies filled with Photoshop goodies, including review of some material presented in this class.

Dates: Call office for dates.

Introduction to ClarisWorks

This class will introduce the student to the integrated modules of 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, & 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. Students should come with a basic familiarity with the Macintosh environment.

Dates: Jan. 15, 9:30-12:30 [Course #M011597]; Jan. 18, 9:00-noon [Course #M011897]; Feb. 15, 9:00-noon [Course #M021597]

Intermediate ClarisWorks

A class for those who have some experience with ClarisWorks. This class will focus on the word processor and integrating the other tools into the word processor. Integrating the elements together: combining the parts in multi-column documents and documents with multiple elements, for example: newsletters, tables, bulleted lists, outlines, mail merge, etc.

Dates: Jan. 18, 12:30-3:30 p.m. [Course #M011897]; Feb. 15, 12:30-3:30 p.m. [Course #M021597]



Introduction to PageMaker

This course is for new users of PageMaker. It will cover use of 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 text and graphics and do page layout. Before coming to this class students should have some experience using the Macintosh.

Date: Call office for dates.

Internet

A thorough introduction to the features and services of the Internet. Detailed demonstrations of the major Internet applications for the Macintosh. (2 parts) **Dates:** Jan. 21, 7-9 p.m. [M012197]; Jan. 28, 7-10 p.m. [M012897]; Call the office for February dates.

HTML Part 1-The basics

Internet; What it is and how it works; What you need to worry about (i.e. bandwidth, standards); What you need from ISP; FTP Tools

(Fetch & Anarchic) Documents (Format & Content); Images (Colors on different platforms & How to make smaller-GIF/JPEG/Transparency); HTML (What it is-Tags & Browsers & Endless change-striving to include formatting information and action, HTML editors, testing, how to learn more from others, Web sources for more information).

Call the office for dates.

HTML Part 2—Beyond the basics

Prior to class student must make and submit 2 sample Web pages for class review. HTML (document layout, file management issues, Using CGI scripts, Testing, Getting noticed); Using enhanced functions (Sound, Animation GIFS, Movies, other bells and whistles).

Call the office for dates.

Introductory Word 5.1

A basic introduction to word processing using Microsoft Word 5.1. Create, edit, save and print documents with basic headers and footers. Ma-

nipulate text and formats using cut, copy and paste techniques. Find and change text and format characters. Format text using ruler and menu selections. Move text within and between documents. Check spelling and create your own tailored spelling dictionaries. Two three hour sessions on consecutive weeks for \$70 (\$100 for nonmembers).

Dates: Session 1, Jan. 22, 7-10 p.m. [Course #M012297], Session 2, Jan. 29, 7-10 p.m. [Course #M012997]; Session 1, Feb. 19, 7-10 p.m. [Course #M021997], Session 2, Feb. 26, 7-10 p.m. [Course #M022697]

Learn how to use the TCS!

Learn how to configure ZTerm, long on to the TCS and send/receive Internet e-mail. You'll also learn how to navigate around the TCS's conference system, read/enter messages and download files. **Call the office for dates.** ■

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.**



Unload Download Phobia

by Lorin Evans

HAVE YOU EVER been interested in going 'out there' to download an update to system software or get a newer driver for your printer, print monitor or CD-ROM? With your access to the WAP bulletin board, you have ready access to those items. All you have to do is download them — right? Well, not quite. It seems you also have to uncompress each download, turn the image you just retrieved into a disk again, put it on a disk, and then install it. Daunting? Not really. Just follow the easy steps in this article and you too will quickly overcome Download Phobia.

When Apple has a software update to release, it usually consists of the update itself, a ReadMe file, an installer program and other miscellaneous pieces. Those are the items you find on a set of disks when you buy an update from the Apple distribution center. But, when Apple makes it available to the Pi for you to download, it is important that those pieces not get misplaced; it is not nice for parts of Disk 2 to end up on Disk 1, or vice versa. Apple maintains the integrity of the contents of each disk by creating an "image" of that disk, compressing it and putting it online for us to retrieve. They sometimes create two versions of the download: one a network version and a single install version for the rest of us. This article will help you take a single install update from Apple as it appears on the TCS and turn it into usable software.

You can identify disk "images" several ways. The filename will sometimes end with ".img". If you have DiskCopy installed the downloaded file's icon will look like the DiskCopy icon. You should also read the file description on the TCS. Quite often the description will mention that this file is an image or that

"Let's take an update
to the System 7.5
operating system and
walk through each
step; the process is the
same for other up-
dates. Three disks are
required to hold all the
parts which create
System 7.5.5 updater.
It is your job to down-
load each disk in the
set, expand the con-
tents, and then change
the "image" of each
disk back into a disk."

DiskCopy is needed to convert the file to a disk format.

You need to have the following programs available on your hard drive before you can do any of this. Unless otherwise noted, each can be

found in File Area 21, Mac Essentials. They are also found on our Telecommunications disk (13.01). If you access to the Internet, you can find the shareware utilities at <<http://www.shareware.com>>. Apple software is located at <<http://www.apple.com>>.

■ ZTerm or a similar telecommunication program to download the software;

■ UnStuffIt or StuffIt Expander to open the archived copy which was compressed or stuffed (the terms are interchangeable) to reduce download time and save hard drive space. You should already have a copy of Expander as it is found on many of the disks in our library and on our telecommunications disk.

■ DiskCopy to unpack the disk "images" onto your own disks. It is found in Apple System Software, Area 3, #10;

■ some number of 1.44m blank disks (in this case 3).

■ [optional] ShrinkWrap will enable you to "mount" disk images.

To Install From Disks

Let's take an update to the System 7.5 operating system and walk through each step; the process is the same for other updates. Three disks are required to hold all the parts which create System 7.5.5 updater. It is your job to download each disk in the set, expand the contents, and then change the "image" of each disk back into a disk. At that point the software is in a usable form so that you can install the update in your computer. If everything goes as planned, the installer will recognize each piece and know how to install it in the correct manner to effect the changes you and Apple want to have happen. Trust me, this works — usually. Let's begin.

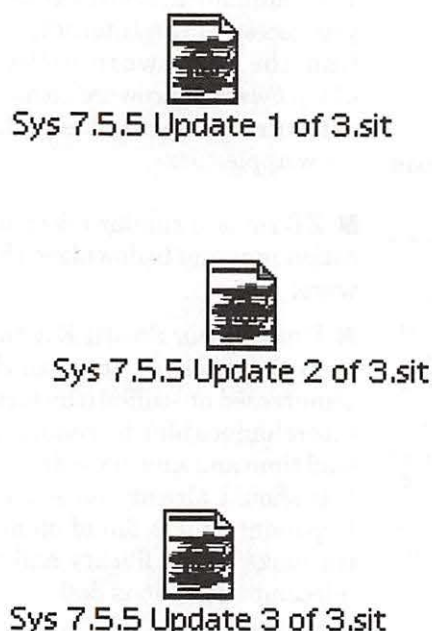


Figure 1.

1. Format three blank 1.44m disks and set them aside.
2. Find the software you want to download. The three disk update that creates System 7.5.5 is in Apple System Software (Area 3). The disks are numbers 532, 533, and 534. Download the three files onto your hard drive. (See Figure 1.)
3. Unstuff each file by dragging the icon for that item atop the icon for StuffIt Expander (or UnstuffIt). You will be asked where you want to place the expanded version. Select your desktop. Each unstuffed file turns out to be a disk "image" of that disk in the set. You can now delete the compressed versions. (See Figure 2.)
4. Double Click on DiskCopy. Click on the "Load Image File. . ." button. Tell DiskCopy where to find the three files. Highlight the "image" of Disk 1, and open that file. (See Figure 3.)



Figure 2.

5. Click on the "Make a Copy" button. Insert one of your formatted blank disks. A dialogue box will appear on the screen asking if you want to replace the data now found on "untitled" with the "image" of Disk 1. Click on "Duplicate". DiskCopy will convert the "image" of Disk 1 to a functioning disk, called Disk 1, and eject that disk when it is finished. One down, two to go!

6. Once again click on Load Image File and repeat steps 3 and 4, this time highlighting Disk 2. Repeat these steps for Disk 3 and you are finished. Make a label for each disk and store with the rest of your system software.

At this point you should have three disks that are the update which will change System 7.5.3 to 7.5.5. Quit all the programs you have been using, insert Disk 1. Read the ReadMe file to learn what Apple would like you to do so as to assure a successful update.

You should keep the disk "images" on your hard drive until you are certain that the system software you just recreated on disk works. When you are satisfied that the installation was successful, delete them.

A Shortcut to Success

Now that you are comfortable doing this, I want to show you another way to accomplish the same task, but with fewer steps. To do this, however, you need to download a copy of ShrinkWrap.

If you recall, you cannot install an update to system software when the update is located on your hard drive. It has to be done from an external source (disk, CD, or external hard drive) or with some slight-of-hand. ShrinkWrap is a program that fools your computer into thinking that the system software update you have placed on your hard drive is on a removable floppy disk.

To use a piece of jargon, you will have to trick your computer into "mounting" a pretend disk. ShrinkWrap will create [mount] a disk "image" on your desktop from which you can install the system update, rather than having to translate the "image" to a disk and then use that floppy disk to install the update. This feature becomes more useful the larger the update becomes. For example, the update 2.0 which created System 7.5.3 is 14 disks. You could use the first method I described or, if you have sufficient room on your hard drive or a

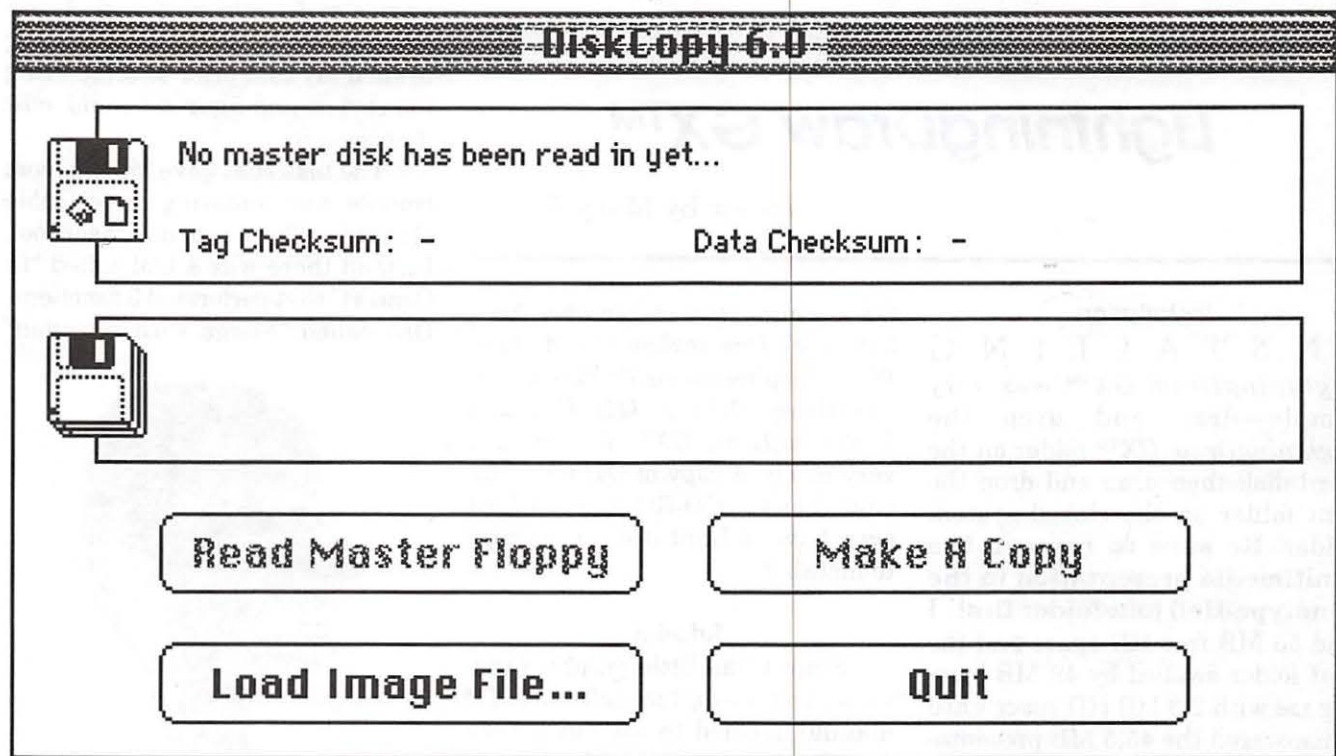


Figure 3.

ZIP cartridge, etc., create "image" disks there and install the update directly. Clearly that would be a lot faster, if you have the storage room. Here is how to do it:

1. Some preliminaries: (a) make sure you have the room needed for the number of disks in the set; (b) place ShrinkWrap on the desktop or create an alias and place it on the desktop. I also assume you have uncompressed each item you downloaded.
2. drag the first disk "image" onto

the icon of ShrinkWrap. Watch as the program "mounts" the image. You will see an icon for the disk, name and all, appear on your desktop. Just remember there is no such disk in your Mac.

3. repeat step two until you have "mounted" all disk images. (See Figure 4.)
4. Open Disk 1. Click on the ReadMe file and follow its instructions to prepare to install the update.

5. When you are ready to install the update, click on the Installer and away you go.

6. Restart your computer to make certain that the update is working. You now need to decide whether to keep the update on your hard drive as disk "images", or transfer those "images" to floppy disks and save them with your other system disks. I vote for the latter. To do that, follow steps 4, 5 and 6 under **To Install From Disks.** ■



Figure 4.



LightningDraw GX™

review by Mary Keene

Installation

I N S T A L L I N G
LightningDraw GX™ was very simple—drag and drop the *LightningDraw GX™* folder on the hard disk then drag and drop the font folder on the closed system folder. **Be sure to remove the multimedia presentation in the Linotype-Hell font folder first.** I had 55 MB free HD space and the font folder swelled by 48 MB leaving me with 2.3 MB HD space until I discovered the 45.5 MB presentation buried in the font folder. For those of us who know nothing about QuickDraw GX (it is required for this application), the multimedia presentation presents a very good description of why QuickDraw GX is desirable. The short answer—it lets you do things with QD GX fonts that most applications won't permit and it creates "portable digital documents" if both computers have QD

GX installed (sort of like what Acrobat does). One review I read about PhotoShop mentions its lack of text handling ability. QD GX and *LightningDraw GX™* fill this gap very nicely. A copy of QD GX is included on the CD-ROM so you don't even have to hunt down your copy to install it.

Tutorial

Since I had little graphic experience and the *LightningDraw GX™* manual seemed to lay out a very specific, detailed and basic tutorial, I decided to attempt a very non-Macintosh task: I would read the tutorial and follow it step by step! The assignment was to draw "Mr. Wonderful". Bear in mind as you read this, even though I have taken six drawing class and six oil painting classes, I am not a fluent artist; my drawing skills are minimal and primitive. I am right-handed, mixed brain dominant and I was wearing a long arm cast on my **right** arm due to a wrist fracture. (That combination is probably responsible for driving me to even consider following a tutorial in the first place.) I had some difficulty controlling my mouse because of the aforementioned problems; nevertheless, I went bobbing through the directions pretty easily until I got to Mr. Wonderful's nose. Some of the facial contours were ragged, sharp and didn't work well with the noses I drew. I tried skipping ahead to find ways to correct the problem areas, sometimes successfully and sometimes not. I did remember to save frequently and with different file

names so I could pick and choose what to work with. I was expecting to shed my cast prior to completing the review and figured I could edit if necessary.

The task that gave me the most trouble was removing undesirable elements. There was no eraser tool. Instead there was a tool called "In Concert" that performed 3 functions. One called "Merge with selection"



Figure 2. Mr. Wonderful

allows the user to merge new elements with current elements seamlessly. Another option called "Remove from selection" serves as a type of eraser tool—it demarcates an area to be subtracted from the graphic but it does not remove it directly. Instead, you must also use a combination of "pen color" and "fill color" to match the color of the underneath elements thus making the "removed elements" invisible from the eye. The last function is called "Remove from selection" and draws a freehand box around the area. When the unwanted area is completely enclosed, you click on the pointer tool to give the box handles and then you can clear it from the graphic. I learned the "merge with" easily except I kept forgetting to be sure the proper shades of pen and fill colors were selected. One of my greatest problems was that I couldn't "lock" the tools. It seemed that clicking to finish an operation also released the designated tool and

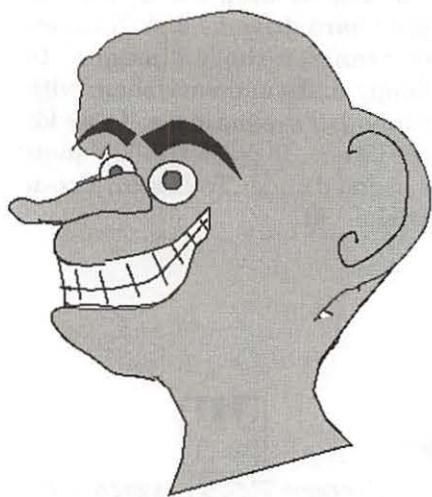


Figure 1. Mr. Wonderful

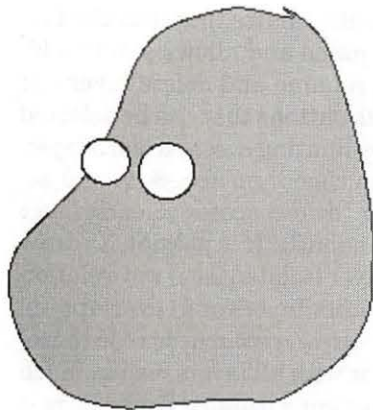


Figure 3 Mr. PotatoHead

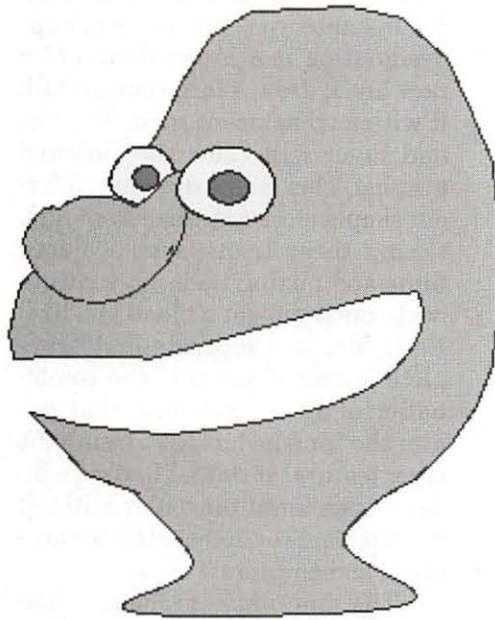


Figure 4. Mr. PotatoHead

defaulted to the pointer tool. Many times I went merrily on my way drawing up a storm only to realize nothing was happening because I had exited the intended tool and I was merely "surfing" the graphic with an impotent pointer tool. The good news was that at least defaulting to the pointer had not selected elements that were being changed involuntarily. However, I did become

very, very friendly with the "undo and redo" commands. I spent a lot of time trying to select colors and tools in the correct order to keep everything working the way I wanted (fig.1 Mr. Wonderful). Since my mouse and my left hand kept "stuttering" quite a bit, I waited until the cast came off and tried again. This time, I still had a soft splint on and it also interfered with mouse control. So I started another "Mr. Wonderful" (actually this one is Mr. PotatoHead) to see if what I learned had stuck at all. That's when I discovered how important the mouse surface can be. One too slick caused my hand to go too fast overshooting my target. I experimented with various surfaces until I found one that worked better. (More about this later.) I figured out how to work the "remove from selection" pretty well. After I finished Mr. PotatoHead (fig. 3-7), I opened the original Mr. Wonderful and completed it too (fig 2).

I next experimented with using *LightningDraw GX™* to retouch old photos. I have one that is badly in need of retouching in the shadows. I also want to recolor it sepia instead of its present stark black and white. The first thing I noticed after opening *LightningDraw GX™* was how much more precisely *LightningDraw GX™* displayed the many colors in a black and white photo. I had opened this picture previously in another application and while there were tonal and color values that reflected the colors in the photo and the old paper, in *LightningDraw GX™* these differences manifested a greater range, depth and breath of color. I was able to magnify the shadowed areas large enough to see the pixels clearly. It is possible to alter individual pixels or areas quite precisely. I have to develop skills adequate to work this

precisely.

Then I played around with the type and text functions. This is neat stuff. It allows your imagination to run away with you. Pretty much anything you can do to a graphic element can be done to a letter, a word, a sentence, a paragraph or a page. You can type it, place it, twist it, turn it, move it, drag it, squash it, squeeze it, and mangle it many other ways. Then you can apply style changes to bold it, slant it, outline it, shadow it, underline it, condense and extend it. You can choose from all the fonts you own (*GX* fonts have other features besides these standard ones), select the color of your choice (256 color palette), or use a gradient if you want to (including gradients that you design). After you create the text, take another look at it. Does it make a picture? Can you manipulate the text to become a graphic? Of course, you can! All you have to do is see it. Try using the perspective tool to turn your text into a row of trees, then put a thin line under the trees, duplicate and flip the text vertically and you have reflected the "trees" into a lake or a river creating an instant and simple landscape.

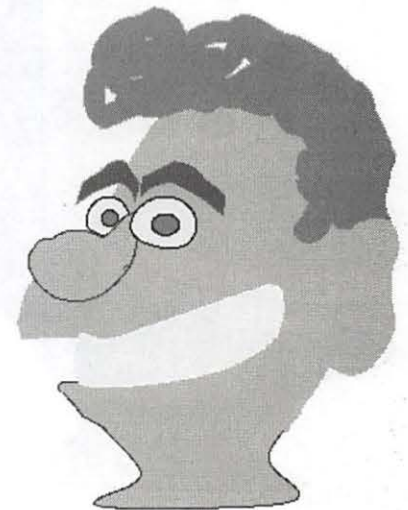


Figure 5. Mr. PotatoHead

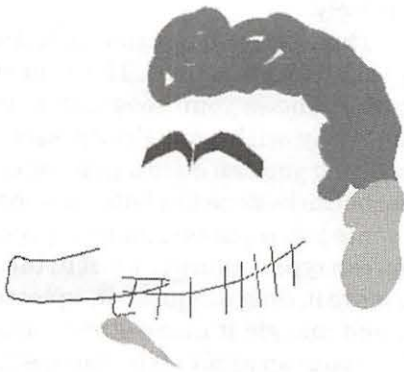


Figure 6. Mr. PotatoHead Layer

Working in Layers

That playtime led to my next project—create an Anniversary greeting since I hadn't bought a card. It was very late at night and I decided to just play around with freehand experimenting. I also wanted to become more familiar with the "Layer" feature. I used the freehand tool to scribble randomly on the page. Then I picked a fill color

I liked and assigned that to be the background layer (fig. 8). Next, I drew an oval, colored it a lighter shade, and positioned it behind the background layer (fig. 9). Then I drew a rectangle, canted it diagonally, colored it with a complementary color and arranged it behind the bottom of the background layer figure (fig. 10). I added a text layer to "address" it to my husband and placed that layer on top of the rectangle (fig. 11). It began to look very much like a figure flying an envelope so I added eyes to enhance that image (fig. 12). Since I wanted to show an example of using text as a graphic I added the "Happy Anniversary" layer. It becomes the nose and mouth (fig. 13). To complete the conceit of an envelope, I added my name in the upper left corner (fig. 14). I used a total of 7 layers (fig. 15 finished image). The layer feature allowed me to play around and experiment with the look that was being created without jeopardizing any work I wanted to keep. I didn't

have to save 3 billion copies of the changes and experiments. (My HD thanked me profusely. I give it headaches quite frequently.) In all the text areas, I used many tools to alter the words; this created some interesting effects. None of the words were simply typed in a text box and placed in position. I tried to have them curve to follow the contours of where they were placed (Happy Anniversary) or to suggest an element of perspective. Note the end of "Elmer" suggests the letter is coming to him and the end of "Mary" suggests it is going away.

The layer feature has

a separate palette that lists the layers by name and allows you to add, name, rename and delete layers. It also has buttons that can be selected thereby limiting access to each layer. You can choose no access, visual access, or "draw" access to each layer independently. It is possible to draw each layer isolated from any relation to the other layers or in overlapping style. You can retouch, or redo in isolation or with all layers visible. Each layer remains isolated from the rest much as color separations do except you do not have to restrict the contents of each layer to one color only. For instance, you could draw a shape designating it a layer; then add a new layer, draw a large box and fill it with a translucent color. The second layer will color the finished graphic. This is like drawing different shapes on clear transparent film, taking these transparent colored films and mixing them up continuously until you get a blend you like. Each film is a separate and "complete drawing" yet it is the combination of these "drawings" that creates the "finished image". Using the layer feature, at times I had six windows open simultaneously without any problems or demonstrable slowing of screen redraw times.

The one major problem I had with this graphic is that somehow it got too far down on the page and I haven't yet found a way to re-center it on the page except by scrolling down to it; that simply centers it in the window not on the page. (I eventually discovered the page size was 3 x 3 pages.) Exporting and importing change it to a single layer graphic that has "handles". While you can drag it around the page in normal graphic mode, this does not re-center it in the new document, merely re-centers it in the current window. I could find no way to permanently re-center except perhaps to print a copy properly centered and scan it into a new document. I was

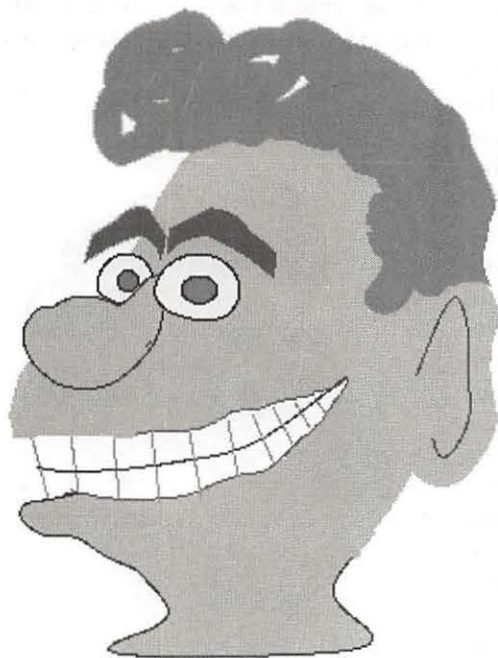


Figure 7. Mr. PotatoHead

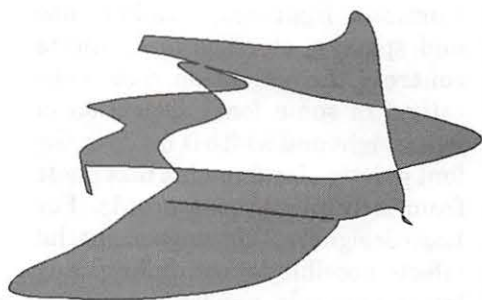


Figure 8. Background

unable to try this because my printer is ill and my friend's system does not have GX installed. I did try to save it as a PICT document and print it on his printer, but the printout was not correct. "Fill patterns" printed in solid color areas. I'm not sure if this was a limitation of his black and white printer or some other anomaly. Importing the graphic to a new *LightningDraw GX*™ document allows it to remain a single layer but it can not be repositioned because changing the graphic size changes the picture proportionally; the image becomes smaller not centered.

Online Help

The multimedia presentation in the font folder is an excellent showcase highlighting the elements of QuickDraw GX printing. It's the first time I've found any sort of coherent explanation of the differences between QuickDraw GX and QuickDraw and why GX would be desirable. The CD contains a

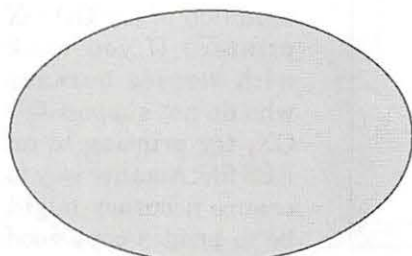


Figure 9. Anniversary

QuickDraw GX FAQ document that further clarifies these differences. I found the balloon feature to be more helpful than nuisance. In fact, balloon help is essential in this application since there is no online help available; however, the manual is well written for the most part and pretty complete despite its minimalist format. For individuals with a graphic background or lots of graphic experience, *LightningDraw GX*™ will be mostly intuitive plus it pretty much follows the standard conventions of graphic software. For the newbie or fledgling user, the balloon help is definitely helpful while getting oriented to the program's features. All the graphic tools and palettes are similar to ones found in more expensive graphic packages. There are many kinds of "editors" that let you fully customize the application the way you want it.

Editors

The ink editor gives you full control over the amount and kind of color (ink) used in your project. You can choose from tint, opaque, translucent, hue, saturation, lightness, mask, reversibility or any combination of these. Used in conjunction with the layer feature, you can create some very interesting effects. If that's not enough variety, all color palettes are fully editable. You can create your own colors from the many millions the Mac can produce. Any color can be created from the Mac's ColorPicker using RGB (red, green, blue), or HSL (hue, saturation, lightness) options. Of course, this includes fill, pen and brush colors (2 different palettes). Want more? Create your own gradient colors and patterns. Naturally you can customize your pens and brushes. If you're on a roll, go to the pattern editor and invent new fill patterns to your heart's content. While you're at it open the pen pattern editor and design some unique pen patterns;

great for borders! There's also a "pen join" editor. At the intersection of two lines you can choose to join the lines with a sharp or curved intersection. For a more decorative look choose from diamonds, circles or blocks to fill your intersections. There's a choice of start and end caps—decorative marks that call attention to that spot. There's an assortment of arrowheads and tails, round or square lines to select from. Finish off your makeover spree by selecting from the many options available in the multigon and star editors. Oops! don't overlook the "other tools" editor. Here you can change whether your shapes start drawing from the middle or corner, the sensitivity of the freehand tool, how rounded your rounded corners are, and whether you want arc outlines open or closed.

Image Sizing

You can magnify elements up to 3200 times normal for doing exquisitely fine detail work. (If you do, please send me a copy of it. I'm fascinated by people with the skills and patience necessary to accomplish this. The mere thought that much detail and attention fries my brain.) *LightningDraw GX*™ does not have a scale function wherein you can pick a specific percentage of change. The scale option works by doubling or halving the current size. The toggle between scaled and 100% is handy. Another way to work around the half size and doublesize limitation is by using the magnifying glass tool. Space bounded by the magnifying glass enlarges to fit the whole screen disregarding original size but maintaining original size ratios. Next click on size reduction. If, for example your magnified section automatically becomes 467%, reducing it leaves 233.5%. This would get you close to 225%. There is no direct way to indicate a specific scale number.

The magnifying glass's main

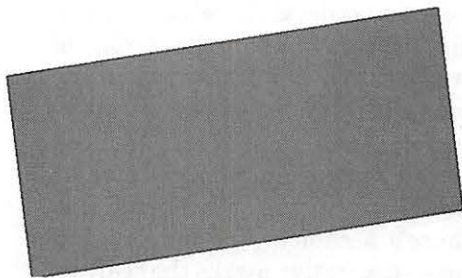


Figure 10. Letter

function is to magnify areas that need special attention. Depending on the user's skill, this could be very helpful or very frustrating. When the object is highly magnified, you can spend agonizing amounts of time carefully drawing a shape only to find when you click back to 100% view that what you did shows very little if at all. Other times, you will find yourself making many excruciating changes trying to get an area just right, only to find the desired result elusive to capture. That's

when you try rearranging the layers to see if placement will help conceal the objectionable area. It must be emphasized that this problem is based on the user's skill; **it is not** a product deficiency. In the hands of a skilled graphic user, this is a great feature. It allows the user to keep selecting and magnifying an area up to 3200%. You can reduce as small as 3%.

Text Tools and Font Palette

One area that separates *LightningDraw GX™* from the herd of graphic applications is its collection of tools usually found in more expensive software. It is in a class of its own with respect to text manipulation. In addition to the standard font/text options of style, size, and font, the user can adjust tracking, baseline shift, leading, text color, text alignment and justification. Using the font palette permits the use of character alternates—

fractions, ligatures, number case and spacing, etc. The font palette controls the variation axes contained in some fonts. Selection of font weight and width is made in the font palette also. Imagine text made from silly putty on steroids. For Logo designers, the range of special effects possible is astounding. Any letter, any style, any font, any typeface is fair game for becoming the next award winning Logo. Play with the letters and words as long as you like. Save your best efforts to disk, take a break then come back to convert the saved text to graphics. Now begin again to use all the special effects with this "text graphic". The possibilities are endless. While this is an excellent reason to choose *LightningDraw GX™* as your graphic package, think about how you will use your work product.

Print and Output Issues

At this juncture, *LightningDraw GX™* saves as either a QD GX file or a GX PICT file. Using some intricate incantations outlined in the **Readme files**, it is possible to save to an EPS file. That process shouldn't be too difficult for a computer savvy user although it is somewhat time consuming initially. A less experienced user would probably need a fair amount of hand holding and assistance to complete this ritual. (I did not test this due to the moribund condition of my QD GX printer.) If you work with service bureaus who do not support QD GX, try printing to an EPS file. Another way to ensure accuracy might be to print a copy good enough for reproduction

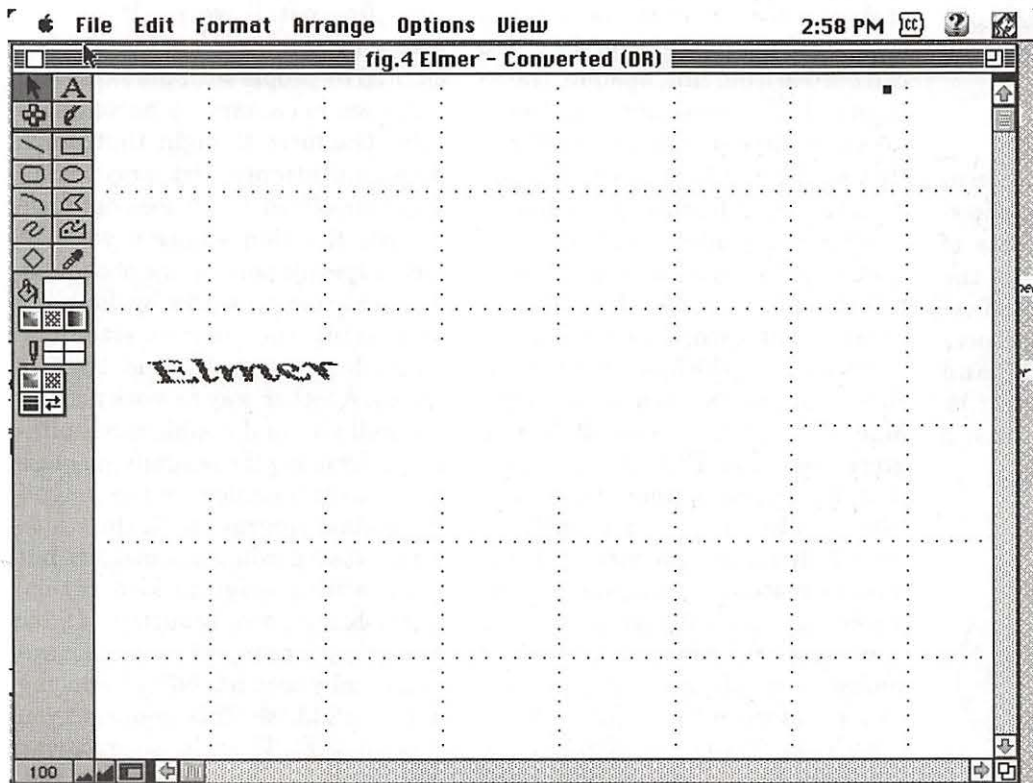


Figure 11.

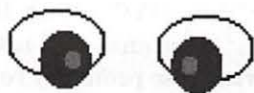


Figure 12. Anniversary

and scan it back using a scanner than can give the quality required for reproduction.

Another potential for conflict occurs if you have some applications that are not GX savvy or GX aware. The QuickDraw GX Helper is included in QD GX, which turns off QD GX in non-savvy applications, but if you have to print a document from that application, turning off QD GX is not enough. You must also use your extension manager to enable or disable (as the case may be) the correct printer and then restart to activate the changes. Remember also to select the new printer in the Chooser. My modem was not GX savvy initially and it was a great pain to change printers from the Color SW 2400 to the Color SW 2400 GX. If your fax/modem software is not GX savvy, I recommend upgrading it if possible.

In the File menu, you can export the graphics as a bit map with a choice of PICT, JPEG or Photoshop. JPEG can be then be used on the Web. Rick Zeman also downloaded a file on the TCS named Electrifier which is used for Web publishing. He also is much more versed than I in using LightningDraw GX, graphics in general and Internet stuff. For those whose publishing is mostly Web stuff, you can get some terrific

effects from this package at bargain prices.

For personal use on a non-networked system, go for it! The Fairfax County public library system has some excellent books on how to draw great images using nothing but the letters of the alphabet. Check one out, sit down with your Mac, *LightningDraw GX™* and have a blast!

Duplicate or Clone?

LightningDraw GX™ has a duplicate function and a separate clone function. The basic difference being the clones are placed on top of the original in a vertical stack. Duplicates are offset to the side so you see the duplicates and the original at the same time—more of a fan pattern. This clone tool makes the creation of new shapes very easy. Holding the option key down while rotating and cloning rotates the clones in precise 15 degrees increments. Cloning and rotating a petal shape creates a flower in seconds. Even newbies could type a “V”, rotate it 180 degrees, clone it 4 times (for a total of 5 “V’s”) and arrange the points to make a star. If (s)he went on to use the multigon editor to add more points, it would become a starburst. Twirl and it changes to a pinwheel!

More Tools

The Stylize, Bloat, Contract and Roughen commands are other tools which change shapes. Twirl does just that—it skews the shape a specified number of degrees clockwise or counterclockwise. When you wish to express your current state, scribble a shape that represents the chaos or serenity you feel, twirl it until the image feels right and then animate it to use

as a screen saver which explains your absence from your desk or to warn innocent bystanders. If you were feeling more serene, you could use the “Averaging Points” and “Simplify” commands to average the points in your image reducing it to a smoother shape which if twirled and animated could suggest a more peaceful and hypnotic state.

“Since I had little graphic experience and the *LightningDraw GX™* manual seemed to lay out a very specific, detailed and basic tutorial, I decided to attempt a very non-Macintosh task: I would read the tutorial and follow it step by step!”

Extras

The application comes on CD-ROM and contains a lot of extras. Be sure to take advantage of them. For instance, there is a copy of Peirce Print Tools which is a printer utility software application that lets you save ink or toner when printing, makes cover pages, maintains a printer log, provides watermark templates and lets you design or edit your own watermarks. You can also print borders on your pages, tell the printer what order to print the pages (front to back, reverse, etc.), whether to print double-sided sheets or pamphlets. It has a “papersaver” function for printing handouts and

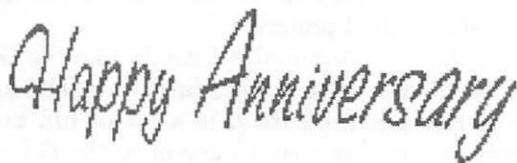


Figure 13. Anniversary

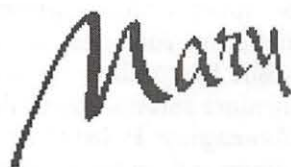


Figure 14. Anniversary

thumbnails. PPT allows you to create "group" settings to be used for similar repeated print jobs, i.e., bulk mailings, default settings for specific document types and it supports multiple desktop printers. There is also a folder that contains PPT shareware. This folder contains *AppSizer 2.2*, *DeskPicture 2.01*, *SBBurster*, *ShareDraw 2.0*, and *Smoothie 1.11*.

Requirements

Probably the best news is that this application is **very gentle on RAM**. It requires a Mac II or later (PMac compatible), System 7.5 or later, QuickDraw GX (included on CD if it is not already installed. Install the latest version) and 2.5 MB HD space—1.5 MB of Ram on a PMac and 2.5 MB for 68K Mac's. I can't think offhand of many programs this easy on RAM with this much power. ClarisWorks is the only one that comes to mind and sometimes it is not happy without additional RAM allocations.

At one point in *LightningDraw GX™* I had 12 windows open and each document ranged from 22k to 836k for a total of 2478k with no problems except a slightly longer screen redraw time when moving between windows or executing new commands in open windows. Now for an apparent contradiction. It only requires 1.5 MB RAM on a PMac but if you do a Get Info on the installed application, the suggested size, minimum size and preferred

size are 2450k. In the manual they explain that *LightningDraw GX™* will dynamically use additional RAM as required by your documents. Initially it takes 600k additional RAM which is sufficient for most documents.

It was perfectly stable with no crashes or freezes on my PMac 6100, 24 MB RAM, running under system 7.5.3. The full application will fit on the HD within the 2.5 MB. If you load the full font file, you need an additional 3.3 MB HD space. You can opt to install the application and then choose your favorites from the font file according to how much HD space you have to spare.

"Many times I went merrily on my way drawing up a storm only to realize nothing was happening because I had exited the intended tool and I was merely 'surfing' the graphic with an impotent pointer tool."

Support

I had some questions early in my testing. The snail mail address was on the manual back cover along with the Web address. Since I do not have Web access, I posted a request to Pi members to for an email address at the web site. I got the email address plus a note that Rick Zeman has been a longtime devotee of

LightningDraw GX™. With Rick's help, I found some answers I needed. Lari Software also promptly replied to my email.

Summary

LightningDraw GX™ is a simple, complex and very powerful program. While it will require a dedicated period to master the learning curve, acquire ease and fluency, most users will be able to install it, skim the tutorial and manual then begin drawing immediately. The user will perform increasingly sophisticated operations as (s)he becomes familiar with the tools. The learning curve is not as steep for this application as it is for similar applications as complex and powerful. This would be an excellent choice for computer phobic artists who are required to become computer aware or literate. That said, most children will be able to create images with the mouse and older children will enjoy enhancing their drawings with special effects. Artistically inclined computer addicts will like it a lot. Logo designers should love it.

I can't stress enough the value of saving to disk very frequently and making full use of the redo/undo command in the edit menu. If you get in the habit of going to undo first before you do anything else, you will have few problems. The other major suggestion I will make is: use the layer feature to tryout new effects and changes without committing to them. If you like them, save a copy to a new document and then copy/paste back to the original if you do not want to use layers in the finished project.

Personally, I would like the GX issues to be less intrusive. The application itself is a lot of fun and rather easy to use once the GX issues are dismissed. I also like to have many options for output formats so I can select the format I need



from my save dialog. All things considered, I was very impressed that I could create the images I did. I have tried using other graphic software for drawing and painting. I was not as successful with them and they were a lot more aggravating to me. I will be more willing to spend time drawing from scratch with *LightningDraw GX™* since I have proof that I can do it. That I think is the bottom line: *LightningDraw GX™* showed me I could draw. ■

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SRP is \$299. Street pricing is currently \$187.95
check the Cyberian Outpost

<http://www.cybout.com/cgi-bin/cyb/quickfind?name=lightningdraw&platform=&category=>>

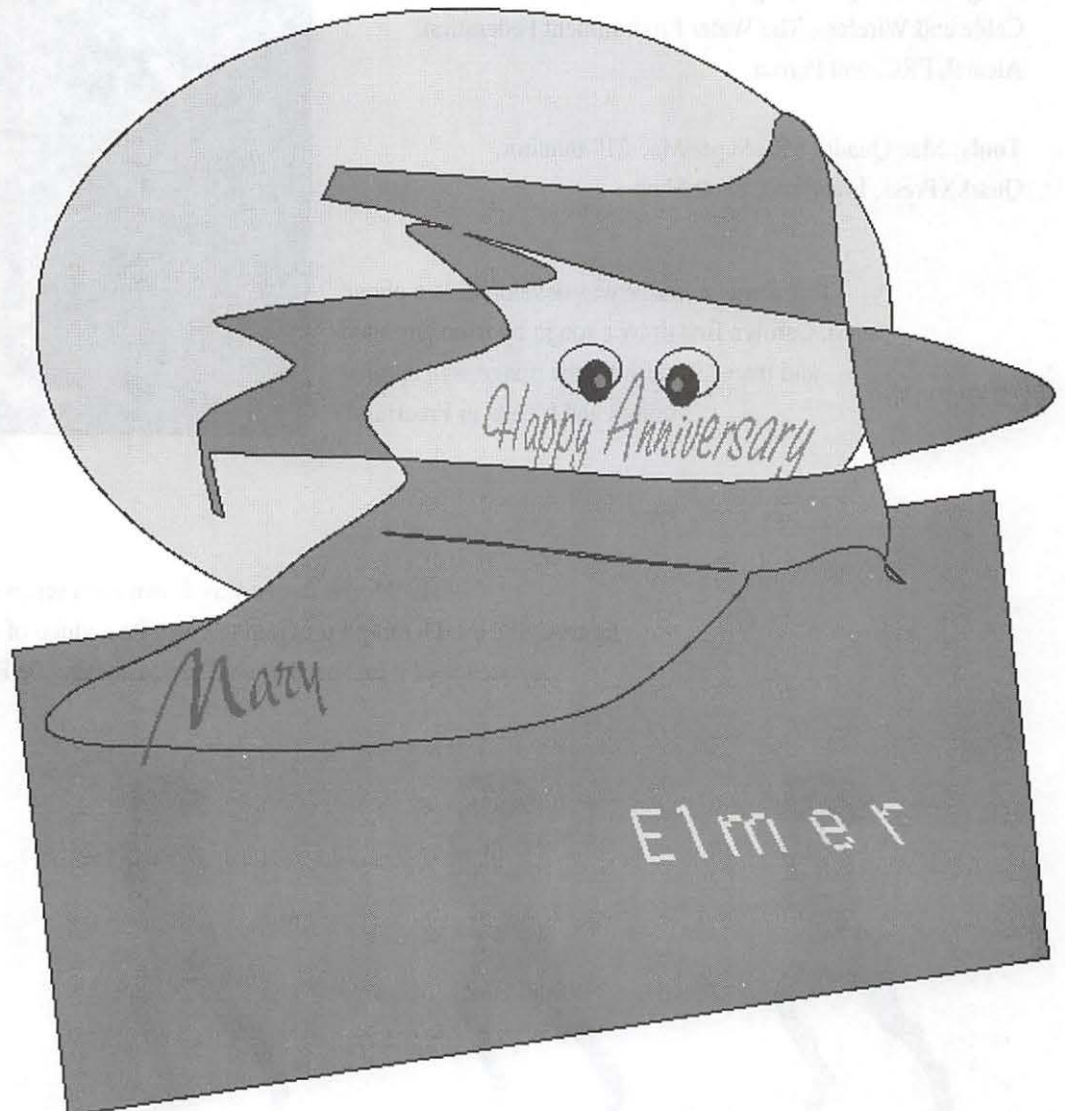
or MacWarehouse

<http://www.warehouse.com/MacWarehouse/Software/Design/Drawing/?pos=40>

web sites for updated pricing. (Last posted price at MacWarehouse Was \$195)

Ad in MacWorld (December) for The Software Source lists it at \$99

Academic and competitive upgrade pricing is also available. ■



Artists on exhibit

by Ann Aiken

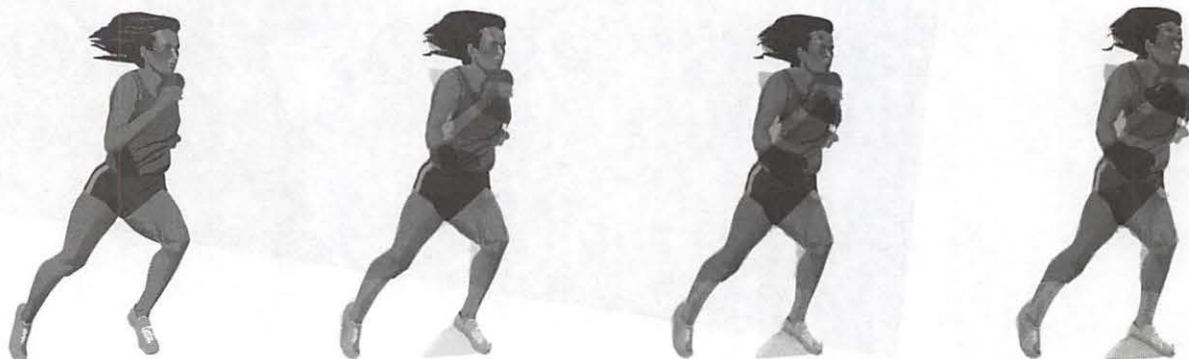
Artist Info: Carolyn Robel studied art and received her B.A. at Norwich Art School in England. She initially worked in medical advertising and then in publishing for Warner Brothers where she worked on several magazines including "Buying Antiques". She worked briefly in Iran for Iran Air Magazine before coming to the Washington area. Here she was with CACI and Omnicom where she started their graphics department using the Luminar Time Arts System. For the past two years, she has operated her own design firm, Aspen Design, Inc., with such notable clients as Cable and Wireless, The Water Environment Federation, Alcatel, PRC, and Perrier.

Tools: Mac Quadra 650, Super Mac 21" monitor, QuarkXPress, FreeHand, PhotoShop

This *Dragon Image* was developed as a phone card. Carolyn first drew a rough by hand, scanned and traced it, refining the image, and applied colors and blends in FreeHand.

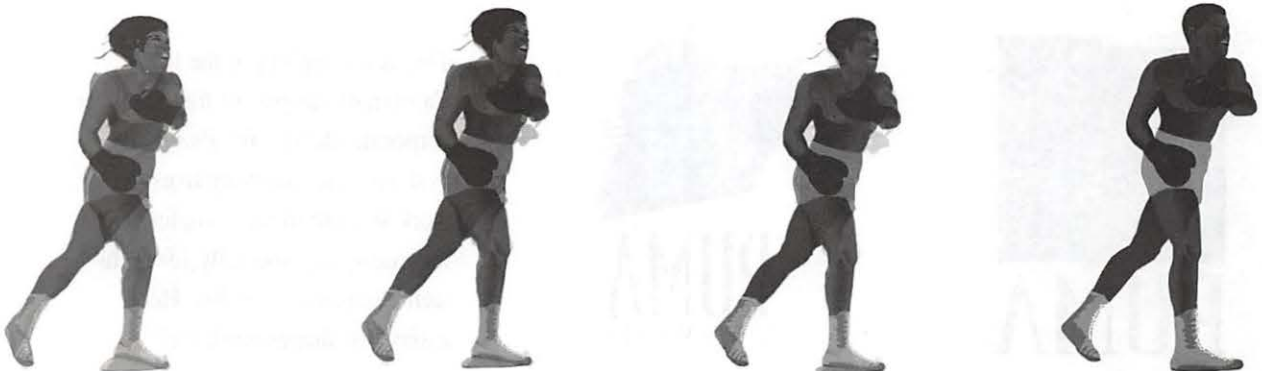


The *Morph Image* was drawn for a series of twelve phonecards of sports figures. She used a morph program to generate a video of 124 frames and then selected a sequence of it and used PhotoShop to change the Pict RGB file to a CMYK Tiff.





These *Florida Cards* are more phone cards for Cable and Wireless and depict the State of Florida. They're all developed in FreeHand starting with pencil roughs, scanned, traced and adding selected clip art.





This is a sampling of the logos Carolyn did as part of the complete corporate identity for *Puma Systems*. She generally likes to work straight in the computer for logo designs, especially for high-tech companies like this. Here geometric shapes work well.

Some Thoughts on the Drawbacks of Not Having an Email Address

by Phil Shapiro

MUCH IS WRITTEN about the benefits of people having an e-mail address, but little has been written about the drawbacks of not having one. The drawbacks of not having one are many, and sometimes life-threatening.

Just as surely as the sun rises, in the next few months there will be a cringing news story about someone who had to be reached with vital information, and for whatever reasons was unreachable by phone.

Maybe they didn't check their phone messages often enough. Or maybe they forgot to turn on their answering machine. Or maybe someone gave up playing phone tag trying to reach them.

There are times in our lives when being informed about something is absolutely vital. Your child is in the hospital. Your spouse needs immediate help. A close friend has had a serious accident. Your doctor needs to reach you asap with information crucial to your own health.

Being reachable online means that you're easily reachable. Being unreachable online means that someone may give up trying to reach you. It's your choice to be reachable eas-

ily, or unreachable.

Not to mention the countless times when unreachable people will miss hearing about a change in plans for a particular event. As surely as the sun sets, there will be a news story about someone who drove over hundred miles, at great personal sacrifice, to attend an event. On reaching the location of the event, that person was informed that the event had been canceled. "Sorry, we tried to reach you. . ."

Technology is no longer about technology. It's about being informed, it's about the ability to make informed choices, it's about opportunities, it's about participation, it's about having enough knowledge to avert tragedies.

Sadly, human beings are abysmal at averting tragedies. We compose great symphonies, do complicated physics, produce breathtaking works of art. But averting tragedies is something we're not good at, both individually and collectively. We don't think things through carefully enough, and end up doing much after-the-fact hand-wringing when avertable calamities strike.

So who can carry forth this message that online connectivity is vital to an individual's well-being? The only people who can effectively carry forth this message are those within the social circles of the people who need to be online. And the only way to reach the people who can communicate this message is for the

national media to do far more to highlight the drawbacks of not being reachable online.

With knowledge of the above mentioned facts, the national news media (television, print and radio) has a moral duty to impress upon people the risks they expose themselves to if they're not reachable online. Sitcom scriptwriters need to include tragedy-averting scenarios (both happy-ending and sad-ending) in their scripts. News anchors, news commentators, colum-

"People need to choose for themselves which tools they want to use in going about their daily lives. Nobody should ever force a person to use a tool that they're not comfortable using. But those of us who use technology as a daily tool should do far more to find ways to help the 'unconnected' choose to be connected."

nists and editorial writers need to take seriously their moral duty of informing the public about the risks of not being reachable online.

People need to choose for themselves which tools they want to use in going about their daily lives. Nobody should ever force a person to use a tool that they're not comfortable using. But those of us who use technology as a daily tool should do far more to find ways to help the "unconnected" choose to be connected.



If we as a group don't make serious efforts to help others get online, we face the uncomfortable prospect of having to tell someone, "Sorry, we tried to reach you. . ." ■

The author is a freelance writer, a technology consultant and the Washington DC Regional Coordinator for the Community Technology Centers' Network (CTCNet), a national non-profit working to expand access to technology tools and the Internet.

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Origins of these ideas: This essay was written immediately after the 1996 annual conference of Computer Professionals for Social Responsibility, where provocative ideas about access issues were discussed. cpsr@cpsr.org
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Other thoughts along these lines: This essay is one of 31 "think piece" essays in the book "Thinking About Online Communications." Excerpts from the essays in this book can be found on the author's personal web page at <http://www.his.com/~pshapiro/taoc.excerpts.html/>

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Women in computing

by Joanna Michelle Grzywacz

IFIND THAT it is almost impossible to discover what women are thinking about in relation to the computer and the culture that is developing around it. Because of that I am sharing with you some recent discoveries from the Wired Web Site and the Computer Professionals for Social Responsibility Web Site. I would encourage any of you out there who feel an obligation to a concept higher than greed and self aggrandizement to pay attention to what these incredibly bright women have to say.

• Pamela McCorduck

Pamela McCorduck is the author or co-author of eight books. Two are novels, and five are focused on the intellectual impact of computing, especially aspects of artificial intelligence. Among her books are *Machines who Think*, *The Fifth Generation* and *Aaron's Code*. She recently published *The Futures of Women: Scenarios for the 21st Century*.

In a recent *Wired* article she wrote "A recent *Times-Mirror* study claims that among users under 35, men and women use the computer in equal numbers, though for different purposes. Moreover, women have begun to move into positions of significant power. Besides the names everyone knows from the media, there are also distinguished computer scientists, like Mary Shaw, formerly chief scientist of the Software Institute at Carnegie Mellon, and Anita Jones, responsible for R&D at the Pentagon, with a budget of some US\$40 billion.

"In other words, women cope very well with this technology—some of them even love it. But coping is not the same as finding it so well-fitting and intuitive that it simply fades away and lets you get on with the important things. This is not only possible, it is overdue. All technology is embedded in its culture—and shapes and is shaped by it. This is not a negligible fact. The atmosphere of arrested development that still permeates the computer magazines goes a long way toward explaining why expectations for this technology continue to be so dismally low. I praise the Macintosh, but it's technology of 20 years past. I cannot for the life of me think why the designers of Windows 95 haven't been put in the public stocks, so we can pelt them with the tomatoes and offal that they richly deserve."

I was thinking of those words recently when I walked up to a Windows 95 PC at a local retailer...if you can't see and feel the difference between the Mac OS and Windows 95, there has got to be something wrong with you, or maybe it's with those of us who expect both quality and ease of use that's not there.

"I remember a lecture by Alan Kaye and some comments by Seymour Papert about the computer culture, and if you look closely you will find some disturbing dimensions to this culture. One of the disturbing elements is how even with a stupid machine like the computer there are attempts to gender stereotype our performance as women.

"To have to out-boy the boyz just

to practice your profession falsifies who you are. It does women no good to 'master the computer as their tool,' as you insist, if their professors, employers, and even their clients can't recognize or accept solutions beyond narrow expectations. Far from shirking difficulties, or evading complexity, these women do what no man does: they're bicultural. They play the boys' game well (often outstandingly), and then they return home. Some even adopt the dominant culture as their own. Recently, I was part of a group exploring scenarios of future warfare, a group where women were in the distinct minority. When I finally, reluctantly (did it have to be me?), mentioned how women might affect future wars, one colleague, a distinguished female computer scientist, said to me privately: My God, I'm so brainwashed I can't even see the obvious anymore."

• Karen Coyle

Another woman I discovered on line is Karen Coyle, a librarian and chair of the Berkeley, California, chapter of Computer Professionals for Social Responsibility. She wrote "How Hard can it Be?" on the "macho myth" in computer culture for *Wired Magazine*.

"Yet when women do excel in the computer arena, their accomplishments often go unnoticed. Ada Lovelace, aka Lady Byron, advised Babbage on the invention of his Difference Engine and, in a letter to him, wrote the first articulation of what today we call an 'algorithm.' Admiral Grace Hopper worked with the earliest computers, and was a key player in the development of the first assembler language.

"Like the early days of the automobile, some cultural force is working to define computers as the realm of men, even though women are just as capable of using these machines. It's like the way we divide up chores

in the home: men carry out the garbage and mow the lawn; women cook and remember family birthdays. There is no logic to it, but we seem to have a hard time questioning this gender-based division.

"Considering that the computer is just a machine, I find it interesting that we have it invested with such a strong gender image. John Dvorak once called the IBM AT 'a man's computer, built by men, for men.'

"There are people who find the command-line interface and completely unadorned ASCII of DOS to be inherently 'masculine.' We interpret 'user-friendly' to mean 'easy,' 'easy' to imply 'feminine,' and thus Dvorak himself at one point refers to the Macintosh's 'girlish GUI.'

"With this, we've just entered into the world of math-is-hard Barbie, where we only expect women to undertake things that we have defined as easy...If there is anything that is keeping women and computers from a happy relationship, it isn't the machine itself, which is capable of a wide range of uses, but the culture and society that surround the machine.

"Women are more hindered by their lack of leisure time and expendable income than they are by the technology of the computer."

Hot Wired Web

The following quote from a discussion that took place on The Hot Wired Web site sounds so much like my beliefs that I am compelled to share it with you just slightly abbreviated.

"I'd be happy with a computer that wasn't designed to put me out of a job even though it can only do a fraction of what I really do.

"I'd like to live in a world where the word 'power' isn't used to sell a machine with a skill set less than that of a gnat. Life would be better if we'd set aside all claims of artificial intel-

ligence until we've gotten some grasp of what real intelligence is.

"I'd like to see computers designed as servants, not masters.

"I want to live long enough to see a time when computers are considered no more sexy than toasters (but I don't think I'll make it).

"In my perfect world, schoolchildren feel sorry for computers because they are so stupid. They know that their dog is a more advanced being than the microprocessor.

"The most important thing for people to learn is that the computer is just a machine. In itself it has no power. It is being used today to disadvantage some people while it makes others insanely rich. All of these decisions are being made by people, not by computers. But we're being told that it's the computer that has the power, and we're supposed to turn our anger against the machine, not the people behind the machine.

"I say it's time to look behind the curtain, at the little man. It's time to point and laugh. The computer has no clothes.

"Oh my god, I sound like a cross between Dorothy and a Trotskyite. I have mixed my metaphors and am melting."

Sounding like a cross between Dorothy and a Trotskyist is not so bad in my book. I wish there were more folks around who understood the native stupidity of the computer and woke up to the wonders of the planet and its inhabitants instead of silicon products of any kind. ■

This forms part of an article entitled "Rumors" in the November 1996 issue of Fat Bits, newsletter of CVMUG, Thousand Oaks, CA.



Internet error messages: Resolving the most common problems

by Jon Rust, Internet SIG Leader

TECHNICAL SUPPORT is probably the toughest thing Internet Service Providers (ISPs) are faced with. One issue is that just a few problems account for most of it. The other issue is that there's a lot of misinformation out there. Here are a few that are our most common recurring tech support calls, and their respective "blame" weight.

404-File not found

Netscape displays a page that says "404 - File not found": This error message comes from the server you're contacting. It means that the web page you're trying to access no longer exists on that server, or you've typed it in incorrectly. Double check the location you typed, or move on to your next exciting link. Your ISP's problem: 0%. Your problem: 50%. Third party (the server you're going to): 50%.

No response from DNS server

Netscape complains that there was no response from the DNS server: This one's a little more complicated. It is usually caused by your connection going bad but, in rare cases, could be a sign of problems elsewhere. Technically Netscape is trying to contact the name server to find an IP address for the web server you're trying to contact. It's having no luck in doing it. Like I said, it usually means that your computer

is no longer connected (at least not connected with a clean enough connection to communicate).

It could mean you've changed your settings (we hope you'd remember doing that!). Finally, it could be that your service provider's DNS server(s) is down. Since DNS is one of the most important services on the Net, most ISPs have backup DNS servers and try make all of their DNS servers as stable as possible. Your ISP's problem: 10%. Your problem: 80%. Third party: 10%.

Unable to locate ...

Netscape complains "unable to locate the server www. xyz.com. It has no DNS entry": First, you may have made a mistake in typing in the URL. Second, the place you're going to either no longer exists, or their DNS server is temporarily unavailable. It could be that their network is down. Third, your ISP's network is down. If you can go to other pages around the Net, then it's not your ISP. Finally, again, you may have lost communication with your ISP. Try reconnecting, and if it still happens call your ISP. Your ISP's problem: 20%. Your problem: 50%. Third party: 30%.

No socket connection

Netscape was unable to make a socket connection: This usually means that you never connected or were disconnected due to inactivity.

Relying on your network app to make the connection for you is not recommended. Always go into the FreePPP menu or Config PPP control panel and explicitly open the connection. Inactivity timers vary from ISP to ISP, but a good rule of thumb is 10 minutes. Inactivity is defined by no data going between your modem and your ISP's modem. Typing a new email is not network activity. Going to a web page is. Your ISP's problem: 10%. Your problem: 90%. Third party: 0%.

Dropped connection

Continual dropped connections: Could be a problem with your ISP or your local phone service, but could also be due to call waiting or other people in your house picking up the phone. Call waiting should always be disabled before dialing, and line noise can be checked by using a phone on your modem's line and listening for static or little clicks. Finally give your ISP a call to find out what type of modems they use, then give your modem manufacturer a call to find out what the best init string is. Your ISP's problem: 20%. Your problem: 60%. Third party (phone co): 20%.

Netscape freezes

Unfortunately, Netscape is not one of the most stable programs you rely on. It freezes and crashes much more than it should. Turning off unnecessary extensions should be the first thing you do with any recurrent crashing problem on the Mac. Giving it more memory than it asks for is one way to help alleviate this problem as well. Consistent crashes could belie a corrupted file: either the Netscape program itself or its preference files. Try moving the Netscape folder out of Preferences folder, and restarting Netscape. If that doesn't do it, get a new copy of the program installed. Your ISP's problem: 0%. Your problem: 80%. Third party (Netscape): 20%.



No recipient specified

Eudora complains that "no recipient is specified." This one's a doozy, and one of our most common problems. Some (very little!) of the blame lies on the shoulders of Qualcomm and Steve Dorner (the original author of Eudora) for not making this feature more clear, but most of it can be placed on the users for not using Eudora's very nicely done Balloon Help. It all leads back to the Nickname feature in Eudora.

Lots of folks use the Nickname area as a sort of address book without realizing what they are doing. The left side is supposed to be a shortcut, an easy to remember name (ie, nickname!), not the email address. The address goes on the right side, and the nickname on the left. Eudora replaces what's on the left with what's on the right. So if you put the email address on the left and nothing, or an invalid address, on the right, and then you try to send email to that address, Eudora will substitute that blank space or invalid address into your To: field. Voila! Instant error messages and unexpected results. Your ISP's problem: 0%. Your problem: 99.99%. Third party (Eudora): 0.01%. PS: Eudora's web site (www.eudora.com) has a softcopy of the manual available. Get it! Also you should consider buying the full version. It's very powerful.

Bottom line

The bottom line is that there are a few things you should try before calling up your ISP and blaming them. First, try other sites. If you can't get to www.macintosh.com but you can get www.yahoo.com, the chances are that something's wrong with MacInTouch. Next, try reconnecting. Analog phone lines (what everyone who doesn't have ISDN uses) are very touchy. Even using the best modems you can find, you'll still get glitches occasionally that

disrupt the flow of info. Then, try rebooting your machine. Lots of times this simple jolt will correct what's wrong. Finally, watch for extension conflicts and corrupted preference files. Checking these few

things will save you from calling tech support 90% of the time. ■

From the November 1996 issue of Fat Bits, newsletter of CVMUG, Thousand Oaks, CA.

Hard Drive Fragmentation

by George M. Engel

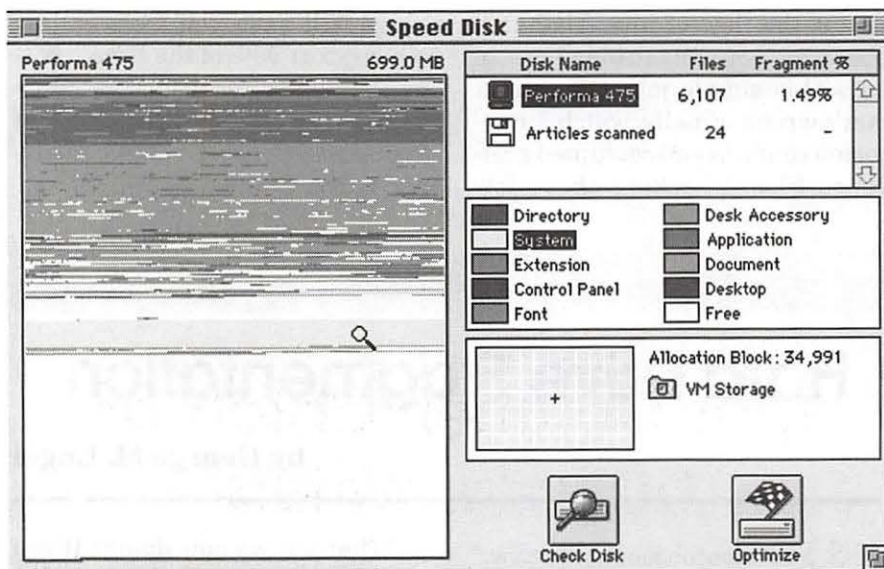
"IT'S SO slooooooooooooooooooooo." "It just crashed, I don't understand it." "It worked yesterday..." "But I just rebuilt my desktop a couple of months ago (whine)." Etc., etc., etc. Typical remarks for a typical problem. However, for a large portion of Mac owners, ignorant of utilities and the reasons thereof, a voodoo subject will be broached today. File Fragmentation. Is it good or bad? Can they still work for you? Are they necessarily dead because they're fragmented? How can you tell? What can you use to see them? To fix them?

Let's start with how it can happen. Let's assume that you have a letter to Aunt Harriett and another to the IRS, one right after the other. Let's also assume that your hard drive is almost empty. The first file you've written is to Aunt Harriett. It's 2k long. Now your humble apologies and the 'second greatest lie,' "The check is in the mail" letter to the IRS breaks out around 4k long. Whoops, you just remembered that you forgot to mention a Happy Birthday to Aunt Harriett. You open Aunt Harriett's letter and add "Happy Birthday" and a few other odds and ends, save it and close her letter again. Now you may put a few games and maybe another old letter or two.

What are we now doing? If you could look at the Read and Write heads moving on the hard drive's platters, you'd see the heads laying down a pattern of magnetic 1's and 0's, sequentially, or all in a row, one ahead of the other. The same thing would happen in a cassette tape. Sequentially coded magnetic 1's and 0's. This would all be okay, if only we never made changes. Unfortunately, we're not perfect. We make changes, throw things away, write over our old stuff.

What happens if Aunt Harriett's letter is between the IRS letter on one side and your spouse's birthdate information on the other side and we have to add data onto Aunt Harriett's letter? How does the computer do this? It wouldn't stretch the tape! It couldn't expand the hard drive's metal platters to squeeze another sentence or two in, could it? Of course not.

The computer keeps an index on hand so that it knows where all the empty spaces are. Whenever something doesn't fit just right in there, the computer fills up the empty space that it can and takes the next empty space it finds and dumps the rest of it in there. Your letter to Aunt Harriett is now fragmented into two files. Add some more games or utilities and go to Aunt Harriett's letter



again and add some stuff. Save that and what happened? Sequentially, we may have to take some more space to save this letter to Harriett. Now it's in three places!

About this time, you open a game for the first time and it asks you your name and serial number. Whoops, now what? It's writing that info someplace, isn't it? Being that it's a copy-protected game, it writes the name and numbers someplace invisibly where you can't find it, in with the System Folder stuff. Smart, huh? Remember this point for later, okay?

Now your husband, Toulouse, comes home and remembers that he left his abacus at Harriett's house. Yep, open that letter again and add some more stuff into it. Save again. It doesn't fit again. Add more space. Now it's in four fragments. You can see where this is leading, can't you? And this is only a small letter. What if it were a large database?

As files change and grow, they add and delete sectors. We DO throw some files away, don't we? They now become available for re-use. Aunt Harriett's letter, or where it used to be located, was in four fragments. If we trashed her letter and reused that space, that means that the next document will automatically be frag-

mented, won't it? Of course. Your index file, or Directory, has to be constantly updated so that the Read and Write heads know where they're going, to access the data you need. It has to be very careful that it doesn't write over data in the adjoining sector. They're extremely close together, you know.

Just because a file is fragmented, it doesn't mean that it's damaged in any way. But because they're spread out over the disk, they take more time for the computer to find all the parts and assemble them sequentially so that you can read them in the order in that you saved them. It's just less efficient, that's all. Think of what happens when the System or Finder, which are also files, get fragmented in many pieces. The record that I've seen is a System file of 67 fragments, similar to the picture attached to this document. I've had higher file fragments on a database file. Now you know that was a very slow moving Macintosh! Take my word on it! When files get that fragmented, they become very fragile and subject to failure.

Also consider that when you Trash some files, you do NOT erase those files, only the directory record of the files' locations. Ergo, that file

is still there and subject to recall, with special software. So a gap in a file is not really a gap, only a gap in the directory. So you MAY be writing directly over existing old data when you write new files onto a disk. Directory damage is the worst thing that can happen to a hard drive. Rebuilding your Desktop is the best thing that you can do for your hard drives, all of them. It keeps the Directories current, and clean. You do this by holding down the Command and Option keys (Ed. note: when you boot up your computer.) I do all my drives at least once a week. Peace of mind.

Fragmented files really start getting to be problematic when the hard drive starts to get really full. At what point does this start to be a problem? My rule of thumb is 75% of your drive's capacity. Don't exceed that on a regular basis. My second rule of thumb is to watch your drive's fragmentation with a software utility, like Norton's or MacTools, etc. Typical fragmentation is in the 1% to 3% range. You can comfortably live with this. Start optimizing around the 4-5% area. Over 10% you definitely start to see a slow down in operation. I had three hard drives in one day over 14%, and yes, they were all slow. One was 24% and I had to wait around two seconds between click and mouse movement. Oh yeah, you'll know!

My record on customer's fragmentation is an astounding 100% fragmentation. Really! This was on a Power Mac. No customer's name will be mentioned, but the attached pictures are my proof. Picture #1 shows the fragmentation. It doesn't show the directory damage that resulted. In fact, it thinks that there were only 19 files, when it really was 1,197 files. I recovered about 900 files or so successfully. The rest were damaged, some partially and some totally gone. Picture two shows no room on the disk for recovery. Also wrong. Just damaged and erroneous



Directory data. Picture #3 shows my drive just after I added some files and opened and made some changes to a few of them for demonstration purposes.

De-fragmentizers, or optimizers, perform the task of keeping all your files sequentially in order, or all together in one piece. Before you do that, however, there are some things to keep in mind. Please remember to keep a current backup whenever possible, especially prior to optimizing your drive. Risky business, this. You should also do a sector check before optimizing, but a good utility program like Norton's or MacTools will do this automatically, or should. Next, prior to optimizing your drive, try to save whatever files you can first, since optimizing will rearrange whatever files are on your drive in a new organized manner. That means moving them!

Whoops, remember what I said before about hidden files? You can't see them. That also goes for copy-protection and software like Kent Marsh's (and other's) hard drive disk-locking stuff with password protection software. Move it and you're dead. Unlock and remove your passwords before doing all this stuff. Trust me! Losing or changing the location of these software decrypting keys can make your software and hard drive data unreadable. Forever!

Also there are ways to securely erase your data so that even some of the best data retrieval software can't recover it. And it works. This is rarely used today outside of the government and defense work. Personally, who wants to read Aunt Harriett's letter anyway?

In general, remember these tips from the guy who fixes them: Try to keep your drives under 75% of capacity; try to always stay under 5% fragmentation; backup frequently; and lastly, Rebuild your Desktop at least weekly. Follow those rough

outlines and your hard drive may never need me. ■

From the October 1996 Panhandler, newsletter of the Panhandle Macintosh User Group (FL)

(Please note that the original graphics are not included in the WAP version printed here. One graphic was created to go with this version.)

Spell Catcher: Catch-all Utility for Writers

by Tonya Engst <tonya@tidbits.com>

WHEN CASADY & Greene released Spell Catcher earlier this year, I decided to give it a try. Spell Catcher's principal claim to fame (though it has many secondary claims) is that it can check spelling in any program, using the same interface and dictionaries. Spell Catcher 1.5.6 is based on the now-discontinued Thunder 7, a long-standing workhorse for writers.

Spell Catcher has a suggested retail price of \$79.95, though the street price is some \$20 less. Thunder 7 users can upgrade for \$19.95, and there's also a cross-grade offer. Casady & Greene bills Spell Catcher as working with any Macintosh, so long as it's a Mac Plus or newer. They recommend having at least 2 MB RAM available for Spell Catcher's use, 2 MB free hard disk space, and System 7.0 or later. (My contact at Casady & Greene points out that if you keep your dictionaries small, you can get by with as little as 700K of RAM available.)

Installing Spell Catcher went smoothly, and—after restarting—I used the Spell Catcher control panel to activate Spell Catcher in Eudora 3.0, Word 5.1, ClarisWorks 4.0v4, and

Nisus Writer 4.1. In these programs, Spell Catcher adds a new menu to the menu bar, which it indicates with an exclamation point.

Insta-Correct

Spell Catcher's optional Interactive Checking monitors typing, and beeps at you if it detects a misspelled word, with different sounds for different types of errors. You can ignore the beep or activate the Suggest Spelling window by either pressing Command-[or choosing Suggest Spelling from the Spell Catcher menu. The resulting petite dialog box offers a numbered list of spelling suggestions. To choose a selection quickly, simply type its number or double-click it. You can also enter a correction or add the unknown word to a dictionary. When you add a word, you can also quickly choose and add common variants, such as a plural form.

On my Power Mac 7600, I had smooth sailing with the Suggest Spelling window, but—on my Duo 230—suggestions for fixing problems came up so slowly that I often found it easier to type them instead, if I knew what was wrong. (If the correct spelling came up quickly, Spell



Catcher helpfully allowed me to choose it without waiting for all suggestions to list.) Spell Catcher has a preference for reducing the buttons in this window to black and white, and though this is supposed to speed things up it doesn't do much for my Duo.

A Quick Fix

If a misspelling is one you make frequently, you can set up a glossary entry so that whenever you type the word incorrectly, Interactive Checking automatically fixes it without beeping. Spell Catcher also comes with 1,071 preset glossary entries that correct common errors without beeping, such as typing "teh" when you mean "the".

The glossary immediately made me wonder if I could use it for text I type frequently, like my email signature or snail mail address. I found that the glossary only works for up to 255 characters, so it's fine for small things, but won't hold commonly used paragraphs.

Careful manual readers will learn that to insert a Return in a glossary entry, you must press Option-J. I'm not fond of this quirk—for one, I didn't realize it right away; for two, the two-line text box where you create a glossary entry doesn't show Returns by moving text down to the next line; instead you get a triangle character where the Return should be and your text continues on the same line. Another quirk that bugs me is that this same text box only can show 68 characters at once (34 per line).

At first, I thought the glossary replacement feature worked far more slowly on my Duo 230 than on my Power Mac, but later I learned (and observed) that replacement speed depends largely on the application in question. I found replacements of misspelled words in Word 5.1 and Eudora 3.0 work just slowly enough that I can detect them happening, though they don't affect my touch typing at all. Several times per day,

I'm pleasantly surprised to watch errors fix themselves while I continue typing.

However, Spell Catcher in ClarisWorks is a touch slower, and in NisusWriter 4.1, longer words (like "unsuccessful"), correct themselves more noticeably—I have time to type about five characters during the replacement, and those characters don't appear until Spell Catcher completes the replacement. The slowdown is only pronounced when words must be retyped: insertions of glossary entries in place of short abbreviations—such as typing my snail mail address in place of "snailm"—were much faster.

Interactive Checking can also optionally help with situations where you accidentally type two uppercase letters in a row; for instance, typing "APple" when you mean "Apple." I quickly found that I needed an override to this feature, and—indeed—one can quickly toggle Interactive Checking on and off via either a keyboard shortcut or the Spell Catcher menu. The Spell Catcher menu icon changes color to indicate the Interactive Checking status.

Will the Beeps Drive You Batty?

If you worry that Spell Catcher's beeping every time you made a mistake would drive you batty, you might be right—I certainly thought so at first. But, after a day or so, I'd taught Spell Catcher my most common special spellings and added a number of glossary shortcuts for a few typos I make frequently. I also learned to type more carefully, and thus improved my accuracy enormously in a short time. Later on, I realized that you can even turn the beeps off, or simply have Spell Catcher just flash the menu bar when it detects an error. There's also a Tone option for customizing the pitch and duration of the beep.

The Check's in the Menu

Spell Catcher can also check the

spelling in any selection, and the Check Selection spelling checker dialog box is somewhat bigger than the petite one mentioned earlier. It has buttons for Ignore All and Replace All. A Statistics button leads to a word and character count, along with readability ratings. Spell Catcher took about 3 seconds to come up with statistics on a recent TidBITS issue on the Power Mac 7600; 5 seconds on the Duo 230.

When Spell Catcher checks a selection, it instructs the program in question to copy the selection to the clipboard, and then checks the text in the clipboard. When you finish a spelling check, you get a dialog box where you confirm that you want to paste the changes back into your document. If this works smoothly and doesn't mess up formatting in the applications you use Spell Catcher with (it worked smoothly for me), you can set it so the changes paste in automatically. I experienced problems in Word 5.1 where Spell Catcher would tell me that I didn't have any text selected. I was consistently able to work around this problem by invoking the Check Selected command a second time.

Thesaurus & Dictionary Services

I was pleasantly surprised to find that Spell Catcher integrates a competent thesaurus that includes word definitions. To invoke the thesaurus, you type a word and then press Command-], or choose Thesaurus Lookup from the Spell Catcher menu.

Along with an 86,000 word Large Dictionary and 50,000 word Small Dictionary, Spell Catcher comes with optional dictionaries for HTML coding, Science and Engineering, Law, and Medicine.

Quirks and Quibbles

There are a few problems with Spell Catcher's spell checking. For one, I've grown to rely on Nisus Writer's Ignore All feature, which applies a special character style to



words the spelling checker should always ignore in a document. (Some other word processors have a similar feature.) Spell Catcher's Ignore All can't go around applying character styles to individual documents; instead, if you tell it to Ignore All of a certain word, it will do so in all documents until you restart the Mac. I'm not sure how Spell Catcher can realistically improve in this area, but I'm loathe to give up my style-based Ignore All.

In addition, Spell Catcher attempts to check URLs. I find this particularly annoying with Interactive Checking turned on, because my Mac beeps every time I type a URL.

But That's Not All

I hadn't realized until I started exploring, but Spell Catcher is a full-featured writers' utility. Its Interactive Checking includes a few old friends, such as an automatic Smart Quotes feature and Double Space Eliminator. These features can both be overridden with keyboard shortcuts and can be turned on and off by application.

There's also a Ghostwriter feature, which, when turned on, retains keystrokes you type on a document by document basis. Ghostwriter creates folders for each day, and then in each folder, as applicable, folders for each application. Inside the application folders it keeps actual files, which have the same names as the files you actually worked on. If you type documents straight through with little jumping around or deleting, you'll end up with copies of your documents. The more you scatter typing throughout a document, the less useful Ghostwriter will be, but the idea is that a Ghostwriter file could be a lifesaver in the event of a bad crash. Whether I worked on my Power Mac or Duo, GhostWriter did not bog down my work in the slightest.

You can turn Ghostwriter on universally or only in certain applications and set different preferences for

its behavior relative to different applications. Settings include how big the file should be before it's retained and how long to keep old files around. For example, in the case of Eudora, Ghostwriter retained files for each email document that I read or worked on, and for each mailbox that I opened. I changed this by setting Ghostwriter to retain only files containing one character or more. Since I never type into mailboxes or messages that I read, this significantly reduces unnecessary empty files.

Other features center around massaging text selections in small but useful ways. For instance, you can quickly straighten or curl quotes, or uppercase and lowercase text in various ways.

No Processed Cheese Here

Another feature worth mentioning is the manual. Lately, I've noticed more and more manuals taking on a corporate tone to the point where the writing more resembles processed cheese food product than prose. This manual is not particularly folksy or humorous, but it reads as though real live people wrote it. After thoroughly covering how to set up and use the application, it gets into the nitty-gritty of how to create your own dictionaries and how to make them work well in context with what's going on behind the scenes.

The manual explains that Spell Catcher performs lookups through a "hashing" technique. Instead of directly comparing each word you type to each word in the dictionary until it gets a match, the software uses a series of comparative algorithms to decide quickly if a word is correct. This yields fast performance with an extremely small margin of error.

Getting to the Point

Most programs with spelling checkers and thesauruses offer those features as a mega-megabyte sized collection of modules and dictionaries. Should I decide to use Spell

Catcher full-time, I could discard those files as my hard disk fills up, and—for future installations—I could choose not to install them. Not only that, but I wouldn't have to learn new spelling and thesaurus features in future programs.

In the final analysis, I think most writers will find Spell Catcher a handy tool, and I wish I'd had it when I was in college. Students with writing assignments and anyone whose job description includes writing should definitely consider Spell Catcher.

An important caveat, however, is that performance for suggesting spelling replacements started trailing off on my Duo 230 (that's a 33 MHz 68030, so it's faster than an SE/30, but slower than a 68040-based Macintosh). I'm not known for my patience when it comes to software speed, but I'd recommend treading carefully if you are thinking of installing Spell Catcher on anything much slower than my Duo.

I won't settle on Spell Catcher permanently, however, until I've investigated an upcoming release from JEM Software, called Online Army Knife (OAK). OAK may have shipped by the time you read this, and it will offer universal spell checking, but take a more Internet-oriented approach and include a different mix of additional features. Another product that offers universal spell checking is Spellswell Plus, by Working Software. Given our tendency to end up reviewing multiple products in a category, no doubt we'll take a look at Spellswell Plus as well. ■

Casady & Greene — 408/484-9228 —
408/484-9218 —
<c&g@casadyg.com>

From TidBITS #353, November 11, 1996



Sources for Apple II Goodies

by Ron Evry (Apple II Vice President)

EVER SINCE I placed my name and email address (revry@clark.net) on the Pi Web Page, I have been regularly receiving messages from Apple II owners around the globe asking where they can find programs to run on their machine. As terrible as it might sound, you just can't walk into an Egghead store and find Apple II programs anymore. That doesn't mean that there aren't any out there to be found — on the contrary, millions of Apple IIs are in use today, and most of them are located in public and private schools. But when you think about it, how many school principals are going to walk into a retail computer store with a purchase order?

So if you want to get Apple II software, there are a number of ways to get it. Perhaps the best place to start is the Apple II Disketeria. You can order disks with the full catalogs on them, or drop by the Pi office and browse through the selection.

The cheapest way to get Apple II goodies is to download the stuff off of bulletin boards and web sites. The Pi TCS has an extensive selection of Apple II Public Domain, Shareware, Freeware and Apple Utilities available for downloading. If you have internet access (a shell account via Proterm is an excellent way to surf), you might want to drop in on the Ground ftp site, located at <ftp://ground.isca.uiowa.edu/apple2> and pick from the huge selection of goodies of the world's largest repository of downloadable Apple II software.

Here are some other ftp, gopher and web sites you might want to check out:

Tony Cianfaglione's Apple II & IIGS Download Area:
<http://www.cfn.cs.dal.ca/Services/PDA/appleII.html>

Apple Computer's ftp sites (with II and IIGS system software, HyperCard GS, etc.):
<ftp://ftp.support.apple.com/pub/>
<ftp://ftp.apple.com/dts/aii/>

Caltech site via gopher:
<gopher://apple2.caltech.edu/>
or by ftp: <ftp://apple2.caltech.edu>

Hypermall (a great site):
<ftp://ftp.hypermall.com/pub/apple2>

University of Kentucky ftp site:
<ftp://f.ms.uky.edu/pub/appleII/>

Joe Kohn's Shareware Solutions Web Page:
<http://www.crl.com/~joko/ssii.html>

The Merit gopher site, with over a thousand Apple II files:
g o p h e r : / /
<gopher.archive.merit.edu:7055/11/apple2>

Of course, there are plenty of catalog and mail order sources for commercial Apple II software and hardware. The following list is in no way complete! Nevertheless, it's a good starting point. Pick up your phone, call these folks up and ask them for Apple II catalogs:

Scantron/Quality Computers
20200 Nine Mile Rd.
St. Clair Shores, MI 48080
(800) 777-3642
email: sales@sqc.net
<http://www.qualitycomp.com/>

National School Products
101 East Broadway
Maryville, TN 37801- 2498
(800) 627-9393
e-mail: nsp@hrweb.com
<http://www.ierc.com/nsp/>

Cambridge Developmental Laboratory (CDL) Software Shop
86 West St.
Waltham, MA 02154
(800) 637-0047
Massachusetts: (617) 890-4640

Sun Remarketing
PO Box 4059
Logan, UT 84323-4059
(800) 821-3221
email: sales@sunrem.com
<http://www.sunrem.com/>

Adrian Vance
PO Box 60533
Santa Barbara, CA 93160
(805) 569-1618
email: avsystem@rain.org
<http://www.hypermall.com/avsystems/>

Shreve Systems
1200 Marshall St.
Shreveport, LA 71101
(800) 227-3971
<http://www.shrevesystems.com/>

Creative Solutions
Box 340850
Beavercreek, OH 45434-6665

Alltech Electronics
2618 Temple Heights Dr.
Oceanside, CA 92056
(619) 724-2404
email: info@allelec.com
<http://www.allelec.com/>

Academy Computer
515 West Allen Ave.
Suite 5
San Dimas, CA 91773
(800) 846-3225

Educational Computer Co. Inc
(800) 350-4080

Softdisk Publishing
606 Common St
Shreveport, LA 71101
(318) 221-8718
<http://www.softdisk.com/>
email: info@softdisk.com

Atlaz Computer Supply
616 Burnside Ave.
PO Box 960110
Inwood, NY 11096-0110
(516) 239-1854
email: atlaz@pipeline.com

If you know of any other good sources I've left out, please drop me a line at revry@clark.net and let me know. We will be updating this list regularly, and adding it to the Pi web site in the near future. ■

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Frequently Asked Questions Apple II, III and IIGS

Note to Readers: Washington Apple Pi has decided to devote the next several issues of the Journal to printing of the most frequently asked questions about Apple II, III and IIGS computers. This is the second in the series. Nate Mates maintains, with the help of the Apple II community, a Frequently Asked Questions (FAQ) on the [comp.sys.apple2 newsgroup](http://comp.sys.apple2.newsgroup). For many of you, it is not possible to access this on-line resource. So, for the next few months, the Journal will reprint the the complete text in a form which you can extract from the Journal and save.

Apple II Frequently Asked Questions (FAQ)

HI! WELCOME TO the [comp.sys.apple2 newsgroup](http://comp.sys.apple2.newsgroup)! As the major usenet group for discussing all models of the Apple I, II and /// family, we get lots of questions that are asked fairly often. This document is an attempt to collect the most common questions and provide everyone with answers. . . .

I, Nathan Mates, took over the maintenance of this FAQ in mid July 1996. Big thanks to Dan DeMaggio (dmag@umich.edu), the previous maintainer of the comp.sys.apple2 FAQ, and all the others who took up that mantle before him.

There are still probably some sections that have fallen out of date and I haven't noticed or verified them yet. There are also some sections I'd like to rewrite as soon as I get the time. Please feel free to email me comments, criticisms, or reminders to post it. I hope this FAQ becomes a valuable resource. If not, please tell me what is missing. I can be reached at: nathan@visi.com

Disclaimer: I've tried to make this FAQ as accurate as possible, but there's the chance that it's not per-

fect. I apologize in advance for any slipups. Until I am confident that all information is 100% accurate, you are advised that you are following all info at your own risk. I will fix any problems found with this FAQ, but will not be held liable for the results of problems.

- Nathan Mates

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There are a lot more questions with answers not included directly in this FAQ; please see <http://www.visi.com/~nathan/a2/faq/index.html> for more of them.

Q#19 Can I hook up a Laser printer, ink jet, or bubble jet printer to my Apple IIGS?

A:In short: a number of them, but not all. Please look through the following list to check if a particular model you're looking at is supported. Also, the following applies to all programs which support the GS system toolbox methods for talking to printers through drivers. Most GS programs support this; Print Shop GS is an exception— it'll pretty much only work with the printers listed in the program, and then only at its printing resolutions.

On the GS, you can hook up most LaserWriters made by Apple via AppleTalk— if it supports Postscript and Appletalk, it should work. [Apple's Quickdraw printers are not usable.] A GS program can typically print to a LaserWriter if it's connected to the GS via AppleTalk; just install the LaserWriter drivers from the System 6 disks. Note that some LaserWriters from Apple may be 'Quickdraw,' not true Postscript printers, so they won't work from the GS. The Laserwriter, Laserwriter II,

LW IINT, LW IINTX are all known to work fine.

Of the Apple Stylewriter family, ONLY the original Stylewriter will work on the GS, and then only from GS/OS with the System 6 drivers. As Apple has not written drivers or released the specifications so that drivers could be written by third parties, none of the rest of the Stylewriter models works when connected to a GS.

The HP DeskWriter family is mostly only for Macintoshes; the DeskJet 3xx, 5xx or 6xx (xx= any 2 numbers, plus some optional letters) printer families is much more friendly to all models of the Apple II. If you get a DeskJet, or PaintJet, etc, you can hook them up via a parallel printer card or serial cable depending on what ports the printer has. The exceptions to this are HP's recent 'Windows Only' printers, such as the HP DJ 820C models, which don't work at all with Apple IIs.

But, in order to use pretty much any inkjet or bubblejet printer that the GS can talk to effectively, you will need Harmonie from Vitesse (better— supports color printing on HP inkjets that have such support built in) or Independence (cheaper, but only black & white printing) from Seven Hills. They are new printer drivers for GS/OS programs only. These two programs extend the ranges of printers supported by the GS. If you want to print from an 8-bit program, see the previous question.

Harmonie's drivers also support a number of printer modes that other printers can handle. Apparently the Canon BJ-200e works well with Harmonie 2.1's Epson LQ or Epson LQ 4000 drivers.

As provided by Richard Der, here is a list of printers and such supported by Harmonie; there may be other printers that are compatible with such models listed here, but are not listed. Nobody's gotten a list of

printers supported by Independence to me yet, unfortunately.

Printers supported by Harmonie:

—Canon Dot Matrix— Canon 1080

—HP DeskJet (or DeskWriter) Ink-Jet

— DeskJet (Manual states all DeskJet and DeskJet 5xx drivers DeskJet 500C work with DeskWriter series of the same number

DeskJet 520 using the high speed Printer 57.6 serial port

DeskJet 550C driver included with on the disk)

DeskJet 560C *560C driver is compatible with DJ/DW 600C and 660C printers. The DJ 400 is like th DJ 600C. The DJ 560C driver is listed as a 600x300dpi one whereas all the rest are 300x300dpi. [Other models like the 680C/682C should work also.]

—Epson LQ 24-pin Dot Matrix (or Canon Ink-Jet)— Epson LQ (Epson LQ drivers work with Canon BJ models for Epson LQ 4000 hires 360dpi printing. Some older models have Epson LQ 800 dip switches that must be set to enable automatic Epson emulation -> for example, the BJ-200e requires DIP switch 12 to be set to ON. The printer manual should say what to do for the specific model. BJ-10e, BJ 100, BJ-200, BJ-210, BJ-4100, and BJ-600 models also list Epson LQ emulation and should work with one or more of these drivers.)

—Epson 9-pin Dot Matrix— Epson MX 80

—HP LaserJet laser Printers— LaserJet

LaserJet IIP

LaserJet III (Newer LaserJet models also work with these drivers as are any HP compatible laser printers)

—Misc. Dot Matrix Printers—
Okimate 20
Panasonic 1124
Pinwriter

—Misc. Ink-Jet—
HP PaintJet
QuadJet

Gareth Jones adds the following from his list on his Harmonie 2.11 disk:

—Apple Dot Matrix Printers—
ImageWriter LQII, ImageWriter II

I'd like to get a list of all printers that are 1) officially supported by Harmonie/Independence, 2) not officially listed, but a driver exists that works well with them and 3) don't work at all with Apple IIs. Given that I have neither the time nor the money to test every printer on the market, I'd appreciate feedback sent to me at nathan@visi.com.

Q#20 Can I add more memory to my Apple II?

A: Yes. The hard part is getting machines before the GS to recognize all of it. The Apple II and II+ have a practical limit of about 64K, which is accomplished by the 16K language card in slot 0. [Some accelerators provided 128K, as well as some very old ram cards, but I don't have any real info on that.]

The IIe had the widest variety of memory expansion options. The AUX slot used for 80-column cards could also handle memory expansion—Apple's own Extended 80-column card provided an extra 64K of memory. Other cards in that slot could reportedly add several megs of memory. There were also RAM cards for slots 1-7, the so-called 'slinky' cards, also capable of adding a meg or more. Either brand of card is only available used, to my knowledge.

Later models of the Apple IIc had an internal memory expansion port,

which RAM 'cards' could be added internally—see the section on Apple IIcs for how to determine if a IIc could have RAM added. Such RAM cards are only available used.

The problem with adding extra RAM to Apple IIs (before the GS) is that not much software would take advantage of it at all. Only a few programs like Appleworks had any form of support—versions 1.x or 2.x needed to be patched to recognize more memory, 3.0 and up could use an externally supplied file. [To get the patch or the file, see the disks that came with the RAM card.] Basic, most games, and the like don't care about any RAM beyond the 48-128K they require to run.

The GS, due to its processor design, can directly address up to 16MB of memory (about 2MB is reserved in the GS's design for ROM), though RAM cards only go up to 8MB. Sequential Systems still sells 2-8MB RAM boards for the GS; there were also lots of other manufacturers. Although SIMMs are now dirt cheap, there were very few SIMM based GS RAM boards—you'll probably have to buy a card using some other form of RAM.

The GS can also have IIe 'slinky' cards plugged in, but aside from Appleworks and ramdisk support, the memory on these boards is NOT available to GS programs. This is because they are accessed via slots 1-7 manually, one byte at a time in sequential order, while the 65816 wants program RAM to be directly accessible in random order. It would require rewriting a program to address slinky cards from a GS, and as the numbers of those are extremely limited, no real support for them was ever widespread.

Q#21 Can I accelerate my Apple II?

A: Yes. Over the years, many accelerators were produced for the various models in the Apple II series.

Most of these were slot-based cards, though the ZipChip and RocketChip were drop-in processor replacements. For the GS, the Transwarp GS and the Zip GS were the only options; Ego Systems still sells 8Mhz Zip GSs. [I don't know of anyplace selling non-GS accelerators new; you'll probably have to look for one used.] A separate FAQ for upgrading ZIP or TransWarp GS accelerators is available at <http://www.visi.com/~nathan/a2/faq/zip.html>.

For only a few dollars, you can buy a faster 65C02/65816 from an electronics parts catalog. However, this most likely won't do you a bit of good without an ungradeable accelerator card. This is because the Apple II's system bus runs at 1Mhz, and provides a 1Mhz signal to the processor socket. The processor derives its timing off that signal; running it at a speed under what it's rated at is perfectly safe and legal. Accelerator cards or chips provide their own oscillator at a faster speed, plus the logic necessary for a chip to interface with the slower 1Mhz bus.

Q#22 What are the pinouts for all the various Apple II connectors?

A: While these pinouts are a little too big to include in this FAQ outright, you can still find them in the same place on the WWW as this FAQ, in Nathan Mates's set of Apple II Resources. The pinouts page is available at <http://www.visi.com/~nathan/a2/faq/pinouts.html>.

Q#23 Can I hook up a scanner up to my IIe or IIGS? Can it do OCR?

A: Yes and Yes. (OCR stands for Optical Character Recognition—the ability to convert a scan into text) Just pick up a Quickie scanner (by Vitesse) and InWords (by WestCode Software). You can scan 4" columns (you must have 512K to 1 Meg) and can even paste them together to make 8" scans. Then you

can use InWords to "read" text and put it into a text file or AppleWorks Word Processor file.

Apple put partially completed support for a few Apple flatbed scanners onto the System 6.0 Golden Master CD, but the test program for it could not save a scan to a file. No programs support various popular TWAIN-compliant scanners such as those from HP.

Q#24 Can a Disk II be used on a GS smartport?

A: Yes. Contact Jameco Electronics (<http://www.jameco.com>, phone: 1-800-831-4242) S20 PIN HEADER TO DB19-PIN CONNECTOR MODULE ADAPTS II/II+ DRIVES FOR APPLE IIC. PART NO: 10022 PRODUCT NO.: AAM APPLE IIC ADAPTER \$3.95

If you don't mind some soldering, you can make this cable up yourself. Take a look at <http://www.visi.com/~nathan/a2/faq/diskiiicable.html>

Q#25 I want a Y-adapter for my GS keyboard.

A: Redmond Cable has an ADB Y-connector cable for separating your mouse from the side of your keyboard (also can be used to work around a failing ADB port on the keyboard). See the 'Resources' section of this FAQ.

Q#26 How about hooking up cheap IDE Hard Drives?

A: There's a card called the Turbo IDE, does DMA, and is apparently as fast as a RamFAST SCSI card. See <http://users.ids.net/~kerwood/shh.html>, or contact jlange@tasha.muc.de for details like technical specs, pricing, and S/H procedure.

The first revisions of the Turbo IDE controller's ROM supported only 256MB of capacity on a single drive. With IDE HDs now being sold

at ten times that capacity, you may have to do some hunting to find drives that small.

Q#27 Can an Apple II connect to a SCSI device?

SCSI is a protocol (method of transmitting data) that lets you hook up to 8 SCSI devices on a SCSI bus (SCSI devices connected together). There are Hard Drives, tape drives, scanners, and more available as SCSI devices.

To get SCSI on an Apple II, you need to buy and install a SCSI card. (//cs and IIC+s have no native SCSI cards, but Chinook (later bought out by Sequential) made a Smartport capable drive as your only choice for HDs). At first, there was the Apple Rev 'C' SCSI card (named after the final ROM version—all previous versions MUST be upgraded to work with current software). There were several clones from the likes of CMS and Chinook. Then Apple came out with it's High Speed DMA SCSI card. This has the ability to do Direct Memory Access to the RAM in your computer, which speeds things up. This created a lot of problems with cards that were not DMA compatible.

CV Technologies (bought out by Sequential Systems) also has a DMA SCSI card called the RamFast. This card has 256K or 1MB of on-board RAM to make it even faster than Apple's card. It can also supply terminator power if you drive does not supply it. Both of the new cards support things like SCSI tape backup units, removable SCSI drives, SCSI CD-ROM, and of course SCSI hard drives. Both the new cards also require an Enhanced //e. RamFasts have had their ROM upgraded many times; you may want to look into getting the latest if you have removable devices such as Flopticals, CD-Roms, Zip Disks, and tape drives.

Most fixed and removable SCSI disks can be connected to Apple IIs

with the addition of a SCSI card. People have used Zip, Syquests, Bernoulli, Floptical devices. With older revisions of the SCSI cards, they may NOT recognize them as removable devices, leading to crashes and/or data corruption if you switch removable disks with the computer on. Most SCSI HDs can also be used, but certain SCSI II devices that insist that the SCSI card have a SCSI ID (the Quantum Fireball seems to be one of the main culprits) won't work with at least the RamFAST 3.01f ROM version and possibly others.

You must manually give each device it's own unique ID number from 0-7. The SCSI card is usually set to 7. On a SCSI chain, there must be a Terminator (a bunch of resistors) at each end. Some drives have internal terminators (3 small yellow-orange packs) that can be switched on and off, and some drives come with an external terminator (a "plug" to put on the back of the drive). Nothing other than the ends of the chain should be terminated.

Also, somebody on the bus must supply terminator power (one of the SCSI lines). If There are any problems (multiple things with the same ID, too much termination or not enough, or no terminator power), you may be able to use the drive, but your data will get corrupted. Most of the time, the computer will refuse to recognize the drive.

There are two types of SCSI cables: the 50 pin Centronics-type (like on parallel printers) or the 25-pin "D" connector. The 50-pin is the SCSI standard, the 25-pin is the Apple standard. There are also cables with the 50-pin centronics connector on one side and the 25 pin "D" connector on the other.

Q#28 Tips on setting up a SCSI system:

* You can have multiple drives on one SCSI card, just make sure you remove the termination on all the

drives but the last one. This is because the newer SCSI cards are terminated (and they count as a SCSI device).

- * Always check that the cords are plugged in properly. Never connect/disconnect anything when the computer is on.

- * SCSI ID numbers 0 and 7 tend to have special meanings; the Apple High Speed SCSI displays multiple copies of partitions online if a drive has that ID. Use 1-6 instead.

- * The computer will boot the hard drive with the highest SCSI ID, which should be ID 6.

- * Try letting the drive 'warm up' for 15 seconds before turning the computer on. The SCSI cards look for drives only at startup, and may ignore any drives that are not ready.

- * Try turning off DMA. If this helps, you may have a non-DMA compatible card, such as the early versions of the TransWarp, early versions of the GS RAM, or any 8-bit accelerator. Alternately, try setting up a RAM disk for all but 4 MB. Some RAM cards can only do DMA in the first bank.

- * Check that each device has a unique ID. Most drives have a thumbwheel on the back to set the ID. Your SCSI card (yes, it counts too) is probably ID 7. Number your drives from 6 downwards for best compatibility. The IDs have nothing to do with what slot the card is in.

- * Is there a terminator at each end of the SCSI bus? (the DMA cards are terminated, and some drives are internally terminated.)

- * Try the software that came with the card. It may give helpful diagnostic messages (I.E. the Apple DMA SCSI utilities— Does it say "No Apple SCSI card found" or "No SCSI devices found"?)

- * RamFast boards have gone through many ROM revisions. The latest is 3.01f; if you want to use any removable disks (Zip/Syquest disks, CD-Roms, Flopticals, tape backups),

you should contact Sequential Systems (see above for address) to purchase a ROM upgrade for your board.

- * Do you get the message "Unable to Load ProDOS"? If so, it's booting your drive but you have no system software on it. Try hitting Control-Reset, then PR#5 (or PR#6) to boot a floppy. Then install the system software (i.e. ProDOS or GS/OS).

- * In extreme cases, try reformatting the drive, repartitioning, and re-installing the System software.

- * If the drive access light blinks in a regular pattern before the computer is turned on, it is telling you that it has a hardware malfunction. It needs to be serviced.

- * Did you try re-installing the System software? Many times, the data on a drive will get corrupted if you run the drive with improper terminators or conflicting SCSI ID's. Sometimes you will not notice the corrupted data until after you fix the problem. If re-installing the System software helps, it was probably a software problem, not a hardware problem.

- * The Apple HS DMA SCSI card requires an Enhanced //e. It will not work on the older //e without an Enhancement Kit.

- * To really put a drive through it's paces, copy a LOT of stuff from one partition to another (copy the entire partition if you can). If there is a problem with DMA or SCSI ID's, it will probably show up as a strange GS/OS error. (GS only)

- * Make sure you do not have the Apple SCSI drivers installed if you have a RamFast. It may cause random problems (they leave an interrupt handler dangling if they can't find their card.) (GS only)

- * Make sure you are booting the right slot. If the card is in slot 7, you can set the startup slot to Scan or 7. (GS only)

- * If you boot up and only 1 partition shows up, you need to install

the SCSI drivers. (GS only)

- * If you boot up and it says "Drive XXX is already on the desktop" over and over: Probably a SCSI ID problem. (GS only)

- * If you add a CD-ROM, drivers are available from Trantor Systems LTD, 5415 Randall Place, Fremont, CA 94538 (415)770-1400 (GS only)

- * At least one device must supply terminator power to the bus (Pin 26). The Apple Cards do not supply this, and some drives don't either. Result: The drive won't be seen by any software.

- * Some CMS Platinum drives had pin 40 disconnected for obscure Mac compatibility reasons. This can cause problems with the Apple IIs.

- * Make sure you use the drivers from GS/OS, and not the ones that ship with the Apple HS SCSI card. (Doesn't apply to RamFast).

- * To low-level format an AE Vulcan drive, go into PART.MANAGER, move the highlight to "format" and type "AE". Then say yes to all the prompts.

How do I get files off the net? 8/26/96

Quick summary:

- 1: Make sure you know how to download files from ftp sites
- 2: Make sure you have a Binscii decoder
- 3: Make sure you have a Shrinkit unpacker
- 4: Unpack with the programs

And, in more detail, starting with a word of explanation:

[There used to be details about older Apple II packing programs in the FAQ, but as they're pretty much never used anymore, the info on them has been relegated to the 'obsolete' section of the comp.sys.apple2 FAQ at <http://www.visi.com/~nathan/a2/faq/csa2.old.html>]



Q#29 What are Binscii & Shrinkit, and why do I need them? 8/26/96

Shrinkit was written by Andy Nicholas to be able to take multiple files or disks and compress them into one file. This allows a authors to distribute programs, documentation, and anything else as one complete file. It is analogous to (but NOT the same as) Stuff-It or [PK]ZIP for Macs and IBMs. Shrinkit comes in many different forms, as is noted in the section on downloading it.

Binscii is a method of turning Apple II files into pieces that can be safely transmitted by the internet, such as usenet and email, and restored to the Apple II file later. It is used for two major reasons: 1) Since it splits files up into manageable pieces, it lets huge files be transmitted without fear of being cut short. 2) Since it translates files to strictly printable characters, mediums that cannot safely send binary files (i.e. files put through Shrinkit) such as email and usenet can send binscii'd files.

Binscii is similar to the unix 'uuencode' encoding, but it is not identical, and far superior. It allows Apple II filetype information to be restored when the file is unpacked. Secondly, binscii is usually not concerned about email or news headers (it ignores them when unpacking), and also can unpack the various pieces of a binscii'd file in any order, and the original file will be intact as long as all the pieces were unpacked. Finally, you do not have to rejoin all the binscii pieces into one file before unpacking.

Why these two programs are so necessary in downloading is the following: pretty much all Apple II programs are first compressed with Shrinkit, and if they are to be sent via email or to comp.binaries.apple2, the shrunk file is then binscii'd. To unpack, you will need to first un-binscii the file, if appropriate, and then un-Shrink it.

Ok, fine. What do Binscii and Shrinkit files look like?

If you are given a file, first look at the end of the filename. If it ends in ".BSC" or ".BSQ" (no quotes, and upper/lower case doesn't matter), you most likely have a binscii file. Shrinkit files tend to end in ".SHK", but ".BXY" is also used.

If that isn't helpful, or you have a file without a name, then take a look at the first few lines of content. After any optional news or email header, a binscii file should look like this:

```
FiLeStArTfIEsTaRt
ABCDEFGHIJKLMNOpQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789()
GSOMEFILE.SHK AQhmAAAAA8)4MIAI02DA9ARMQEDtAQhmAIVZ
gYITA6u7xADA0MjM3YTNBIDOENkQwYURzITM2UDN5gzNDJUQGVERyEDM1QzM4cjN
CFUOFROQxAjR0MjM3YTNBIDOENkQwAQrZITM2UDN5gzNDJUQGVERyEDM1QzM4cjN
```

The first two lines are constant throughout all binscii files; the third contains the filename ('SOMEFILE.SHK' here) and then the encoded file.

On the other hand, a .SHK file cannot have any news or email header, and has only about 6 characters at the start (not all viewable on a normal screen, especially non-Apple IIs) that identify it. Thus, trying to look at the first few lines is pointless.

Finally, you can always try to unpack the file, as the binscii and Shrinkit programs will notify you if the file is not in the format they can unpack. As files are always binscii'd last, you should thus try and unbinscii an unknown file first, then try to unshrink it.

Enough technical discussions, now on to the specifics of where and how to get binscii and shrinkit running on your system.

Q#30 Where can I get Apple II software and info on the net? 8/31/95

[A quick note about URL notation: For those of you with full net access, you can run a web browser (like Lynx if you are dialed in from your Apple), which will understand URLs directly. Otherwise, ignore the 'http:' ones and see the next section on how to use the FTP ones.)

Hint:

```
ftp://ground.isca.uiowa.edu/apple2
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
      Hostname      Directory
```


Major FTP sites and mirrors:

<ftp://ground.isca.uiowa.edu/apple2>
We (The Apple II users of the internet) paid a good chunk of money for this drive, so it's the biggest, and may have the best selection. During normal daytime hours, it may be busy, but the WWW interface at <http://ground.isca.uiowa.edu/apple2/> is almost always available

<ftp://apple2.caltech.edu/pub/apple2>
Maintained by Dan Zimmerman, this large Apple II Archive also has a WWW interface at <http://apple2.caltech.edu/a2archive.html>, which supports automatic binary downloading for most files, which is very nice.)

<ftp.apple.com>, dts/aai Get Technical Info, System Software, etc. here.

<ftp://apple2.archive.umich.edu/archive/apple2> Another large Apple II archive. Once again, the WWW interface at <http://www.umich.edu/~archive/apple2> can be less overloaded.

<ftp://archive.orst.edu/pub/mirrors/archive.umich.edu> (Umich mirror)

<ftp://wuarchive.wustl.edu/systems/apple2> Usually overloaded; try the WWW interface at <http://wuarchive.wustl.edu/systems/apple2>

<ftp.support.apple.com>, pub/apple_sw_updates/US/Apple_II/HyperCard_II.GS Hypercard GS, but really only unpackable on Macs. The .bxy files are not readable on Apple IIs unless you manually strip off the 512 byte header

<http://www.openix.com/~jac> Archive of all postings to comp.sources.apple2.

<ftp://names.wvu.edu/pub/apple3> -

Apple III stuff

OK, so here's a bunch of resources:

<http://www.visi.com/~nathan/a2/faq/csa2.html> - Hypertext version of this FAQ

<http://www.visi.com/~nathan/a2/faq/index.html> - Even more FAQs on all sorts of questions and subjects

<ftp://rtfm.mit.edu/emulate-apple2-faq> - Emulation FAQ

<http://www.crl.com/~joko/ssii.html> - ShareWare Solutions II Homepage

<http://www.visi.com/~nathan/a2/index.html> - Nathan Mates's Apple II Links.
Lots of 'em.

<http://www.visi.com/~nathan/a2/bbs.html> - Mike Shecket's BBS listing

Other FTP Sites:

<ftp://ftp.ms.uky.edu/pub/appleII>
Mostly very old Apple II software

<ftp://ftp.cc.utexas.edu/gifstuff/apple>
GIF viewing software for Apple IIs only. (And outdated. Major sites listed above have better selections)

<ftp://info2.rus.uni-stuttgart.de/afs/umich.edu/group/itd/archive> Looks like a umich mirror again

<ftp://syr.edu/software/kermit/appleII>
Kermit sources for the Apple II.

<ftp://watsun.cc.columbia.edu/kermit/a> Kermit stuff in forms that look unusable to Apple II users.

Archives of C.S.A2 Newsgroups:

Dejanews, <http://www.dejanews.com>, is an excellent searchable archive of pretty much

all major usenet groups, including all of the Apple II newsgroups. It's only good back to about March 1995 as of 8/31/96, but they may be trying to extend that back.

Other, more limited archives:

<wuarchive.wustl.edu> /usenet/
comp.sources.apple2 (complete!) /usenet/
comp.binaries.apple2
<ftp.tohoku.ac.jp> /pub/news/
comp.binaries.apple2
<hp4nl.nl> /pub/
newsarchive/comp/sources/apple2 (incomplete)
<mcsun.eu.net> /pub/
newsarchive/comp/sources/apple2 (incomplete)
<nic.funet.fi> /pub/archive/
comp.sources.apple2 (complete?)
<relay.cs.toronto.edu> /pub/lists.1989 (1989 only)

If you have a Shell account, you can use 'archie' to find ftp sites with a particular file.

Q#31 How do you download files off the net?

This is important because once you're on the internet, most of the files are available only on 'ftp' and www sites. ('ftp' stands for File Transfer Protocol, and www stands for the World Wide Web, but all you need to know is where to get Apple II files from. See the section above for a list of ftp sites.)

1. (For ProLine users) Get files to your host

1. Dial up your host and log in.

2. I'm not familiar with ProLine, so I'll be vague here. Just go into the files section and look... Anyone wanna clue me in?

2. (for those with a Shell account) Get files to your host

1. Choose an FTP site from the FAQ

2. At your UNIX prompt, type

"ftp _____" (fill in hostname)

3. At the "Login:" prompt, type "anonymous" (or "ftp" if you are a bad speller like me ;)

4. Type in your e-mail address when prompted for a password.

5. Type "bin" unless you are only getting text files

6. Type "cd _____" (directory) to move to the right directory.

7. type "ls" to see a list of files.

8. Locate each file (more "cd _____"s and "ls"). Also, "cd .." will move up a directory in the tree.)

9. use "get _____" (filename) to get it

10. When you are done using FTP, type "quit"

3. From a WWW browser, most browsers are not set up to download .SHK files in binary, which will make them impossible to unpack. There are some solutions to this. Dan Zimmerman has made the Apple II archive at Caltech automatically send files in binary mode; go to <http://apple2.caltech.edu/a2archive.html>

If you are using Lynx, when the cursor is on the file to download, you can hit 'd' to download the file, which for most people forces a binary download. [Lynx has too many versions with the same version 'numbe' and possible configurations to be able to list which ones will work.]

Using most WWW browsers under unix (Netscape, Mosaic, lynx, maybe some others) you can try editing the file '.mime.types' (no 's) in your home directory on most unix systems. (Contact your local sysadmin or guru for help on unix editors). Add the following lines to the file: application/x-Shrinkit shk SHK sdk SDK application/x-BinaryII bny BNY bqy BQY bxy BXY

This will work for most files downloaded with lynx, netscape, and mosaic. Non-unix browsers can do similar things, but you'll need to

read the documentation on them.

4. From email or comp.binaries.apple2, the files are pretty much always in BINSII format, so you do not need to worry about binary downloading.

Simply save the email or news articles to disk (most things do have multiple parts, so be sure to get all of them), and download that to your Apple II. You can keep the posts as separate files, no need to paste them all together when saving or downloading. For a multiple part binscii file, the order in which you unpack them does not matter as long as you unpack every part.

5. Get files to your Apple II See the next section on transferring Apple II files.

Q#32 How do you transfer Apple files to/from other personal computers?

Normally, you cannot stick a 5.25" disk in a non-Apple II machine and have it read it. This is because the disk writing formats are different at a hardware level, and no software exists (or will exist) to let a PC read an Apple II 5.25" drive. However, with rarer add-on hardware, you can bridge the gap. This has been an insolvable problem for nearly 15 years; if it could be solved in software, such a thing would exist.

That being said, here's a list of ways that do work:

Q#33 How do I transfer DOS 3.3, Pascal, CP/M files?

Unless you have a null modem (see below) and a comm program for the OS in question, you'll most likely have to use a real Apple II to transfer the files to an OS that a lot more systems can read, such as ProDOS.

The //e system software, the DOS 3.3 FST (GS/OS System 6), and Copy][+ can all read and convert Dos 3.3 files into ProDOS (but the

DOS 3.3 FST can not write to DOS 3.3 disks). This is only helpful for text files, graphics, and some Basic programs. For translating between ProDOS, CPM, Pascal and DOS 3.3, try the program Chameleon. You have to use the 'force disk as ProDOS' option to use your hard drive.

<ftp://apple2.archive.umich.edu/apple2/8bit/util/chameleon.bsq>

Once the file is on a ProDOS disk, you generally have a lot more transfer options available.

Q#34 How do I transfer files by (null) modem?

This is probably the most accessible option; it can be done by an Apple and any other computer as long as both have serial ports, cable(s) to go between them, and communications software on both sides.

Modems allow you to transfer computer data over phone lines; a null modem essentially yanks the middleman of a phone. Null modem cables (which are identical to serial printer cables) are essentially a cable which plugs into the serial port of two computers, and is wired such that when one computer sends, the other receives, and vice versa. With a communications program that supports file transfer on both ends, you can send files from one side to the other.

For those who haven't picked a program to download with, here are the better Apple II programs listed alphabetically; for other systems, you'll have to find a comparable program. All of the non-commercial programs are available from FTP sites. If you don't have a comm program already, your best bet is to have someone mail you one on a disk or buy ProTerm. (See resources).

Program	Comp	Emulations	Protocols	Note
ANSITerm	GS\$	color ANSI, PSE	X,Y,Z-modem	Editor, scrollbar, etc.
Agate	E	mono ANSI	X,(Y,Z D/L only)	Unpacks ZIP, Buggy
ColorTerm	GS	color ANSI	X-modem	Desktop based
CommSys	E	none	X-modem	Works on][+
FreeTerm	GS	none	X-modem	Desktop based
GSVT	GS	VT-100	none	Desktop
GTerm	GS	color ANSI	none	Written in BASIC/ML
GenComm	GS	none	none	Text, Shell Compat.
Kermit-65	E	VT-100	Kermit, X-modem	Hard to use, Works on][+
MegaTerm	GS	color ANSI	none	ProDOS 8
PTP	E\$,	VT-100	X-Modem, (Y-mdm D/L)	From Quality Computers
ProTerm	E\$	PSE, VT-100	Kermit, X,Y,Z-modem	From InSync
SnowTerm	GS	VT-100 (+)	none	Desktop based
Spectrum	GS\$	ANSI, VT100, PSE, Viewdata	Kermit,X,Y,Z Modem	GS Desktop Prog
TIC	E\$	VT-100 (+)	X-modem	Small, Scripting.
Telcom	GS	VT-100, PSE	X, (Y D/L only)	Shell compat
Z-Link	E	VT-100	X-modem	Good.

Key: _____

| Key: \$ = A commercial program + = And other obscure ones

| Computer: E = works on GS and //e, GS = only works on GS

| D/L = Download from other computer

PTP = Point-To-Point. I don't think it's being sold anymore. Anyone know?

See the resources section for where to buy the commercial programs.

Once you are set up with a comm program on both ends, with a modem, here's how to send files:

1. Find out what file transfer protocols your Apple communications package supports. (see below for a list)
2. On your local comm program, set your file transfer type to Text (TXT) or Binary (BIN) depending on what type of file you are downloading. If there is an option to "strip incoming linefeeds", try turning it on.
3. Get your host to send you the file. I don't know about ProLine, but UNIX users can use these commands:
 For Z-Modem: "sz _____" (file names)
 For X-Modem: "sx _____" (one at a time)
 For Kermit: "kermit", then "put _____" (filename)

Z-Modem is by far the fastest of the three; if you are getting random connection errors, you may need to do "sz -e _____" to force a safer (but slower) xfer method.

4. If needed, tell your local communications program to Receive. You must do this quickly, or the other host will give up trying to send the file.

5. Write down the full pathname of the files you downloaded and where you put them. There will be a quiz later. Pathnames look like "/DISK/DIR/FILE.NAME"

Note: If something goes wrong, hit ESC, Ctrl-X or Ctrl-C 3 times. If you can't get one protocol to work, try the next one down. Z-modem is much faster than the others. You will want to find a program that supports it.

With a null modem, it is similar. First, you need to tell both sides that they are online. Reading the manual is strongly encouraged! This is easy for some programs, where you can just start them or set an option, and they're running. Other, like Windows 95's Hyperterminal, are almost dead set on dialing a modem first. You'll also need to set both sides to communicate at the same speed and connection parameters (8 bits, no parity, 1 stop bit, aka '8N1' is customary). When you've got that done successfully, you can type on either computer's keyboard and have it appear on the other's screen.

FAQs will continue in Mar./April
starting with question #34



Macintosh Disketeria

by Dave Weikert

New Disks

WE FEATURE 32 disks this month including an update of the Disketeria Catalog, additions to the Systems Utilities Series, Internet Series, Fun and Games Series, Claris E-mailer and some more Apple Systems software disks. Single disks are available for \$4.00 each and quantity purchases are priced at \$3.50 for five or more. See the Disk Order Form and following paragraphs for the prices for sets not otherwise listed herein.

Disketeria Catalog Update

Our Disketeria Catalog—in Easy View viewer format—permits fast browsing of the contents of our Disketeria collection. You can search for specific file names or disk numbers. The three Easy View windows make it easy to see the overall organization of the Disketeria collection as well as see the detailed descriptions of the contents of each folder or archive. The catalog disk costs \$4; you can trade in an older version of the Disketeria Catalog disk for the current version for \$1 (plus postage if by mail).

Claris E-mailer

Claris has made version 1.1v3 of E-mailer available for free distribution. Why would they do this? Well, they are hoping that you will try it out, like it and then buy version 2.0 when it is released early in 1997. Well, their marketing scheme is your good luck. E-mailer is arguably the best of the Mac E-mail clients. We have the two disk set for \$8; the cost of duplicating the disks.

For those with Internet connections, this is a must buy.

Apple System Software

LaserWriter 8 v8.4.1 Update

is a five set disk that updates the recently released LaserWriter set. The recent LaserWriter package provided a new user interface that is simpler and easier to use. It also provided single-pass printing for foreground print jobs, more background printing options, and more layout options. Cost is \$15 for the set.

Open Transport 1.1.1 is a six disk set with Apple's new technology for accessing interface protocols (like AppleTalk, TCP/IP, IPX, etc.) in an industry standard manner. The use of Open Transport and Open Transport/PPP from Apple provides better, more stable communication than MacTCP and PPP for Power Macs. Although designed for MacOS 7.5; OT may be installed on MacOS 7.1 and later. Cost is \$15 for the set.

Open Transport/PPP is included on a single install disk and provides the PPP protocol for use with Open Transport 1.1.1. OT 1.1.1 is a prerequisite. Cost is \$4 for the disk.

CD-ROM Software 5.1.7 is the latest update of Apple's CD-ROM drivers. Cost is \$4 for the disk.

About Shareware Requests

Please honor authors' requests for shareware fees if you decide to add shareware programs to your software library. Shareware is a valuable distribution channel for low cost software and it is important to encourage authors to use this chan-

nel by paying them for their efforts.

Disk #16.14F SYSTEM UTILITIES

DropStuff w/EE™ 4.0 Installer:

By Leonard Rosenthal. Offers drag and drop compression and BinHexing with on-the-fly option switching. When used in conjunction with Stuffit Expander 3.5.1 (Disk 13.01), lets Stuffit Expander expand DOS and UNIX formats. Fat binary. **Shareware - \$30; \$15 for StuffitLite registrants; free for Stuffit Deluxe/SITcomm owners.**

File Buddy 3.4.8: By Lawrence Harris. A file utility to perform a wide variety of 'Get Info' type file functions including creating custom icons, aliases, file type, creator, etc. For System 7.0 and later. **Shareware - \$25.**

ramBuncious 1.1 By Elden Wood and Bob Clark. A ram disk program. Ram disks set aside an amount of memory that the system can then use as a 'normal' hard drive, floppy drive, or any other storage device—except that they're much faster. Several options let you customize for your desired balance of speed, security, safety, and versatility. **Shareware - \$12.**

RamDisk+ 3.2.4: By Roger D. Bates. A RAM Disk program designed to run automatically on startup. It copies any selected files and folders to the RAM disk and optionally installs a crash saver to recover from system bombs. This program is considered by many to be the best of the shareware RAM disks. **Read Me - RamDisk+** is in TeachText format. System 6 and 7 compatible. **Shareware - \$35.**

ShrinkWrap™ 2.1: By Chad Magendanz. Create and mount multiple DiskCopy disk images. Automatically compress and decompress archived image files on-the-fly with Aladdin's StuffIt Engine™. This is a 'must have' application for anybody who has to work with disk images.

Stuffit Expander 4.0.1 Installer: By Leonard Rosenthal. This is a



must have 'Swiss Army Knife' for expanding archives. Decompress any Macintosh file compressed with Stuffit or Compact Pro packages or in BinHex 4.0 format. If you have also installed 'DropStuff with Expander Enhancer' (on Disk 13.02) you will also be able to expand files which were compressed on PCs and UNIX systems. Requires System 6.0.4 or later.

DISK #16.15F **SYSTEM UTILITIES**

Finder Heap Fix: By John Brisbin.

Keep getting the 'Not enough memory to open Window' prompt? Well, adjust the Finder Heap Size with this control panel. Recommended for System 7.5.5.

Finder Size Updater: Updates Finder size so that MacLink 9.0 may operate with System 7.5. However, increased Finder size may be useful for running many other applications as well.

Gauge Series: By Newer Technology. A series of 'gages' to test the performance of your Mac. They include:

Cache-22 v1.4: Shows amount of Level 1 and Level 2 cache and CPU type.

Clockometer v1.9: Shows clock speed and CPU type.

RAMometer v1.2.1: Tests RAM.

SCSI Info 1.0a3: Shows information on SCSI busses (including multiple)

Slot Info 1.0a2: Shows what cards are in computer, what versions ROM they have and information about what motherboard-based video controller (if any) is on your Mac.

GURU 2.1.1: By Newer Technology. In addition to showing the RAM and VRAM configurations, it lets you test RAM memory and show other characteristics of different Mac models. Excellent and it is free.

Keep It Up 1.3.1: By Karl Pottie. Watches certain applications and monitors if they are still running. If an application no longer runs because it "unexpectedly quit" or

because the user quit it, attempts to relaunch this application (and open certain documents) or restart the computer. *Shareware - \$25.*

Magic File 1.0: By Mark Cenicola. Makes files or .sit archives 'invisible' from casual prying eyes.

MemMapper 1.3.1: By R. Fronabarger. A window shows the memory map for your computer as currently loaded. The left side of the window is the Memory Map which shows the entire physical RAM or, if virtual memory is on, the total logical RAM of your computer. The map is drawn to scale and displays the way memory

"Claris has made version 1.1v3 of Emailer available for free distribution. Why would they do this? Well, they are hoping that you will try it out, like it and then buy version 2.0 when it is released early in 1997. Well, their marketing scheme is your good luck. Emailer is arguably the best of the Mac E-mail clients."

space is partitioned for use by the system and applications. The right side of the window is the Item List which shows each partition's name, type, signature, size, and amount of free space left in that partition. Requires System 7.0 or later.

Memory Filler 1.0: By Chaotic Software, Ltd. A memory stress-testing tool. It allows you to reduce the amount of free temporary and/or System memory to any desired amount. It's great for testing products under low memory condi-

tions.

Okey Dokey Pro 2.0.1: By Dan Walkowski. Presses the default button in modal dialogs after a time limit. The control panel lets you specify several preferences including specifying which Applications will be exempt from Okey Dokey actions.

RAM Check 2.1: By ProVUE. A small application to test your RAM; you may run it in a single pass mode or continuously.

RAM Dumper II: By Roby DeLuca. Captures values of memory buffers between specified locations.

SCSIProbe 4.3: By Robert Polic. Displays status of SCSI drive in control panel; mounts SCSI disks and disks that have been dragged to the trash. Also reads drive PROMs and reports back vendor, product and version numbers. This version is sponsored by SyQuest for use with their cartridge drives. System 6 and 7 compatible.

TattleTech 2.51: By John Mancino. Collects very complete information about your computer and its system related software. You may view information on screen by category, print it, write to a standard text file in standard or a special Bug Report format, or output it in database readable format. Requires System 6.0.4 and later; Mac Plus and later. *Shareware - \$15 (level 1) or \$25 (level 2).*

DISK #16.16F **SYSTEM UTILITIES**

FastFontMenu 1.0.2: By Dave Polaschek. Speeds up the building of the Font Menu in most applications using an improved algorithm scheduled to be included in a future version of the MacOS. *Donation to ACLU or Amnesty International.*

FilterTop 1.0.2: By TopSoft. Allows Macintosh files to be processed through a series of "filtering" operations. These operations are provided via plug-in modules and are configured by the user via a graphical interface.

Font Box 2.0: By Insider Software.



Checks for duplicate and corrupted fonts and superfluous bitmapped font sizes. Registered copy fixes problems with corrupted and duplicate fonts and resolves font ID conflicts. Create and use font library. **Registration, Personal Edition - \$29.95, standard - \$69.95 and network - \$79.95.**

Font Gander 1.0.5: By Hugh Johnson. Lets you view fonts without having to install them. Also prints beautiful specimen sheets.

"Please honor authors' requests for shareware fees if you decide to add shareware programs to your software library. Shareware is a valuable distribution channel for low cost software and it is important to encourage authors to use this channel by paying them for their efforts."

Works with Adobe Type Manager 3.0 and above to allow high-rez imaging of Type-1 fonts. Best used as a "drag-and-drop" application. Requires System 7.0 or higher, and any PowerMac or 68k Mac higher than a straight 68000. **Shareware - \$10.**

DISK #16.17F SYSTEM UTILITIES

Font Finder 1.1: By Bishop Software. View different fonts and copy them to the clipboard. Create text with different fonts, sizes and styles for pasting into documents. Convert between inches, points, picas and centimeters. For System 7.1 and later and AppleScript. **Shareware - \$10.**

Font-o-rama! 1.3.0: By The Henry Starr Co. Font-o-rama presents a

dialog box with a multi-column list area that's big enough to display all your fonts at once. You don't have to scroll through a long font menu looking for a font; you just click on it. **Shareware - \$10.**

Fonts Manager™ 3.6.2: By Ed Hopkins. Create and select or remove 'sets' of font suitcases for installation in your System in a manner similar to Extensions Manager. Requires System 7.5 and later. **Shareware - \$10.**

ProFont Distribution 2.1: By Andrew Welch, Carl Osterwald and Stephen C. Gilardi. A Control Panel and font that you can substitute for Monaco. The ProFont is much more readable than Monaco and has such features as slashed zeroes so the letter 'oh' is not mistaken for a zero.

SmoothType 1.1: By Gregory D. Landweber. Makes your screen look more like the printed page using a technique called anti-aliasing. SmoothType blurs the jagged edges of bitmap fonts with shades of gray, effectively doubling your screen resolution. **Shareware - \$5.**

DISK #16.18F SYSTEM UTILITIES

Catalogue 2.1.1: By Jacques Bersier. Allows you to track all the removable media that can be mounted on the Mac. Easy to use and you can scan into StuffIt and Compact Pro archives. **Shareware - \$10.**

Disk Mapper 1.0.1 68k: By Tom Luhrs. Graphically show the space that files occupy on your hard disk; then capture the list of files in a text document. Versions for 68K and PPC. Requires System 7.0 or greater and 256 colors or more. **Shareware - \$5.**

Disk Mapper 1.0.1 PPC: By Tom Luhrs. Graphically show the space that files occupy on your hard disk; then capture the list of files in a text document. Versions for 68K and PPC. Requires System 7.0 or greater and 256 colors or more. **Shareware - \$5.**

File RoundUp 1.0: By William Patterson. A powerful file and disk

utility that catalogs disks (including removables), provides GREP searches, batch processes files (delete, launch, copy, move, rename, synchronize, etc.), creates image thumbnails and other useful functions. For System 6.0.5 and later. **Shareware - \$30 for Lite version, \$79 for Pro version.**

DISK #16.19F SYSTEM UTILITIES

FileIndexer 1.4: By Peter Marks. Indexes the full text of collections of documents on your disks. By using Claris XTND the program can read any document you have translators for. Indexing takes some time, and can run in the background without much impact. Requires System 7.0 or later.

FileMerger 1.1: By Graham Herrick. A drag-and-drop utility for merging files. For System 7.0 and later. **Shareware - \$5.**

Library Cataloger 1.0.1: By Todd Barrett. A database that helps you keep track of your personal library and create bibliographies for papers, reports, and other documents which include references. **Shareware - \$15.**

List Files 2.5.4 FAT: By Alessandro Levi Montalcini. Creates text catalog of any disk, folder or document you drop on it. It has file filters, lots of formatting options, easy-to-use worksets, automatic catalog saving, text file searching for fast file retrieval. **Shareware - \$5.**

MacUpdate 3.2.5: By Richard Fiegle. A file synchronization and folder reconciliation program useful for doing incremental backups, as well as for keeping two or more directories on two or more volumes (disks) up-to-date with each other. Requires System 6.0.5 or later. **Shareware - \$5.**

MasterScan v 1.1.3: By Joseph Laffey. Calculate scanning resolution easily and quickly right on your Mac! Enter input and output sizes or percent enlargement. For film choose the output resolution. For halftones, choose the line screen or quality factor. After input entry, read out the resolution. **Shareware - \$20.**

**Synk 2.0.2 (FAT):** By Randall Voth.

A program to backup and synchronize files across selected folders. Synk can copy files to and from any media that will mount on the Finder's Desktop. Examples of such items are hard drives, floppy disks and removable media like Zip disks. Tape drives are not supported. Requires System 7.0 or later. Does not support the Mac Plus, Mac Classic or PowerBook 100. *Shareware - \$10.*

Disk #16.20F**SYSTEM UTILITIES****AppSizer 2.21:** By Michael Peirce.

Allows you to modify an application's MultiFinder partition size as you launch it. *Shareware - \$19.95.*

Cache Tool: By Adrian Umpleby. A

small application that lets you set the cache for Macs with 68040 CPUs and to then use the new settings without restarting. Not for System 6 or non 68040 CPUs.

CacheSaver 1.0.2: By Jon Gotow.

Periodically saves (or "flushes") the disk cache, thus minimizing data loss should your Macintosh crash while you are working. Set CacheSaver to flush the cache whenever your Mac is idle for more than a specific amount of time, or it can do it automatically at regular intervals. *Shareware - \$10.*

Clip2Startup 1.0b1: By Patrick

Bores. Install your own custom startup screens by designing your picture in any paint or draw program, copying it to the clipboard, and running Clip2Startup.

CopyPaste 3.1.1: By Peter

Hoerster. Copy to/ paste from up to ten selections at a time using the CopyPaste clipboard. *Shareware - \$20.*

Fat Free 1.2.2: By Hubert Figuière.

Intended for 680x0 Mac users, it removes the Data Fork (i.e. the part containing data and native PowerPC code) of a file with both 680x0 and PowerPC code thus saving lot of disk space.

FinderNote 1.2.1: By Jae Ho

Chang. A simple text editor whose

documents can be read within the Finder without opening any application. For System 7.1 and later.

Folder Icon Cleaner 2.0: By

Fabrizio Oddone. Lets you 'properly' get rid of those space and time wasting custom icons, stuck right there on your folders. 'Properly' means deleting the hidden icon file as well as deleting the icon resource. For System 7.0 and later. *Shareware - \$5.*

Hidden Finder Features 1.0.2:

By Richard Burgess. Enables hidden features of Finder 7.5.4, System 7.5.2 and later. Features include creating an alias and showing its original by dragging with a command key down and moving a selection to the trash.

IconFixer 1.0: By Dave

MacLachlan. Modifies the creation dates on your drives to make sure that they're all just slightly different so that custom icons may be set for each partition. *Shareware - \$10.*

Kaleidoscope 1.0: By Greg

Landweber and Fred Bass. A control panel that completely overhauls your Mac's user interface using plug in Color Scheme files. Change your Mac's desktop appearance to look like System 8 as displayed in Aaron. Drag windows from any side. Set Finder background windows to any color. More. *Shareware - \$20.*

KeyCommander 1.0 68K: By Gra-

ham Herrick. Adds command-key equivalents for frequently used menu items without modifying the applications themselves. It does it all in RAM without touching the applications. So you don't have to worry about your applications getting corrupted. Requires System 7.0 or greater. Separate versions for PPC and 68K Macs. *Shareware - \$10.*

KeyCommander 1.0 PPC: By Gra-

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ting corrupted. Requires System 7.0 or greater. Separate versions for PPC and 68K Macs. *Shareware - \$10.*

Disk #16.21F**SYSTEM UTILITIES****KeyQuencer 1.2.2:** By Alessandro

Levi Montalcini. A powerful and solid macro engine designed to use very little memory; it can perform complex tasks that are invoked by a single keystroke. KeyQuencer uses a very simple scripting approach and can be extended through external extensions, which are the basic building blocks that make up a full macro. *Shareware - \$10.*

MacAuditor 1.1.1: By Matthew

Xavier Mora. Allows you to scan volumes for Applications, Startup Documents (INIT), Control Panel Devices (CDEV) and Stacks. Its used primarily by auditors to make sure that the employee's machine have only registered software on there machines. *Shareware - \$15.*

OpenIt! Strip 1.1: By Ammon

Skidmore. Clicking on this item when installed on a Control Strip opens a dialog box for opening documents. You can even use without the Finder running.

Power Windows 1.2.1: By Gregory

D. Landweber. A tiny extension that lets you drag the entire contents of windows instead of a dotted outline. Power Windows preserves the contents of the screen as you drag instead of turning your window into a giant eraser. *Shareware - \$5.*

PowerPCheck 3.0.2 FAT: By

Alessandro Levi Montalcini. A drag & drop utility that looks for native PowerPC code inside executable files, folders or disks. It inspects both the data fork and the resource fork of each file and creates a detailed text report of all the native code it finds. It can also remove the PowerPC or 68K code from the inspected files. *Shareware - \$10.*

PowerScan 2.1: By Jonas Walldén.

Scans folders and disks for dupli-



cate files. Supports file filtering on name, size, type, creator and creation and modification dates. Requires System 7.0 or later. **Shareware - \$10.**

PrefKiller 1.0: By Tatsuro Kosaka. Searches for preference files for which there is no corresponding application and collects them for moving to the Trash. You can mark Prefs as 'Needed' so they will not be collected for trashing even if there is no corresponding application. Requires System 7.0 and later. **Shareware - \$7.**

Sleeper 2.0.4: By St. Clair Software. A control panel for desktop Macintoshes and Power Macintoshes that puts your system to sleep, thus saving energy, reducing noise levels in your work area, and decreasing wear to your monitor and hard disk. Sleeper can dim the screen, power down Energy Star compliant monitors, and spin down disk drives after periods of inactivity. Run on any Performa, Macintosh, Power Macintosh, or compatible computer running System 7.0 or higher. **Shareware - \$20.**

Startup Player 1.0.4: By Alessandro Levi Montalcini. An extension that plays a sound over and over until all other extensions have loaded and the Finder comes out. For System 6 and later.

Startup Frills v3.5: By Ian McCall. Provides a means of having a random events occur when you restart your Macintosh. These events can include changing the startup screen, playing a startup sound, showing a startup movie and/or reading a text file using the Speech Manager. Requires System 7.0 or later.

Disk #18.10A

INTERNET

Eumorpha 1.5.1: By . A simple utility which will import Eudora/sendmail mailbox files and NewsWatcher saved articles into Claris EMailer. You must have Claris EMailer 1.0v2 or later to use Eumorpha.

Internet Config 1.3: By Quinn and Peter Lewis. A (near) universal

configuration utility designed to make your life easier by reducing the number of times which you need to enter your Internet preferences (such as E-mail address) into the various preferences dialogs of all your Internet applications.

Jade 1.03: By Eric Shieh. A JPEG viewer that can view full sized JPEG images while maintaining reasonable memory and speed requirements. Requires a 68020 or higher CPU and 7.0 or later with the Thread Manager.

MacWx 2.1.8 FAT: By Chris Kidwell. Get weather data about selected cities from the Internet. Displays current conditions in digital or analog format. Displays text forecast, marine forecast and climate for selected cities.

MagicBullets 1.1: By Bill Karsh. Provides Internet-style quotes and DOS-Unix-Mac text conversion. Many other useful features such as line length control, stripping leading/ trailing blanks, etc. Requires System 6.0.5 or later. **Shareware - \$5.**

NetStickies 2.0: By Ron Duritsch. Creates a 'Drop Folder' so that 'Stickies' may be shared over a network. Requires System 7.5, Apple 'Stickies' enabled, Program Linking turned on and have Users and Groups privileges on the receiving computer.

NiftyTelnet1.1-US-EAT: By Chris Newman. A simple, fast telnet client for the Mac for use on the Internet. It is Open Transport native with improved keyboard support and allows you to drag text into the Telnet window.

PPP 1.4.1: By Rob Friefeld. Puts up a little window containing a button which you use to open or close a PPP link. An arrow on the button shows the current state of PPP: up or down. Requires System 7.0 or later and MacPPP 2.01 or newer. **Shareware - \$10.**

PPPremier Timer 1.2.1B: By Nathan Lamont. Allows you to quickly and easily open and close your PPP connection on your Macintosh, while keeping track of how much time you accrue online.

Requires a 68020 processor or better and PPP.

Disk #18.11A

INTERNET

Network Time 2.0.1: By Pete Resnick. Sets the clock on your Mac computer to the correct time of day by contacting a time server using the MacTCP network software to get the correct time of day. Requires a Mac Plus or later with System 6.0.5 or later and MacTCP v 1.1 or later. **Shareware - \$5.**

PageSpinner 1.1: By Jerry Aman. An HTML Editor for Macintosh. It supports both HTML 2.0, parts of HTML 3.0 and 3.2 plus additional Netscape extensions Useful for both the beginner and the more advanced web author. Gives you quick access to often used formatting and also supports AppleGuide and an HTML Assistant that helps you create your HTML pages. Requires MacOS version 7.0.1 or later; 68020 CPU or later. **Shareware - \$25.**

TableMaker 1.1: By Sam Choukri. Takes your comma or tab-delimited data and converts it into HTML tables. You have control over many formatting options including the border, width, height, cell padding, cell spacing, caption, column spanning, row spanning, header cells, and horizontal alignment. Your formatting options are stored in settings files and you can save and reuse them as you please. **Shareware - \$5.**

TableWorks 1.0: By SoftTools Enr. A WYSIWYG HTML editor specialized in the manipulation of tables for your web pages. You have control over many formatting options including the border, width, height, cell padding, cell spacing, caption, column spanning, row spanning, header cells, and horizontal alignment. Requires System 7.0 or later.

Tagline 1.0: By Ben Clark. A Tagline is typically a one line quote, saying, or humorous text that is appended to e-mail signatures and e-mail messages on most Bulletin Board Systems. Tagline will copy a random tagline



from the "Taglines" file (which was originally distributed with over 400 taglines in it; you can add more if you wish) and copy an e-mail signature from the "Signature" file and paste them to the clipboard.

DISK #22.32 FUN & GAMES

I I Ching 1.0 (PPC): By Sidney Hoover. Consult the I Ching. The translation is the authors and includes about three quarters of the text.

Mac Video Poker 1.0.5: By Glenn Seemann. Bet away; all you can lose are 'credits' which have no value.

MacChess 2.5 EN 1996: By Wim van Beusekom. A classic game of chess where you can play another player or the computer or have the computer play itself. Many features including setting levels of play and windows for Info, Time, PV and Moves. Requires System 7.0 and later and 68020 or later CPU.

MacPipes 2.2: By Federico Filipponi. A multi-level arcade game based on the Pipeline game for Amiga from the 80's. You have to assemble a pipeline and get the water flowing. Of course there are obstacles. Requires System 7.0.1 and later and Sound Manager 3.0 and later. *Shareware - \$5.*

Mahjong 1.0.3 INT: By Matti Larborn. A four player mahjong game. Mahjong is an ancient Chi-

nese game played with tiles. *Shareware - 50 SEK (Sweden) Yeah, Right!*

DISK #22.33 FUN & GAMES

Escape! 2.1: By John V. Holder. A simple but addictive strategy game. Similar to Daleks but with a lots more goodies. For System 6.0.5 or greater. *Shareware - \$10.*

Mortal Pongbat 1.3.3 68k: By David Hirschfield. Well, it's a Pong game but with lots of extras like beam weapons, mines, multiple, colored pucks, etc. Requires System 7.1 or later and 68020 or later Mac (68040 or later recommended). *Shareware - \$20.*

ProCreation 1.0.0: By Gideon Greenspan. This is the Artificial Life game; originally developed by James Conway. This one is blindingly fast and has infinite scrolling in all directions. There have been hundreds of implementations of Life on every conceivable platform. Requires System 7.0 and later. *Shareware - \$10.*

Simon Says 1.0: By Homeboy Software. The objective of Simon Says is to copy the notes that the computer makes. It's harder than it seems though, since you have to remember all of the notes from before too! Requires System 7.0 and later, QuickTime 2.0 and later. *Shareware - \$1.*

Snood 1.0: By David M. Dobson. A colorful arcade game. You use the

cannon to shoot delightful looking Snood critters. Watch out for the wall of death. Requires System 7.0 or later. *Shareware - \$10.*

DISK #22.34 FUN & GAMES

(The following segmented archive is provided on a two-disk set priced at \$8.)

ShatterBat 1.0: By Antennahead Industries. An arcade game with great graphics. Shoot the bats with a laser cannon while dodging Mr. Bob (anybody remember the Evil Empire's program launcher Bob?). You have to wait a while for the 'not yet' button to activate before starting. Another reason to pay your shareware fee. *Shareware - \$12.*

Space Debris 1.4 FAT: By Richard Bannister. An arcade game patterned after Crystal Quest. There are critters and mines to avoid and crystals and bombs to collect for bonus points or self defense. *Shareware - \$20.*

DISK #22.35 FUN & GAMES

(The following segmented archive is provided on a three-disk set priced at \$10.)

Sirtet Voyager 2.0: By John Dalglish. A sirtet like (read it backwards) game with lots of extras. Very colorful graphics and wild sounds. The piano (yes, I said piano) has special properties. Best of all, it is free. ■

Please write disk numbers on a separate sheet of paper and include them with your order.

Mail this form with your check to: Disk Library, Washington Apple Pi 12022 Parklawn Drive Rockville, MD 20852			Are you a member of Washington Apple Pi, Ltd.? Y/N ____ If yes, member number ____ <i>All payments must be in U.S. funds drawn against U.S. Banking institutions. Non-members add \$3.00 per disk to listed prices.</i>																																	
<table border="1"> <thead> <tr> <th># of disks</th> <th>Member Price</th> <th>Extended</th> </tr> </thead> <tbody> <tr> <td colspan="3">3.5" Singles</td> </tr> <tr> <td>___ 4 or less @</td> <td>\$4.00</td> <td>_____</td> </tr> <tr> <td>___ 5 or more @</td> <td>\$3.50</td> <td>_____</td> </tr> <tr> <td>___ sets (as marked)</td> <td>\$ (above)</td> <td>_____</td> </tr> <tr> <td colspan="3">5.25" Singles</td> </tr> <tr> <td>___ 4 or less @</td> <td>\$2.00</td> <td>_____</td> </tr> <tr> <td>___ 5 or more @</td> <td>\$1.75</td> <td>_____</td> </tr> <tr> <td>___ sets (as marked)</td> <td>\$ (above)</td> <td>_____</td> </tr> <tr> <td colspan="3">+postage \$1.00/disk maximum \$5.00</td> </tr> <tr> <td colspan="2">Total Amount Due:</td> <td>_____</td> </tr> </tbody> </table>	# of disks	Member Price	Extended	3.5" Singles			___ 4 or less @	\$4.00	_____	___ 5 or more @	\$3.50	_____	___ sets (as marked)	\$ (above)	_____	5.25" Singles			___ 4 or less @	\$2.00	_____	___ 5 or more @	\$1.75	_____	___ sets (as marked)	\$ (above)	_____	+postage \$1.00/disk maximum \$5.00			Total Amount Due:		_____	Name _____ Box Number, Apt., Suite _____ Street Address _____ City _____ State _____ Zip _____ Day tele. _____ Evening tele. _____		
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Macintosh Library Order Form

New disks in this issue!

- Open Transport 1.1.1 - 6 disks; \$15[†]
- LaserWriter 8.4.1 - 5 disks; \$15[†]
- CD ROM Setup 5.1.7; \$4
- System Utilities - 6 disks; \$4 ea.[†]
- Internet - 2 disks; \$4 ea.[†]
- Fun & Games 32-33 - 6 disks; \$4 ea.[†]
- Fun & Games 34 - 2 disks; \$8 ea.[†]
- Fun & Games 35 - 3 disks; \$10 ea.[†]
- 26.38A - Claris eMailer, 2 disks; \$8

Disketeria ValuPaks[†]

- PostScript Fonts 1, 14 disks; \$30
- PostScript Fonts 2, 5 disks; \$10
- TrueType Fonts 1, 9 disks; \$20
- TrueType Fonts 2, 4 disks; \$10
- Calc/Clock Utils, 5 disks; \$15
- Pers Management Utils, 5 disks; \$15
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Apple System Software

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- LaserWriter 8.4.1 - 5 disks; \$15[†]
- Apple Telecomm 2.3.3 - 2 disks; \$8[†]
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- TrueType Fonts & Software; \$8
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- DOS Compatability 1.0.5 - 2 disks; \$8[†]
- Open Transport 1.1.1 - 4 disks; \$15[†]

00.XX - Pi Library[†]

- .01 Mac Disketeria Catalog
- .02 New Member Sampler & Catalog

1.XX - Anti-Virus Utilities[†]

- .02M — .03M

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- 8 disk set; \$24
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- .05E — .06E — .07E — .08E

3.XX Education[†]

- .01A[†] — .02^{(3)†} — .03^{(2)†} — .04^{(3)†}
- .05^{(3)†}

4.XX Function Keys (F Keys)

- .01A — .02A

5.XX - ImageWriter Fonts[†]

- .01A — .02A — .03A — .04A

6.XX - PostScript Fonts[†]

- .01B — .02B — .03B — .04B
- .05B — .06B — .07B — .08B
- .09B — .10B — .11B — .12B
- .13B — .14B — .15B — .16B
- .17B — .18B — .19B

7.XX - TrueType Fonts[†]

- .01A — .02A — .03A — .04A
- .05A — .06A — .07A — .08A
- .09A — .10A — .11A — .12A
- .13A

8.XX - Graphics[†]

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- .05A — .06A — .07A — .08A
- .09A — .10B — .11B — .12A
- .13[†]

9.XX - INITs & cdevs[†]

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- .05C — .06C — .07C — .08C
- .09C — .10C — .11C — .12C
- .13C — .14C — .15C — .16C

11.XX - Paintings (MacPaint)

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- .01 — .02 — .03 — .04
- .05

12.XX - Digitized Sounds[†]

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- .05B — .06B — .07B — .08B
- .09B

13.XX - Telecommunications[†]

- .01D — .02D — .03D — .04D
- .05D — .06D — .07D — .08D

14.XX - Programmer/Hacker

- .01C — .02B

15.XX - Miscellaneous Utils[†]

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- .05C — .06C — .07C — .08C
- .09C — .10C — .11C — .12C
- .13C — .14C — .15C

16.XX - System Utilities[†]

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- .05F — .06F — .07F — .08F
- .09F — .10F — .11F — .12F
- .13F — .14F — .15F — .15F
- .17F — .18F — .18F — .20F
- .21F

17.XX - Word Processing Utils[†]

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- .05C — .06C — .07C

18.XX - Internet Series[†]

- .01A[†] — .02A[†] — .03A[†] — .04A[†]
- .05A[†] — .06A[†] — .07A[†] — .08A[†]
- .09A[†] — .10A[†] — .11A[†]

19.XX - QuickTime Series[†]

- .01[†] — .02[†] — .03[†] — .04[†]

20.XX - Mac Troubleshooting

- .01B — .02B

21.XX - LAN Tools[†]

- .01 — .02 — .03

22.XX - Fun & Games Series[†]

- .01 — .02 — .03 — .04
- .05 — .06 — .07 — .08
- .09 — .10 — .11[†] — .12[†]
- .13[†] — .14[†] — .15[†] — .16[†]
- .17[†] — .18[†] — .19[†] — .20[†]
- .21[†] — .22[†] — .23[†] — .24[†]
- .25[†] — .26[†] — .27[†] — .28[†]
- .29[†] — .30[†] — .31[†] — .32[†]
- .33[†] — .34^{†(2)} — .35^{†(3)}

23.XX - PowerBook/Duo Series[†]

- .01C — .02C — .03C — .04C

26.XX - Update Series

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- .03A - Photoshop Plug Ins, 1 disk; \$4
- .04A - Desktop Publishing, 1 disk; \$4
- .05A - QuarkXPress, 1 disk; \$4
- .07B - HP DeskWriter 6.0, 1 disk; \$4
- .08/09C - Denaba Canvas, 2 disks; \$8[†]
- .10A - Word Processor 1, 1 disk; \$4
- .11C - Word Processor 2, 1 disk; \$4
- .12C - Database, 1 disk; \$4
- .13C - ClarisWorks 4.0v4, 2 disks; \$8
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- .35A - Quicken 4 & 5, 1 disk; \$4
- .36A - QuarkXpress 3.31r3->3.31r5, 1 disk; \$4
- .37A - ATM ->3.8.2, RamDblr ->1.5.2 & PM 5 WP Filters, 1 disk; \$4
- .38A - Claris eMailer, 2 disks; \$8

[†] all files compressed

[‡] on 1.44 Meg diskette(s)

^(#) number of disks in set

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It's best to reach me via email, but I can also be reached at my home/office at: (202) 686-5465. If there is a charitable organization in your neighborhood that you support, I'd appreciate if you could pass along this message to them.

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Please answer a few questions for us regarding your computer use. Check the computers/equipment that you use on a regular basis.

- | | |
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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

☐ I'd like to volunteer. Call me.

AppleWorks SIG _____	HOTLINE _____
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Excel SIG _____	Stock SIG _____
Game SIG _____	Telecommunications
	SIG (TCS) _____
	Women's SIG _____

☐ I can serve as a

Hotline contact for _____

Enclose check or money order payable to Washington Apple Pi, Ltd.

- | | |
|---------------------------------------------------|------|
| <input type="checkbox"/> Basic Membership—1 year | \$49 |
| <input type="checkbox"/> Student rate* for 1 year | \$42 |

For other options please add correct amounts

- ☐ WAP Bulletin Board System (TCS)** with e-mail \$20
- ☐ WAP Bulletin Board System (TCS)** with Internet \$171
- ☐ 1st class mail (U.S.) \$17
- ☐ Airmail to Canada, Mexico, West Indies or Central America \$20
- ☐ Airmail to Europe & South America \$38
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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
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- ☐ 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.)

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