January / February 1998

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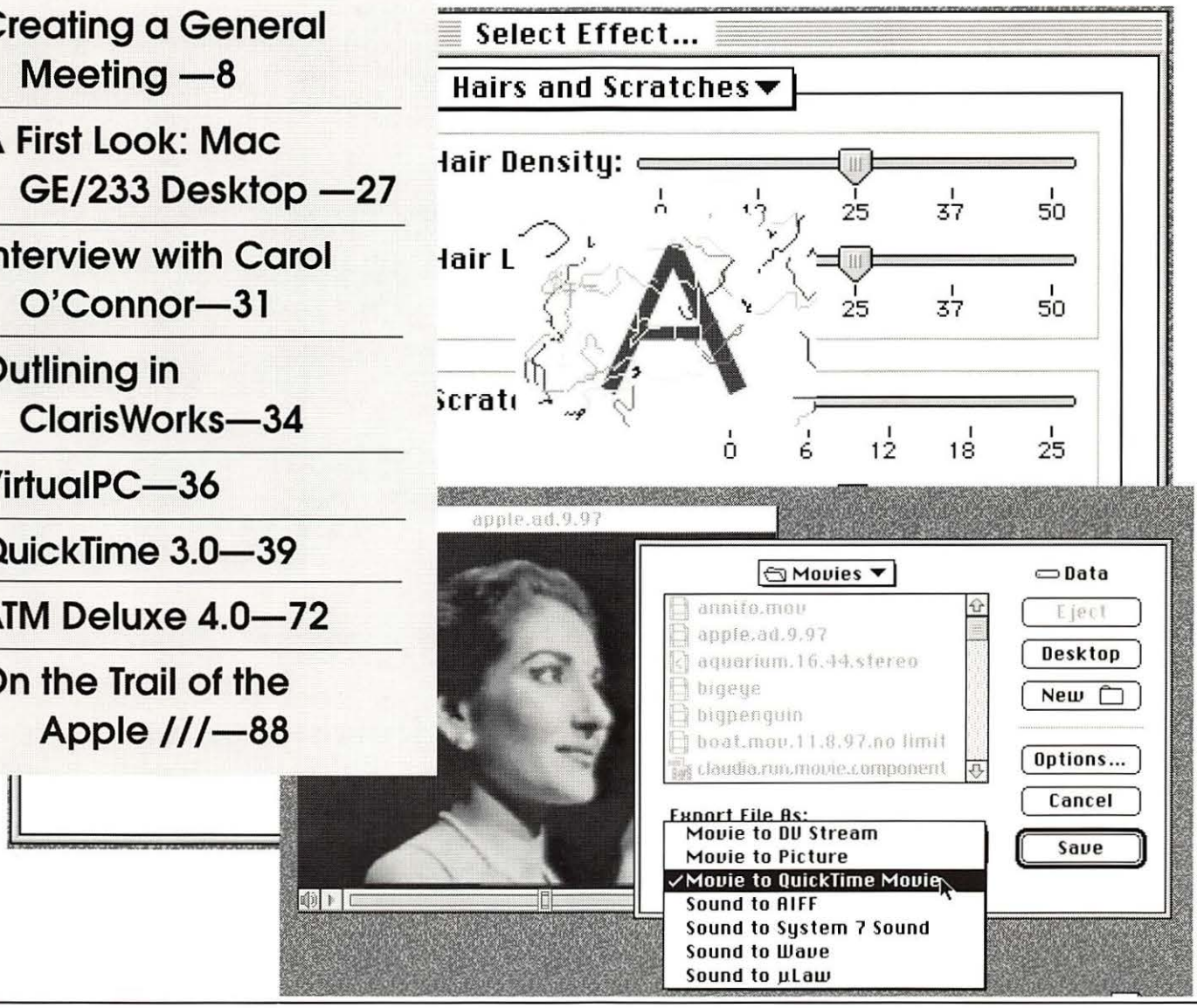
The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 20, Number 1



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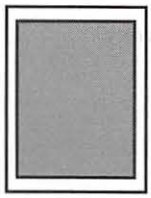

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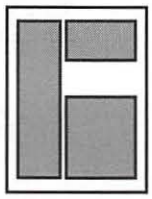

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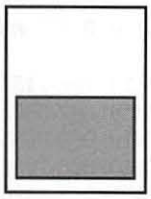

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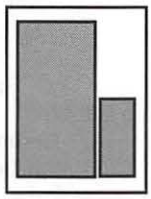

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May/June ..... March 18

Editors' submissions
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May/June ..... March 22

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Washington Apple Pi

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

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Icon Guide

Macintosh

Apple Disk Libraries

Apple II, IIe, & IIGS

Macintosh Disketeria

Apple III (SARA)

General Interest

Postal Information

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President's Column

Who's On First?

To "Relevel" A Playing Field

APPLE has a very basic problem that I don't see anyone addressing. It can't be that I am the only one to sense it. This problem can be as deadly to businesses run for the bottom line as to politicians running for office. It may be that I am more aware of Apple's quandary because I live and work in a political setting and view issues and their solutions in those terms.

What's In A Word

The problem is called definition. Who is defining you and the value of the services you offer? If not you, then who? And if you are at all aware that it is being done in a way that is injurious to your well-being, why do you allow it to continue (never mind how or when did it start). Are you willing to address it head-on? What I see, and don't understand why others don't see as well, is that Apple Computer allows others to define it — and the definers are not Apple's friends!

Apple has **allowed** a sagging public image to become ingrained. By its inaction, it has enabled Wintel producers, their suppliers, pundits, 'analysts,' management information 'specialists' (MIS), and Education, Inc. [the people on the business side of educating your kids] to define it into irrelevance. Time after time Apple has put forward nothing or a wimpy press release to counter erroneous or really sloppy reporting about it. The media is ambivalent about the health of the company, but not its products. Typically you read: "Apple's latest personal computers are among the fastest in the world and a great value, which would be phenomenal if the beleaguered computer company wasn't hours away from folding." Macintosh products have essentially no marketing presence on television, and its Evangelists can be found in church singing to the choir. Bright? No. Deadly? Definitely. Late? You know it. Any hope? You bet! Let's start with a PolSci 101 textbook.

Dick Morris 101

Every two years, 870 people aspire to become full members of the House of Representatives. Half of them don't make it. I will grant you that the half of those who did not would not have been any better or worse than those who did. In many of those races, the winner was the candidate who was able to define the issues on their terms — and gained public acceptance of their positions. Once that was done, the other candidate had to explain why his or her position was not an acceptable alternative. The former gained the initiative and, if astute, did not surrender that position. The American political landscape is littered with perfectly good 'could have been' candidates.

Once the Democrats got you to believe that a reduction in the rate of growth (in a particular entitlement program) meant a cut in your favorite program, and could keep

that definition in front of you, Republicans could say what they wanted, but their 'growth' was seen as a cut. When the Republicans defined the measure of goodness for something and held it in your mind as the correct measure, the Democrat alternative came up wanting.

Wintel Knows Best

In the computer business, the Wintel folks have positioned their product as the legitimate measure against which others must be compared. And the measures they selected are their strong suits — processor speed; the number of programs available that run on their platform; amount of RAM installed in their machines, size of hard drive; and all that other drivel you know only too well. The measures they do not mention are simple application installations, cross-application compatibility, hardware integration, ease of networking, or *any* of the positive features found in a Mac — nor should they. Our comparables don't measure up because goodness is defined by the Wintel folks, who have also convinced others that our strong suits are irrelevant. We have been marginalized and seem unable to get this story turned around so that the features of the Macintosh are the measure against which **they** are compared — to get the story told our way.

The arguments made by Education, Inc. to justify the purchase of Wintels is equally specious: cheaper to purchase; spare parts are inexpensive; and, it's what is used in business. Are those the measures by which to acquire classroom machines? I don't think so. Try comparing how quickly they become obsolete; try fewer applications; try networking them; try adding in the cost of the extras to make them function in a lab; try costing the added time it takes kids to learn Wintel gibberish; or the salaries of the techs you need to nurse them. Yet Apple has **allowed**—yes, allowed—the Wintellers to define the terms of the debate, and Apple is losing it! And, just in case you are thinking of writing off the school market, consider this: sell one for a classroom, and chances are you sell one to the parents of a student in that room and one to the teacher! Now what was your question?

Take the markets in which Apple claims to be the dominant player and you find the Wintellers making major inroads — not because they are the better computer, but because they are defining the values by which a purchaser decides what to buy. Consumers accept those values and, by golly, Wintel machines just happen to have those features available at a good price. Apple has clear advantages over Wintel platforms by most measures; yet it continues to abrogate its position over and over again.

> "Somewhere there must be someone who can craft those questions in a way that will elicit responses, that will reveal some patterns, that will yield clues as to what has gone wrong. But more importantly, somewhere within Apple must be someone brave enough to commission the work, read the results with an open mind, and not shoot the messenger."

What was your reaction to the full-page advertisement in MacUser/World from a Wintel notebook maker, telling you that "all the programs work the same under Windows" and for the $2500 you'll save over a similar PowerBook computer, you can live with Windows? Have you seen the advertisements from Wintel platform makers in the magazines read by 'Education, Inc.'? Are you surprised that there have been none from Apple? In both cases Wintellers are moving to define the values you or a school should use when deciding which computer to purchase.

Obscure Reference

Apple clearly leaves one with the impression that its decision makers live within the "Garden of the Finzi Continis". They are sort of like some doting grandparents who haven't been outside the family homestead in eons and have not a clue as where the world has moved since they last ventured out all those years ago. But they sure remember the good old days. The company carries on as if it were still the only graphical interface in town, that serious practitioners only do it on their machines, and when the work is done on a Mac, it looks better than if it had been produced on the other platform.

Why is Apple allowing them to define it into irrelevance? Why is it that I cannot find someone from Apple who understands what is happening and cares enough to do something about being marginalized? Of course, it could be an inside the beltway thing; but, I doubt it. There is something Apple can do and it certainly is not more of what they are not doing now! Let's try this instead.

Dick Morris 202

I am not going to tell you what kinds of computers Apple should make nor what features to put in them. I don't believe that is the

problem. Apple can engineer and manufacture machines better than most. What Apple needs is as clear an understanding as possible as to why it has fallen out with consumers. Somebody has got to convince someone on Infinity Loop that its market malaise is neither the result of a shortage of megahertz in some processor nor too few Xs in the speed of a CD player. The problem is so basic as to be scary. I question whether Apple is in touch with consumers in general, much less the consumers in its self-defined niche markets: multimedia and education. This is bad news for Apple, and is not the result of some typographical error!

People who are good at asking you questions and interpreting the results, tell me that to some extent it can be done, but that the answers are only as good as the questions posed. Somewhere there must be someone who can craft those questions in a way that will elicit responses, that will reveal some patterns, that will yield clues as to what has gone wrong. But more importantly, somewhere within Apple must be someone brave enough to commission the work, read the results with an open mind, and not shoot the messenger.

Apple needs to give someone the authority to learn the whys of consumer disenchantment with it and its products, chart a course which gets the company out of this morass, puts it into place as part of a long term corporate strategy — longer than the next quarter's bottom line — and orchestrates the many assets of Apple to affect those changes.

Only with a real understanding that comes from this kind of inquiry is it possible to begin to build a positive definition of Apple and its products and regain so much of what has been lost to date.

— Lorin

Washington Apple Pi

Board of Directors Notes
Meeting—October 8, 1997

Directors present: David Harris, Dave Weikert, Tom Witte, Ellen M. Baniszewski, Dave Ottalini, Don Essick, Lorin Evans, Blake Lange, Lou Dunham, Dale Smith, Charles Froehlich, J. David Mudd
Members present: Henry Ware
Directors absent: Lawrence Charters, Ron Evry, Jon Thomason

The meeting was called to order at 7:36. Minutes of the previous meeting were approved, as amended.

Old Business

The Board invited Jim Ritz, chairperson of the Tutorial Committee, to a meeting to discuss a new charter for the group.

New Business

UMAX, the sole surviving Macintosh compatible maker has contacted the Pi. It is interested in presenting at a monthly meeting and/or attending the December computer show and sale.

Interest was expressed in exploring the feasibility of sponsoring a trip to the 1998 MacWorld trade show now that it has moved to New York City. David Mudd will look into charter options and possible joint overnight arrangements with other organizations.

David Harris moved, with a second from Lou Dunham, that the meeting be adjourned. The motion passed at 9:27p.m. ■

Washington Apple Pi

Board of Directors Notes
Meeting—November 12, 1997

[Preliminary; the Board had not approved the minutes as of this writing.]

Directors Present: Lawrence Charters, Blake Lange, David Harris, Dave Weikert, Lou Dunham, Dave Ottalini, Tom Witte, Ellen Baniszewski, Charles Froehlich, Don Essick, Dale Smith, Lorin Evans
Directors Absent: David Mudd, Jon Thomason, Ron Evry
Members Present: Nancy Seferian, Grace Gallager, Henry Ware

The meeting lurched to the usual fitful start at 7:40 p.m. The minutes of the previous meeting were accepted by acclamation.

Old Business

The December Garage Sale is still in need of a Garage Sale Manager.

ence organizer has contacted the Pi to make sure we are aware of this momentous change. They've also made it known that they'd be pleased to have chartered buses, or organized train groups, or any large masses of DC-area Expo attendees. They further indicated a keen interest in speakers for their conference sessions.

The Apple Road Show in Annapolis received all kinds of help from Washington Apple Pi. Members of the Annapolis Slice stopped in to help out, and quite a few not from the area also pitched in. The crowd was definitely more middle-class than the Road Show visitors earlier in the year at Tyson's Galleria. The Pi distributed several boxes of magazines and membership brochures.

New Business

The headlines in magazines, newspapers and especially rumormongering Web servers are true: BMUG is in trouble. This isn't actually new, since they were in far worse trouble a couple years ago. What may have changed: the core group that helped reduce their massive debt in the past has moved on. Sadly, Washington Apple Pi was the only user group, at a local or national level, that contacted BMUG asking if we could help.

An overview of the Pi's financial report, comparing June to October 1996, June to October 1997, and October 1997 statements reveals a consistent misspelling of the word "miscellaneous." Most of the rest of the discussion degenerated into a review of accounting principles, with an eventual conclusion that we are on track for the current fiscal year.

Tom Witte moved, with a second by Lou Dunham, that the meeting be adjourned. The motion passed at 8:31 p.m. ■

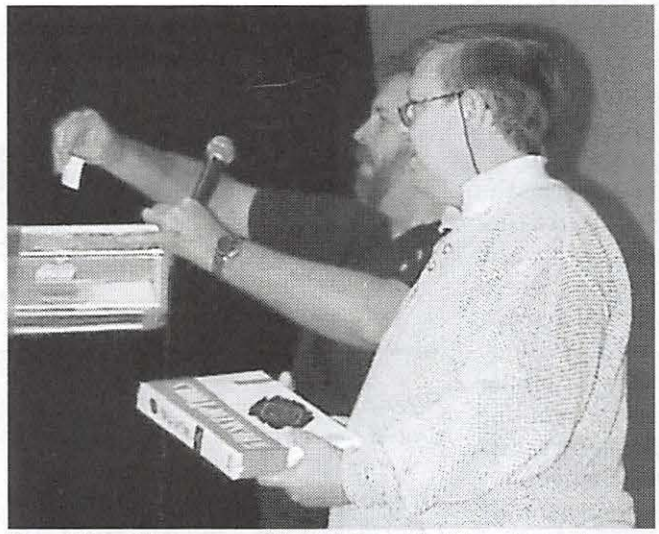
Puppet Strings: Creating a General Meeting

by Lawrence I. Charters

EACH month (except June and December) Washington Apple Pi puts on a General Meeting. In many ways, a General Meeting is much like a rock concert, except it is usually quieter, people are generally older (and sober), and it takes place early in the morning rather than late in the evening. Aside from this, however, they're almost identical.

The "roadies" arrive first, bringing in equipment, magazines, brochures, boxes of diskettes, and whatever else is required. Finding and opening the meeting space is a high priority: over the years, Washington Apple Pi has held general meetings in people's homes, schools, federal buildings, hotels, and colleges. In just the past few years, the advance party has arrived to find the meeting site locked, or without chairs, or in various stages of unreadiness. Once, I was stopped by a very suspicious

> "In the beginning, Pi presentations were quite simple: someone would bring in their Apple II and, with everyone else crowding around, then wow the crowd with an AppleSoft BASIC program that draws multi-colored sine waves."



Tom Witte (foreground) and Don Essick select winners at the end of a General Meeting. Most drawing prizes are donated by visiting vendors, but "prize loot" is also donated by other vendors eager to get a bit of publicity. Both Tom and Don are far-sighted, and there is always an air of mystery and suspense as they struggle to read the handwriting of the winners.

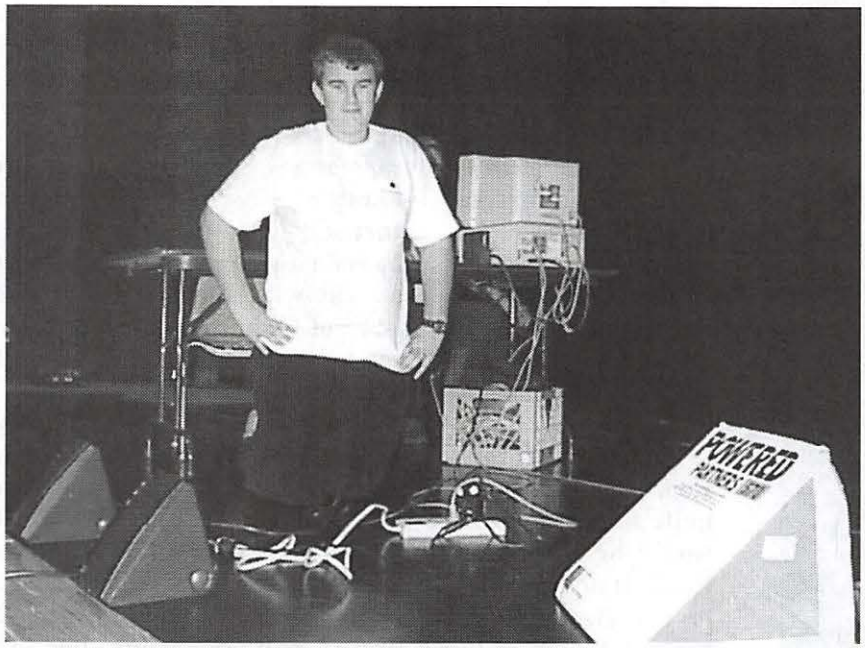
Don Essick, the Pi's Vice President for Macintosh programs, sets up a Proxima active-matrix LCD panel. The LCD panel, combined with a bright overhead projector, blasts out a large-screen version of whatever is being demonstrated at the General Meeting. During the course of a year, it isn't unusual to work with half a dozen different projection systems. Setting these up with an audience of early risers watching your every move is a challenge. Even for gadget lovers.

security guard, determined to find out how I had entered a locked auditorium. I finally managed to suggest that maybe it wasn't locked (it was), that I hadn't been sneaking in (I had), and that a thief would not be taking valuable computer equipment *into* a locked room (fortunately, he didn't think to ask how valuable a Macintosh IIci might be).

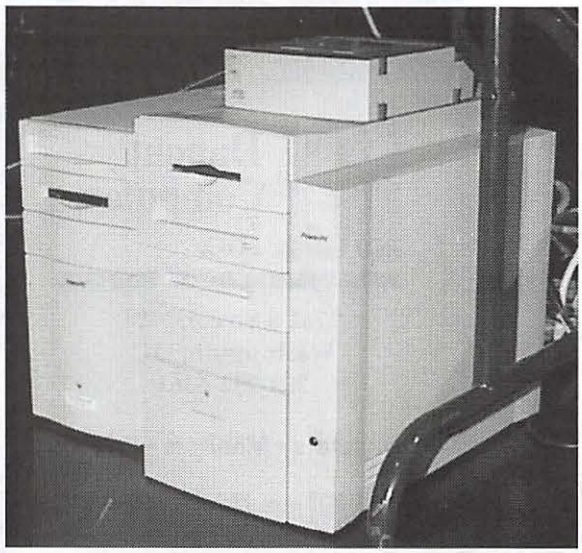
Once the meeting site is secured, the "roadies" divide into two sections: one group assembles the famed "Pi table," usually several conference tables stacked with brochures, magazines, diskettes, mugs, sample CD-ROMs, sample magazines, various advertisements, and a cash register for handling membership sales and other transactions. A separate group sets up the equipment for the presentations.

In the beginning, Pi presentations were quite simple: someone would bring in their Apple II and, with everyone else crowding around, then wow the crowd with an AppleSoft BASIC program that draws multi-colored sine waves. But that was twenty years ago; today, a Pi presentation has (1) a projection system, ideally bright enough to fill a bus-sized screen with a crisp image of (2) whatever was appearing on the presentation machine, usually the Pi's Power Macintosh 7100 or a visiting PowerBook or Power Macintosh brought in by the vendor, with (3) stereo sound blasted out to the audience via a pair of amplified speakers. As the Pi doesn't own a projection system, it is always fun trying to figure out how the projector of the day works, or how it doesn't work. Extra entertainment is supplied if additional hard drives, cameras, joysticks, or other peripherals are required. In one memorable case, a huge vacant hotel room without tables, chairs or a projector was transformed into a multi-media presentation site, right in time for the start of the meeting — missing only the vendor's representative, trapped in a cab with a driver who'd never heard of Bethesda, Maryland. This was a problem: Bethesda was the meeting site that month.

The General Meeting almost always starts off with a Question and Answer session at 9 a.m., and many people come early just to participate in the Q&A session. But just as many, it seems, come even earlier so they can watch people frantically plug in cables, string electrical cords, and ask deep questions of the equipment. "Why won't you fit?" is the most popular question, asked of



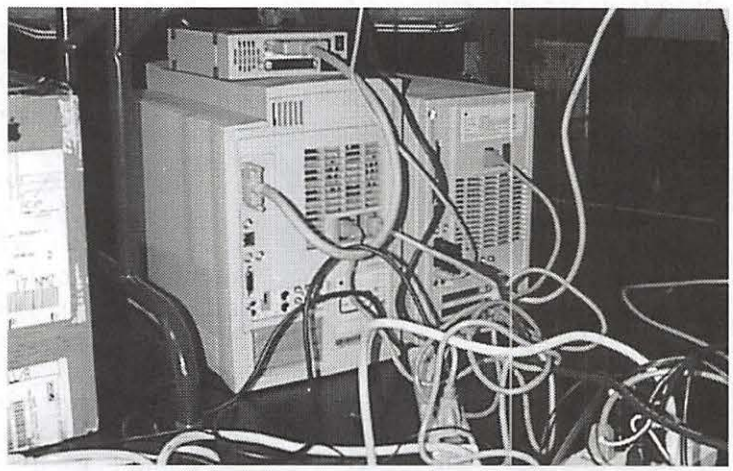
David Essick checks out electrical cables and the Pi's amplified speakers (the black wedges on the left). In all honesty, David was really stopping to ask, "Is that a digital camera?" just moments before the flash went off, after which he screamed, "My eyes! My eyes!"



Apple Computer brought two machines to the November General Meeting, a Power Macintosh 8500 for demonstrating Rhapsody (shorter tower on the left) and a new Power Macintosh G3 minitower for demonstrating high-speed computing (the taller tower on the right). Sitting atop the G3 is an APS external hard disk drive. From the front, it all appears sane and orderly.

a keyboard cable that refuses to plug into a serial port, or of a three-prong power cable that objects to a two-prong extension cord, or of two seemingly identical RCA jacks on the ends of two video cables, only one of which works with an NTSC video converter. (Early Apple II folks understood NTSC video and RCA jacks, as the early Apple II computers worked with television sets. But to Mac users, NTSC, RCA and similar terms are Deep and Imponderable Mysteries.)

The accompanying pictures may give some idea of what goes into this monthly madness. Taken with a Kodak DC50 digital camera, they may print too dark to see much, if any, detail (a problem when taking pictures in a large, darkened auditorium). If they are, in fact, unrecognizable, then you'll just have to take our word for it that these are from the October and November 1997 General Meetings, and not satellite photos of the Loch Ness monster. ■



From the back, the two machines are a maze of cables and cords. Things get really entertaining if a cable or cord is missing; there have been meetings where only a cable, cord, keyboard, terminator or some other gizmo borrowed from someone in the audience saved the day. You would be astonished at what people will carry to a 9 a.m. meeting.

October General Meeting Report

by Don Essick
Vice President, Macintosh

THIS MONTH we were pleased to welcome two Macintosh utilities vendors who ventured out from the left coast to visit us. David Loomstein, product manager for Symantec Corporation and Peter Thomas, product manager from Aladdin Systems came to show us their wares.

The cold and rainy weather seemed to keep many people home. A little over 140 of the faithful turned out this month. Following a lively and early-starting questions and answers session, ably hosted as always by Lawrence Charters, we launched directly into the demos. Aladdin won the toss and presented first.

Wasting no time, Peter Thomas launched into a demo of the newest incarnation of Aladdin Systems most well-known product, StuffIt, now at version 4.5. StuffIt is the utility that "stuffs" and "unstuffs" files, making them smaller for transmission over modems or small enough to fit on floppy disks. I shudder to think how large our TCS downloads area would be without this technology. StuffIt 4.5 boasts an improved engine, Magic Menu and contextual menus which let you access Stuffit's features from the menu bar or, if you are using MacOS 8, use the contextual menu feature by command-clicking. You can also now open an archive by just double-clicking. This opens the "StuffIt Browser" from which you can drag and drop items.

Next came a demo of one of Aladdin's newest products, Spring Cleaning 2.0. This is a program which provides some functions which sound useful, but like any tool, can be dangerous if misused. As a user of Spring Cleaning 1.0, I was pleased to see that many of the things that I disliked about version

"The cold and rainy weather seemed to keep many people home. A little over 140 of the faithful turned out this month. Following a lively and early-starting questions and answers session, ably hosted as always by Lawrence Charters..."

1.0 and 1.1 are fixed or changed in 2.0. The best news is that 2.0 is a free upgrade which can be downloaded from the Aladdin website, http://www.aladdinsys.com/. Look in the downloads area. You can also order an upgrade for a small processing fee.

Version 2.0 of Spring Cleaning sports a revamped user interface and the capability to move files to a "storage area." This allows you to "set aside" things from your system folder into a folder called "on the way to the trash" and wait a few days before deleting the items, just in case they turned out to be something important to one of your favorite applications. There is also an application Un-installer that removes an application and any related items placed in your System folder, an Alias Resolver that attempts to repair aliases that have become broken because you moved the original to another place or installed an upgrade and put it in a different place.

Two handy features I use often are the Empty Folder Remover and Help Remover. It's amazing how big some of those help files are! I freed up about 2 megabytes of space by deleting help files from applications I know well and never reference the help on. Empty folders take up relatively little space, but it can add up. There is also a Font Remover which searches for all of your fonts, arranges them by family in alphabetical order and allows you to remove the ones that you don't use.

A new feature in 2.0 is a Duplicates Finder that searches for files that have the same name and size or are byte-for-byte copies of one another. This is great for getting rid of the 36 ReadMe files and copies of Simple Text that inhabit your disk.

Finally, there is a Prefs Cleaner. This makes it easier to go through your preferences folder and delete preferences files created by that 30-day trial software you decided not to buy or for those shareware games your kids loaded up and played once and threw away. The application is gone, but the preferences linger on in your System folder until you trash them, either manually or with the help of Spring Cleaning. Spring Cleaning makes it easier by matching preferences to applications and then asking what you want to do with the "orphans."

Have you ever hit the save key

on your machine and realized that what you really meant to do was a "Save As" instead. I know I'm a lazy guy and often use an old document as a basis for a new one. I just load up the old document and do an immediate "save as" to create a new one. What if you were working on a project at work and made major revisions to a document cutting out a large section. A week later your boss says, you know, we need to add that stuff back into the project. You can either type it all back in or go back 3 versions using FlashBack. FlashBack is an ingenious utility that saves just the changes to a document from one version to another. You can save up to 99 revisions to a document and you can also provide a "time window" which prevents you from saving more than one revision every 15 minutes for example. To enable FlashBack, you simply select a document in the finder and drag and drop it into the FlashBack window. That's all. Now every time you save that document with that application the changes will be saved to as a revision file. You can go back to any of these revisions by double clicking them in the FlashBack window.

Peter's last demo was of Private File, an application which lets you encrypt a file using a 128 bit encryption algorithm and decrypt files sent to you by others. Each license, naturally, is for 2 copies of the program. The encryption key can be as long as 255 bytes, but you need to remember it, since it can't be recovered by anyone. Those scary guys up at NSA might be able to decrypt your file with their supercomputers in a month or so, but for all practical purposes, if you forget the key, your file is gone forever. The file is cross-platform with the dark side (DOS/Windows) and automatically uses StuffIt compression as well as encryption to save the file for transmission as an e-mail attachment or to put on a floppy to send to a colleague.

Those of you who attended the meeting were able to get very attractive discounts on many Aladdin products, including a bundle of StuffIt, Spring Cleaning and FlashBack, retailing for $349, Pi User Group price $99.95! Now, aren't you sorry you missed the meeting!

After a brief technology switch, David Loomstein of Symantec (http://www.symantec.com/) took the floor to update us on his company's products. Of course he started out with Norton Utilities for Macintosh, another exceedingly popular utility which has saved me numerous times. Norton Utilities for Macintosh is now at version 3.5.1. If you are a MacOS 8 user, you should be sure to get the update, as there are some annoying glitches in 3.5. None are serious enough to destroy data, but there is a bogus warning in Disk Doctor which can cause some confusion.

The Norton Utilities consist of a number of Goodies including Disk Repair, File Recovery, Unerase, Volume Recover, Crash Guard, Speed Disk and Disk Editor, plus I think I forgot one or two. Crash Guard is one of the newest features of NUM. Crash Guard attempts to intercept those annoying application crashes and attempt to enable you to save your work and do a graceful shutdown instead of having to hit the power switch and pray. It doesn't always work, there are some errors that have scrambled your computer's memory like a Denny's omelet, but it's worth a try to save some brain sweat when Word goes south yet again.

Of course the one thing which can cause a Mac user's blood to run cold is the dreaded "Question Mark Mac." You turn or your Mac and instead of Welcome to Macintosh you get a little Mac icon with a question mark on the screen. This usually means that your Mac can't find a suitable boot disk. Not a pleasant prospect. Fortunately, the NUM CD is bootable and you can also use the CD to make a bootable "Emergency Disk" just in case. If you are running Speed Disk or Disk Repair, it's a good idea to start up from the CD, since there are some things which can't be fixed on the startup disk.

Just as you should regularly run Disk First Aid, it's a good idea to run Disk Doctor on a regular ba-

sis too. Disk First Aid is good for detecting problems with the disks HFS file system, but it doesn't go nearly as far as Disk Doctor in diagnosing and repairing problems.

Speed Disk is the Norton Utility which "Defragments" your disk. As you use your Mac, you are constantly using up free space. When you open a file on your disk or use Netscape to surf the internet, you are causing your disk to become fragmented. Ever see that little "cache cleanup—removing 99 files" message at the bottom of the Netscape screen? You just left 99 holes in your file system. Some of them might get reused, but if the new files don't exactly fit the available space, they will be scattered over your disk like rice after a wedding. The new version of Speed Disk has optional Optimization Profiles for Multimedia, CD-ROM Mastering, Software Development and Recently Used as well as the old default, by File Type. If the demo we saw was any indication, the process is much faster than it used to be, with the demonstration badly fragmented 10 MB partition being defragmented in about 45 seconds.

There are extensive Apple Guide instructions with the product and disk images and instructions for creating bootable emergency disks as well as the bootable CD made this a very nice package available to those who picked up a WAP User Group discount form for $50 off the SRP of $99.95.

Due to time limitations and questions & answers regarding what will happen with HFS+ if it arrives on schedule with MacOS8.1 precluded another demo. Perhaps Symantec will stop by again when they are in the neighborhood to demonstrate ACT, SAM (soon to be renamed Norton AntiVirus for Macintosh?), Suitcase or Visual Cafe (a Java development tool).

We had lots of Aladdin software to give away. Symantec's shipment didn't make it, so we will have it in the future. Those of you who won door prizes know who you are. Remember, you must be present to win!!!

Special thanks to David Loomstein of Symantec and Peter Thomas of Aladdin Systems for coming all the way from the left coast to visit with us. It isn't cheap for these vendors to send someone all the way across the country, provide a hotel room, rental car and expenses to talk

> "Of course the one thing which can cause a Mac user's blood to run cold is the dreaded 'Question Mark Mac.' You turn or your Mac and..."

to us. We really appreciate the fact that they are willing to spend some of their marketing money on us. Thanks as always to Lawrence Charters for fielding the Q&A so ably, Bill, Beth, Lorin, David and the other volunteers that help with the logistics of getting everything in place and making the meeting happen.

Next month, Apple Computer has tentatively promised to reappear to show us MacOS 8.1 and possibly some of the new G3 hardware. December 13 is the Garage Sale. Mark your calendars now!! No confirmed presenters in the new year so far. Microsoft has committed to coming to demo Office 98 for Macintosh as soon as it is ready. They're talking April or May. If there is anything you would like to see, send me an e-mail at don.essick@tcs.wap.org. I'll see what I can do. ■

StockSIG for October

by Morris Pelham

HELLO AGAIN!

I stopped writing these after our March meeting. Had to. Our house broke. After it broke my wife and I first consulted several experts on repairs, then decided to have the whole thing replaced. We moved out of the old house April 1, had it torn down, had the new, factory-built house lifted into place by a crane in May, and moved back in on August 1.

StockSIG has been meeting every month, as usual, and people have been bringing things to talk about, as usual, but not me. I have been showing up primarily to open the door. I offered the opportunity to write these columns to several people, who all declined.

With our October meeting, things are getting back to normal. Our stocks are up in value, and that always helps.

As of October 6 our 1997 Dow stocks are up 25.64% as a group. They are AT&T, International Paper, Goodyear, General Motors, Chevron, and MMM. It continues to be a good idea to buy these stocks in the October-November-December time period and not wait for the first trading day of the new year, as the book recommends. Also, it continues to be a good idea to keep back some cash to add to positions during the year at lower prices. We talked about all of this, and plan to talk about our 1998 portfolio at the next meeting.

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

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

StockSIG for November

by Morris Pelham

IT WAS A dark and stormy night...

It really was. Cold, cold rain and very dark and the road full of tail-lights and brake-lights and moving things and stopped things and all that. But several brave souls showed up and so we talked about our 1998 portfolios.

Dave Weikert brought us a page from the Quicken website showing the Motley Fool choices among the Dow stocks. Turns out you don't need the Quicken software on your computer to use the Quicken website or to keep your stock market choices there. Dave put in one portfolio near the end of June and another early in July and the page he brought us was updated to November 12, 1997. We talked about the possibility of firing up a computer at a future meeting and Dave showing us how he does his work.

Mark Pankin brought us an article on the new futures and futures options on the Dow Jones Industrial Average that are now traded by the Board of Trade of the City of Chicago, called the CBOT.

Mark also brought us his current estimate of which stocks will be in his 1998 Beating the Dow portfolio. He feels confident that Philip Morris and AT&T will be, but feels the others could change by the end of the year.

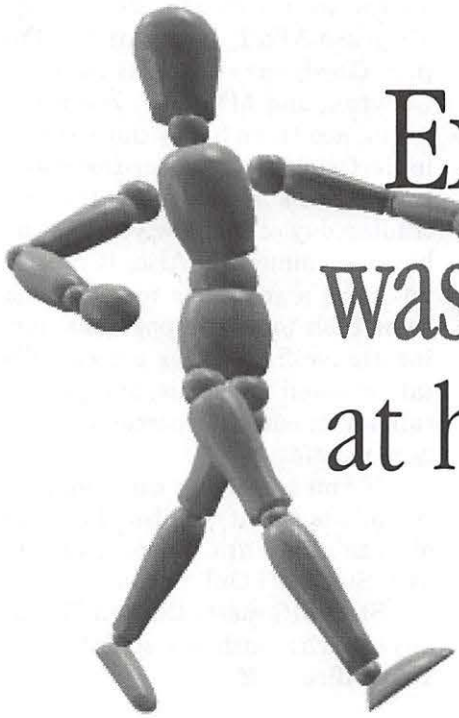
Mark also brought us his results for his 1997 portfolio. Mark uses a "2 year combined" strategy including all the Beating the Dow stocks from 1996 and from 1997. His portfolio includes AT&T, Chevron, DuPont, East Kodak, Gen Motors, Intl Paper, and Minn M&M. Counting from 12/31/96 this portfolio has increased in value by 10.9% to 10/31/97.

I do it a little differently. I have been running the Beating the Dow list each week starting with the first Barron's in October, and buying additional shares when the price drops after my initial purchase. So far my 1998 portfolio includes Philip Morris, AT&T, UnCarbide, DuPont, EKodak, Sears, International Paper, and Exxon.

As you might imagine, we had a good and lively discussion of all this and other things. You should have been there.

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

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



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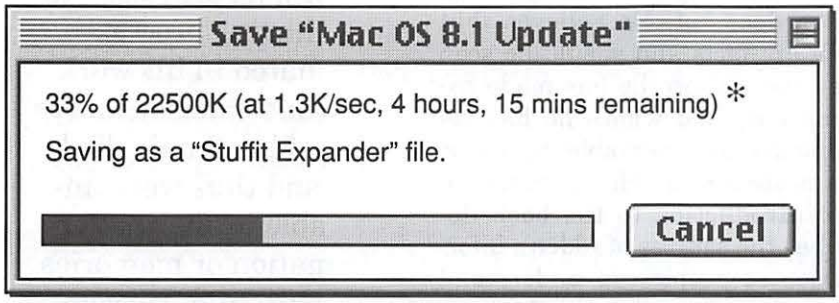

* as computed by the TCS Penguin.

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Genealogy SIG

THE GENEALOGY

SIG met at 10 am on Tuesday, November 19, 1997 at the offices of the Washington Apple Pi. There were 17 people in attendance and a number of those were newcomers.

Ed Jordan reminded members that the SIG is on the TCS at Conference 2, Board 12. Members will find the agenda there.

Ed then introduced Alden Bestul who has published a 200 page book on his mother's family.

Alden noted that he has not done any "Mayflower" genealogy but felt fortunate in working with a family which came to America from a much smaller country, Norway. Like almost everyone who does genealogy, he confessed to having procrastinated in his work while older members of his family died and thus were unable to share information or memories with him. He commented that genealogy is the process of grandchildren trying to recover what grandparents wanted to forget.

Not only is Norway a smaller country than the United States, Alden noted that he began his research with the smallest of his ancestral families: his maternal grandparents had only two daughters and one of those was childless.

Although he did not use the Internet much for this book, Alden noted that he will soon begin work on his father's family. He expects to use the Internet heavily while working on this new book. He also noted that his wife, Marie, wrote two books on her family on their old Apple IIe. Both books will soon be revised. Alden uses ClarisWorks to organize his family information. Marie has used a variety of genealogy software and thinks highly of "Reunion."

Most genealogical researchers believe strongly in documentation. Alden does not. He believes that facts are facts and should be seen that way. Where he has made assumptions and where he has recounted undocumentable stories, he has made it clear. However, half of the introduction to the book describes the sources of Alden's information so people can understand where the information was obtained.

Alden discussed the difficulty names can present. In Norway, where patronymics are often used, tracing a family name can be especially difficult. Also, as in Germany, where a farmer assumed the name of the farm which he owned, but changed that name if he moved to another farm, makes for great difficulty. Fortunately, Alden found his family names to be straightforward.

When do you stop researching and begin to write? Alden found that a projected trip to Norway pushed him into writing the book. However, after visiting Norway, he had almost 800 names more than the 1000 names which were in the book. He has added an errata sheet to the book to include family members who are not included in the original volume (Alden noted that people get very annoyed if they do not appear in the book!)

The Family History Center near the Mormon Temple, the Library of Congress and the National Archives have been resources for the book.

The Library of Congress has a large collection of "Bygdeboks," histories of towns or areas in Norway. Bygdeboks can be very helpful but, in using them, one must be careful since they aren't always accurate. The State Archives in Norway has also been enormously helpful. Alden noted that researchers should not forget newspapers as a source of helpful information.

"Like almost everyone who does genealogy, he confessed to having procrastinated in his work while older members of his family died and thus were unable to share information or memories with him. He commented that genealogy is the process of grandchildren trying to recover what grandparents wanted to forget."

Alden has made special sections of the book on the family longevity and family charts, among others. He also has a special section on 15 family members, fishermen, who were lost at sea. There is a special section of stories about his ancestors, but the stories are presented as stories and not as facts.

Alden used a commercial printer to photocopy the text, charts and maps. He and Marie took the photocopies home and interleaved color photocopies and photographs by hand in each volume. They then returned the books to the printer for binding. Fifty copies were produced, of which 25 were sent to family members. There are also copies of the book in the LDS library, a genealogy society in South Dakota, the Norwegian-American Historical Society at St. Olaf College and in other repositories throughout the country.

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Nancy Seferian contributed to

the meeting by reviewing the TCS with us. As a result we had a lot to think about and remember. She is the Sysop for the TCS and gave us a refresher course on its workings. She provided a handout which showed the screens that we will see when accessing the TCS.

Anyone can upload to the TCS. The Sysop of that particular Board will review the Board periodically to be sure that all messages are appropriate and family friendly.

After walking the group through the steps of logging on, uploading and reading a particular Board, Nancy noted that there is a new edition of "The Fine Print" (the guide to using the TCS) available either at the office or by mail.

Nancy suggested that the "library" section of a Board can be helpful to members of a SIG. She noted that a list of resources, whether printed or Internet, might be appropriate for a library. The library holds the items which the group chooses to be held permanently. Each Board has its own library.

Ed noted that upcoming agendas will be posted on the TCS.

The meeting adjourned shortly after 12:00.

—Mary K. Jordan

Future Meetings

The Genealogy SIG meets regularly on the SECOND TUESDAY of the month at the Washington Apple Pi office from 10:00 AM to approximately Noon. Attendees are welcome to bring a bag lunch and join others informally after the regular meeting. Precise dates are shown in Pi calendars on the TCS and Explorer Service, the Office and the Journal.

Agendas and speakers/guests for each meeting are posted on the TCS, Conference 2, Board 12, as much ahead of time as possible. Topics expected in January, February and March include the use of U.S. Census records for genealogical research, Civil War military and pension records, demonstration of members' favorite Internet sites for genealogy research, and discussion of members' experience with Reunion and other genealogical software.

Comments and suggestions are urgently desired. Please post on the TCS, C2B12. ■

Women's SIG Meeting

by Sue Korlan

SEPTEMBER 25, began as usual with an excellent meal provided by Grace Gallagher for $2 per person. We had meatloaf, noodles, three-bean salad, jello with cottage cheese and fruit, apple pie, rolls, and zucchini bread.

During dinner, our discussion focused on problems with the Apple telephone help line. One of our members was cut off by the person who answered her call. She spent days getting an answer to her problem and complaining about the person who had originally cut her off. The staff at the Apple assistance center assured her that they would improve.

We also talked about the latest Claris software. Now that ClarisWorks 5.0 is released, you gain lots of neat new capabilities — like being able to set the default font to something other than Helvetica.

Grace talked about two new school programs: Tabletop and Tabletop Junior, made by Terc at MIT, and sold through Broderbund. She described how to do Venn diagrams with them. For instance, if you have a group of cats, some of them are long-haired, some short-haired, and some medium-haired. Some are male and some are female. Some have green eyes and some have yellow eyes. To make a Venn diagram of the cats, you lasso all of the shorthaired cats together, and then lasso the green-eyed cats, for example. Some of the cats are in both lassos and some are only in one, so you can see the different ways to group the cats in a diagram. The software is easy enough for a small child to understand, and yet complicated enough to be of help to an adult user.

After dinner, our meeting began with the announcement that Kathleen Charters was in Stockholm, Sweden to present her doctoral thesis, "A Plan for Enterprise Integration," on how to merge multiple information systems. The best four Ph.D. papers and the four best MS papers in the world on the subject had been chosen for presentation at the Sixth International Convention for Nursing Informatics in Stockholm. The authors had to

"...our discussion focused on problems with the Apple telephone help line. One of our members was cut off by the person who answered her call. She spent days getting an answer to her problem and complaining about the person who had originally cut her off. The staff at the Apple assistance center assured her that they would improve."

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"We discussed the changing relationship between Apple and its dealers. Apple is reducing the dollar volume necessary to gain the best discounts on volume purchases from Apple. Thus small companies like MacUpgrades and Macintosh Business Solutions will benefit because they can purchase new units at a lower price and pass that savings on to customers."

present their papers four times to different juries. Thirty-two countries were represented at the conference. We hoped that Kathleen's would be chosen the best of the presentations. While that did not happen, she did received offers from three journals to publish her paper, including The International Journal of Informatics. Congratulations to Kathleen.

We then decided in the interest of cheerfulness to watch the tape of Steve Jobs' keynote speech at MacWorld rather than a tape of the cloners' complaints about Apple. Steve explained that the basic problem Apple faces is that its sales have been decreasing, and the company needs to focus on relevance. A new board of directors was announced to help Apple regain that focus. Larry Ellison was added to give software expertise to the board; Jerry York to give experience turning companies back to profitability; and Bill Campbell to give familiarity with Apple's past successes and failures. Ed Woolard and Gareth Chang stayed on the board, and Steve Jobs was added.

Steve identified the two markets where Apple has significant penetration: creative content and education. Eighty percent of the computer work in ads, design, printing and prepress is still done on a Mac. Sixty-four percent of web sites were created on a Mac. He suggested that Apple might begin to co-market with software companies in this field. Apple is also the biggest education supplier in the world. Sixty percent of all computers in education are Apples. Apple does about $2 billion a year in the education field. Therefore, the company needs to focus on these two markets. Steve also reminded his audience that Apple's biggest asset is its approximately 25 million committed users. We need to be treated better, especially on the help line. He promised that Apple would improve.

He also talked about the need for meaningful partnerships with other companies. In particular, Apple and Microsoft settled their patent disputes and agreed to a patent cross license for the next five years. Microsoft Office will have the same number of releases for Macintosh as for Windows. The Macintosh Internet browser will default to Explorer on new systems, but other browsers will be included so users can choose which one they wish to use. The two companies will collaborate on Java to make sure that it is compatible on both platforms. Microsoft will buy $150 million of non-voting stock in Apple.

Bill Gates then appeared on the screen. He pointed out that there are 80 million Macintosh customers of Microsoft. He promised that the programs for the Macintosh will not just be ports from Windows, but will be designed strictly for the Mac. Finally, Steve Jobs finished up by pointing out that for Apple to win Apple has to do a really good job and think differently. We should be grateful to Microsoft if we want to use their products.

In our discussion following the tape, we noted that Steve Jobs pointed out that there are 25 million committed Macintosh users, while Bill Gates noted that Microsoft has 80 million Macintosh customers. Perhaps a Venn diagram of the different groups would be instructive. There are, by these descriptions, at least 55 million uncommitted Macintosh users who use Microsoft products. Then there are those of us who are committed Macintosh users whose only Microsoft products are the translators in the DataViz folder, in case a publisher insists that a book we are working on must be received in Word. Then again, at least some of the Microsoft users are probably committed Macintosh users, so we can't just add the two numbers together to get the number of Macintosh users all together. Even if we have never used a Microsoft product and hope never to do so, we can be extremely grateful to Bill Gates for correcting Apple's gross underestimate of the number of Macintosh users, whatever their commitment level may be. The difference between the two numbers is probably due to the education market.

A discussion followed in which people who had attended gave their reactions to MacWorld. Grace Gallagher said that she went really depressed, and felt that most of the people in the room felt the same way before Steve Jobs started his speech. But after listening to three hours of talks she walked out on air. The whole atmosphere had lifted. Ellen Baniszewski went to the user group breakfasts. She noted especially Adobe and Apple's presentations. She felt that the most noticeable aspect of MacWorld, in general, was the lack of a vision of the future. She liked the English clones. The Best of Show went to Starmax and PowerTower. Sue Ware noted

that camera prices were coming down, and they look really good. You can preview the pictures and throw away the ones you don't like. Lorin Evans noted that IBM and Motorola have dropped all their Apple clone products leaving Umax as the sole clone producer.

There were many fewer second tier vendors this year due to the demise of OpenDoc. Ellen agreed that with OpenDoc gone, a large percentage of the small vendors were gone as well. Paceworks was doing well and had a much larger booth. Grace noted that Guy Kawasaki does Guy's ten best programs of MacWorld. He chose Create as the best. It's like Type Styler on steroids, and costs less than $100. Helen pointed out that Claris 5.1 is an impressive integrated program. Lorin noted that there are lots of new cameras. Grace noted that a good new camera costs $299. Digitals are now at the same price. The Apple and the Epson 800 inkjet printers go for around $499. They come with two color cartridges, a photo-grade cartridge for pastels and the regular color cartridge. The StyleWriter is a nice printer, and the October MacWorld magazine has a review of it.

The Common Hardware Reference Platform (CHRP) is history. In a typical Macintosh, the ROM code that is part of the uniqueness of the Macintosh is imbedded in a chip that is soldered to the motherboard. In the CHRP, that ROM code was to be supplied in the operating system. If that ROM code is not found, the Mac OS will not run. IBM and Microsoft agreed to write enabling code in their operating systems (PS/2, DOS 3.x and Windows 9x) so that each "could" run the Mac OS. IBM and Microsoft backed out of their part of the agreement. Apple decided not to move forward with a common hardware platform, and instead concentrated on its next machine, the G3.

We discussed the level of quality in a Mac. It has always been higher than in other machines, but people are now not willing to pay for it. Grace noted that maintenance for Macs is less than 25% of the maintenance for a PC, according to the

Washington Apple Pi Elections 1998-1999

Do you think Washington Apple Pi is run by a group of **self-serving insiders**? Don't you sometimes wish you were one of them? **Well, now you can be!** **For a short time only** (now through February 28, 1998) nominations are open for **all positions** on the **Washington Apple Pi Board of Directors**! Nominate yourself! Nominate someone else! Nominate several people! Pick from among **these exciting options**: President, Vice President, Secretary,Treasurer, and Director! Write your nominations on a piece of paper or a $100 bill and send it to the Pi office, c/o Secretary, Washington Apple Pi. Or E-mail your nominations to lcharters@tcs.wap.org. **Don't delay; elections are in May 1998.**

Help lead the Pi into its third decade and second century.

University of Texas. When a person buys a PC they only see the up-front costs, but they keep having to go out and buy parts to make their machine more functional. Mac people don't have to do that, so in the long run they are better off. The real problem with Apple is that it doesn't sing its own praises. Ellen added that most people judge the "power" of a computer based on the false premise clock speed is the measure. Lorin pointed out that Macs have much longer utility life in a school than do Wintel machines. Grace pointed out that, at least in education, applications usually come out for the Mac first. There is more of a market for it and therefore the quality of the programming is high.

We discussed the changing relationship between Apple and its dealers. Apple is reducing the dollar volume necessary to gain the best discounts on volume purchases from Apple. Thus small companies like MacUpgrades and Macintosh Business Solutions will benefit because they can purchase new units at a lower price and pass that savings on to customers. Apple will begin to build a more personal relationship with customers by selling computers directly to individuals. Big Macintosh companies like Microcenter, and Circuit City will get more business, while companies like Office Depot, Montgomery Wards and Staples will no longer carry Macintosh. As PC co-marketers, the latter get deals to encourage people to buy a specific brand of PC at a specific time, and not other machines, so they have less incentive to sell Macs. Now they won't pretend to do so. Most software is dual platform, and therefore you will still be able to buy software for your Mac at these stores.

We discussed another change in purchasing a Macintosh. The new series of computers will be sold a la carte: you will be able to select from options such as video in and/or out, video format, amount of memory and size of hard drive.

For the first time in fifteen years, MacWorld is moving from Boston, where it all began, to the Jacob Javits Convention Center in New York City. A version of MacWorld was held twice in DC, but was never successful. The Pi is exploring ways to enable a large group of Pi members to attend at a discount.

We learned that *MacWorld* and *MacUser* had merged. They are both *Ladies Home Journal* style

magazines with long articles. The market for this kind of publication is decreasing. *MacToday* and *MacAddict* are both doing well because they have short articles for today's readers with short attention spans.

Lorin asked how many of us have hard drives over one gigabyte. A discussion ensued concerning the size of files on hard drives larger than one gig. At the present time, one can reduce the impact on file size by partitioning a large hard drive. Unfortunately, that cannot be done while there is data on a drive. However, the update to Mac OS8.0 will include a filing system revision called HFS+, which will allow the block size to be a smaller size, regardless of how large a hard drive you own. The downside is that it won't be compatible with the existing HFS format — although should you come across it, you will get a notice of this on your screen. [Ed note: See following article on HFS+].

Apple's success right now hinges on marketing. Apple has long had a corporate attitude of not speaking up for itself. The company now has a new advertising agency, new ads and even a new PR firm. Apple has to start singing its own praises.

The topic for the November meeting was Design and Presentations. You'll read about the meeting in the next journal. ■

Understand that our meetings are a mixture of knowledge, camaraderie and food — not necessarily in that order. Know, too, that all of you are welcome to attend.

Tuesday Night Technical Assistance

THE TUESDAY Night crew is frequently asked why, after installing one of the gigabyte size drives, old files seem to balloon in volume to fill it. How can that be, we are asked? First, we are told that the old drive is filled with various 'must have' programs and Internet-related applications. Then, the family buys a larger drive only to watch the existing contents seemingly expand to fill the difference. What's going on in there?

To help us understand both the problem and its solution, we went to the experts at *MWJ, The Weekly Journal for Serious MacintoshUsers*. They told us that it all began back in 1986 when . . . . . .

Hierarchical File System

Most people think of HFS as the thing that controls file storage in a hard drive. That is just one of the items HFS controls. HFS was a major improvement over the original file system for the Mac; but over the years capabilities built into it that were light years ahead of the competition are now in need of an update. You use your Mac today in ways not anticipated back then, create and store files of a size beyond what was envisioned (or could be afforded) back then, and exchange data across languages that places a strain on the capabilities of a filing system designed at the start of the Macintosh revolution. Update 8.1 to Mac OS8 is part of the response to the need to improve upon the original HFS. Read on and learn how HFS Plus will change the way your Mac manage files.

A Hierarchy of Files

Files on your hard drive are organized via a methodology called HFS (Hierarchical File System). It replaced the Macintosh File System (MFS) that was used in the original Macintosh operating system released with the Mac 128. MFS, like DOS 3.3 for the Apple II series computers, is said to be a 'flat' filing system. That means that all documents you create are stored at the top level (or root directory for ex-Apple II folks) of a disk. There is no depth to that kind of a filing system. The folders that appear to give you a hierarchical structure in MFS are fakes. You could not create real directories. HFS was a huge improvement over MFS.

The Name Game

In an era when MS/DOS allowed 8 characters for a file name, HFS seemed downright generous with its 31 character titles. Now, the Windows NT file system allows hundreds of characters in a file name. HFS has a problem handling names between Arabic and non-Arabic languages. The two bytes used today to represent a single Japanese character represents two very different characters in the one byte English Mac OS. Conversely, if you name a file on a Japanese system and then look at the file on an English system, you'll see gibberish in the file name.

The Storage Dilemma

Most obvious to everyone with gigabyte-size drives is how even the smallest files take up huge chunks of room on these drives. Why?

When the boundaries of HFS were created in the late 1980s, they seemed to leave all the room in the world for

expansion; but expansion in those day was a pricy 20 or 40-meg drive. The designers of HFS divided a hard drive into units of data at least 512 bytes in size; that is the smallest portion to which an HFS disk can be subdivided. Each of those subdivisions is called an allocation block. HFS provided for up to 65,536 of those blocks per hard drive, **total**. Fortunately, the allocation blocks can increase in size; thus, HFS disks can theoretically hold thousands of gigabytes of data. Internal limitations in the implementation limit it to around two terabytes or so. That's not the problem, however.

The biggest problem is the limited number of allocation blocks, which you just learned can't exceed 65,536. No disk storage device can write blocks smaller than 512 bytes (ignoring, for the moment, floppy disks which default to 256-byte blocks). But 65,536 blocks of 512 bytes each limits you to a 32MB volume (just like the Apple II ProDOS, or Apple /// SOS file systems, if you remember them).

However, HFS allows the allocation blocks to grow in size. Sooo, since the total number of blocks **can't** grow, and the size of each allocation block can grow, . . . ah, you say as the light comes on! So that is why my little files take up so much more room on my gigabyte drive. Wow!

Now, a word from your math teacher. Remember the following: 1K is 1024bytes of data; 1MB is 1024K bytes of data; and 1GB is 1024MB. So, to handle a 2GB volume (2 x 1024 x 1024 x 1024 bytes) in only 65,536 blocks means that each block must hold 32,768 bytes (32K). Ah, so since the allocation block is the smallest unit of disk space, and each block [in this 2gig example] is 32k, than my little two-byte file takes 32K of disk space. Yep, and don't forget, each Macintosh file can have a data fork as well as a resource fork. If the file you just saved has a resource fork, even with a hundred bytes in it, the file now takes 64K of disk space. Oh my gosh. Now you now why partitioning gig-sized drives under HFS saves space all by itself (although you do lose some size flexibility as a result of those partitions.)

If you can accept that each file wastes an average of half the allocation block size for the final block of each file, and you have 10,000 files on a 2GB HFS volume, you're (on average) wasting 10,000 x 16K, or 156.25MB of disk space. Your actual wastage may vary (like gas mileage), but this is a huge amount. By contrast, if allocation blocks were a **fixed** size of 512 bytes each (and you could have zillions of them), you'd be wasting 10,000 x 256 bytes, or 2.4MB. On average you would reclaim 98% of the wasted space on your drive. This [savings] would be very cool. See, that wasn't so complicated was it?

> "Most people think of HFS as the thing that controls file storage in a hard drive. That is just one of the items HFS controls. HFS was a major improvement over the original file system for the Mac; but over the years capabilities built into it that were light years ahead of the competition are now in need of an update."

The Rhapsody Consideration

Apple's file system engineers have known for some time that revisions to HFS would be necessary, and the onset of Rhapsody made that even clearer. HFS isn't suitable for the thousands of tiny files that most UNIX implementations deal with (because they don't support resource forks and resources), so Rhapsody is obviously going to need some kind of new file system storage format. What's more, the Mac OS must be able to read and write the same Rhapsody file system or else data exchange between blue (Mac OS) and yellow (Rhapsody) applications is going to be a lot harder.

Enter "Sequoia"

Apple's solution to the need for updating HFS is a new file storage format based on HFS. It has been referred to publicly as "HFS Plus" and, as a development project, goes by the name "Sequoia". HFS Plus is part of update 8.1 to Mac OS 8. Sequoia solves most of the problems mentioned above. Sequoia is also designated as the primary file system for Rhapsody, which will make data exchange easier.

Let's see how it goes about addressing each of the problems mentioned above.

Grow Them Names

Unlike the one-byte name scheme in the original HFS, Sequoia's structure allows for file names of up to 255 Unicode characters. Unicode is a scheme that accommodates most of the characters in most of the world's languages in one mammoth character set, using two bytes for each character instead of just one. Under HFS, a byte with a value of 129 in a file name could indicate a "high-ASCII" special character in an English system, or it could indicate the start of a two-byte Japanese or Chinese or Korean character. Without knowing the language used for the original filename,

there's no way of knowing how it should be interpreted. Apple could add a script system identifier to each file to mark the language used for the filename, but that precludes mixing several languages, and still leaves open the chance that the same characters in different languages might have the same numeric values and create conflicts between files that supposedly have different names.

By using Unicode instead of the existing Macintosh script systems (Apple is a founding member of the Unicode Consortium), Apple eliminates the possibility of filename collisions and the need for script system identifiers. Sequoia filenames can be up to 255 characters with mixed languages. However, like some other features embedded in Mac OS8, you won't get to use this capability right away.

Metadata

HFS has been very useful to the Macintosh user experience because it includes a fair amount of metadata, or information **about** information. Anything that's information **about** the file instead of the information **in** it counts as metadata. That includes: the file name, the file type, the creator type, the modification date and time, the creation date and time, the last backup date and time, the length of the file, and so forth. One of the controversies involving Rhapsody as a replacement for the Mac OS has been whether disks will still contain metadata. UNIX files have no concept of type and creator type; in existing OpenStep implementations, files are mapped to applications through the filename "extension," like Web files or DOS disks. For example, you can set an application to open JPEG files by having the OpenStep system send all files that end in ".jpg" to that application.

This is standard fare for Windows and UNIX users, but is far below the level of ease that Macintosh users expect. The Mac OS file type and creator type serve two separate purposes - the file type identifies the file's contents, like a JPEG file or text; and the creator type indicates which program should open the file when you double-click it in the Finder. The extension-only scheme has serious flaws for Mac OS users; for example, your hard drive probably has text files with dozens of different creator types, and you typically want them to open in the programs that created them. You don't want to set the ".txt" application to BBEdit just to find out that it now opens all the files with styled text information (which BBEdit doesn't parse), and you don't want it set to SimpleText either (which handles styled text but only 32K worth of information).

Sequoia is to be Rhapsody's default file system, and it can handle metadata, at least leaving the door open to its continued use. What's more, it can handle extensible metadata. HFS has several kinds of information about files (as listed above), but programmers or users can't add more metadata to the information that's tracked outside of a file. Sequoia has facilities to keep extended metadata in a metadata file, and implementations that read and write Sequoia disks (like Rhapsody and Mac OS) will move that information around as the file it describes is moved around. Again, note that this doesn't mean Rhapsody will use this metadata, but at least the primary file system has the capabilities to do so - and with at least as much metadata as Mac OS, since Sequoia is targeted at that operating system as well.

Enlarging the Storage Box

Sequoia increases the number of files you can store on a hard drive. Since each HFS drive is limited to 65,536 allocation blocks, and since each fork of each file that actually contains data requires at least one allocation block (empty resource or data forks occupy no blocks on a drive), and still more blocks are used to store directories, volume bitmaps and other housekeeping information, an HFS disk can hold signifi cantly less than 65,536 files. Th

larger the files are, the fewer of them a disk can hold. Since a Sequoia disk can contain 4.3 billion allocation blocks, it can also hold millions and millions of files. Again, this makes it much more suitable for UNIX-style purposes, since UNIX likes to make lots of tiny files.

Sequoia doubles the number of bytes of data used to indicate the size of a single file. It also doubles the number of bytes of data used to references allocation blocks. That bumps the maximum number of allocation blocks up to 4,294,967,296. Sequoia can handle volumes as large as two terabytes (2048GB) without needing to grow beyond 512-byte blocks. HFS, on the other hand, would require allocation blocks of 32MB (that's megabytes) each to handle a 2TB disk. This is progress.

However, you won't see Sequoia volumes using 512-byte blocks on volumes larger than 256MB. When this article was being researched, the plan was to use 512-byte blocks up to that size of disk, then jump to 1K blocks for disks between 256MB and 512MB, 2K blocks for 512MB to 1GB disks, and 4K blocks for all disks 1GB and above. (That's still a quarter of the HFS allocation block size on a 1GB volume, namely 16K, for an average savings on that volume size of 6K per file.) Apple, of course, reserve the right to change the final scheme.

The Norton Factor

There are several reasons for holding down the number of blocks, but the biggest is performance. Users of Norton Utilities' "Speed Disk" program are familiar with the concept of fragmentation: the blocks on disk for each file may not be physically next to each other on the magnetic or optical media. When that happens, and it happens a lot, the read/write head inside the hard drive has to move around more to read various parts of a file, and that affects performance. A 16K file on a 1GB volume will take four allocation blocks under Sequoia instead of one under HFS, meaning a simple 16K read operation could involve as many as four "seek" operations (moving the read/write head to find the block in question). Now imagine a 500MB QuickTime movie file; it takes 128,000 allocation blocks on a Sequoia disk compared to 32,000 on an HFS disk (both 1GB in size). Four times as many seek operations, if the file is fragmented, leads to greater problems with performance.

There's also the issue of keeping track of all these blocks. Each disk has a volume bitmap that uses a single bit to indicate if a given allocation block on that disk is in use or not. That way, when you write a new file or expand an existing one, the operating system doesn't have to look at the list of every file's blocks to see which ones are used and which ones aren't. On our 1GB sample disk, we now have four times as many allocation blocks to deal with. A 2GB disk has eight times as many allocation blocks under Sequoia than under HFS, and a 4GB disk has sixteen times as many. If Apple chose to use 512-byte blocks for these larger volume sizes, the problem would be even worse, with all those numbers multiplied by eight (the number of 512-byte blocks that fit into one 4K block). A 4GB disk would need 8,388,608 allocation blocks of 512 bytes each, and that's 128 times as many as HFS has to deal with on any disk. Seeking through all these, keeping lists of them, managing them and marking the bitmaps properly would add performance problems. Instead, Apple is raising the allocation block size slightly rather than go off the deep end just to save a few more megabytes on each large disk. You'll still get back the vast majority of the wasted space you see on today's HFS volumes.

Sequoia Limitations

As nice as Sequoia is, and as much as it will solve problems we've all faced for years, it's not a panacea. For starters, it's still implemented in the Mac OS in 68K code.

This may seem like a brain-dead move, but it's not that easy. PowerPC-native code is obviously faster than emulated 68K code, but every time the system moves between native and emulated code, there's a "transition penalty" necessary as the 68K emulator starts up and shuts down, making sure the environment is consistent between the two processor worlds. The time for this penalty is a lot faster than you can perceive, but when it happens many times in a row it starts affecting system performance. One of the key decisions that Apple's engineers have to make is when the transitions in and out of 68K code cause this penalty to become more significant than the performance gains you'd get from changing part of the OS to native PowerPC code.

The Mac OS's disk performance doesn't match that of UNIX or Windows for other reasons as well. The File Manager (the set of routines that programmers call to manipulate files) is designed to be called by a single program at a time. It's not re-entrant, so it can't be interrupted to work on several files at once. Imagine it this way—if you're using a Mac OS Web server, and that server is reading an HTML file from disk, then none of the other threads (or even other servers on the computer) can read or write any files until that request is ended. Sequoia doesn't change this, because the existing Mac OS File Manager doesn't support it. Programs do not expect other programs to be able to change files during ongoing File Manager requests, so they'd likely have problems if that started happening unexpectedly.

Who Gets To Use It

While Sequoia isn't going to solve all the file system problems Mac OS users have been hamstrung with in recent years, the more efficient volume storage format, extensible metadata and Unicode character filenames will help some things out. The existing File Manager routines don't accommodate Sequoia's larger structures (eight-byte file lengths, four-byte allocation block numbers, and so forth), so those new capabilities won't be available to Mac OS users until Apple releases a way for programmers to access them, and until programmers revise their software to take advantage of them. (The same is true with Unicode file names.)

Since HFS+ is essentially a new file system, hard drives formatted under HFS+ will only be readable on systems with OS 8.1 or later installed. However, to prevent the unsuspecting from getting a "This disk is unreadable, do you want to format it?" dialog box, HFS+ disks have a little hidden help file encoded in them. When you mount an HFS+ formatted volume on a computer running OS 8.1, the help file is ignored and the drive works as you would expect. If the system doesn't have HFS+, the HFS help file mounts instead; the "Read Me" file tells you it is a hard drive formatted under HFS+ which requires a newer version of OS software than is installed on this computer. ■

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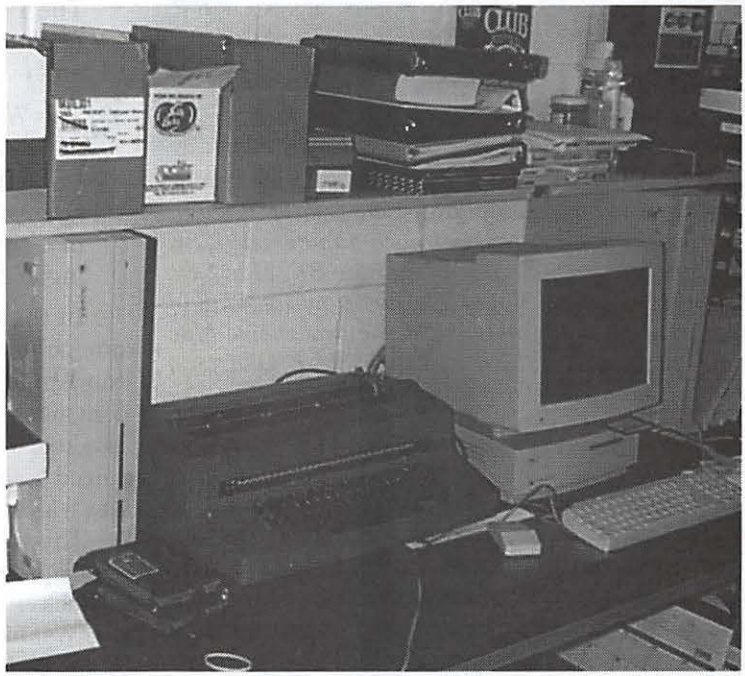
Subscription information is available at <mwj@gcsf.com> or <www.gcsf.com>

Introducing: Washington Apple Pi Mac Bench

by Lawrence I. Charters
(lcharters@tcs.wap.org)

WASHINGTON Apple Pi has long steered a wary path around the issue of computer benchmarks. But no longer: as befitting our status as the world's oldest personal computer users group, we have a unique corporate memory spanning three decades of personal computing. Since the Pi was founded in the 1970s, our members have been besieged with claims and counter claims about which computer is best for any given task, which can carry the load and which can't, and the best way to measure such claims. So we finally developed our own measure.

It is our considered view that the Washington Apple Pi Mac Bench System vastly exceeds the scope, depth, and utility of any competitors. For Macintosh users, the most famed competitor, of course, is the ubiquitous MacBench® 4.0, which the publisher calls the "Ziff-Davis Mac® OS System Benchmark."



Mac Bench II: This Washington Apple Pi Mac Bench System is informally known as the "Mac Bench II," and is clearly a higher system (by several inches). And yes, we find the central placement of the IBM Selectric nothing less than hilarious, too. (Photo by Lawrence I. Charters, taken with a Kodak DC50 digital camera)

Mac Bench Plus: The "standard" Washington Apple Pi Mac Bench System is known as the "Mac Bench Plus," though in reality it works just as well with even numbers of 128K and 512K Macs, as well as Mac Plus, Mac SE, Mac SE/30, and similar "compact Macs." The forthcoming "Wall of Macs" may well be the largest, most comprehensive Mac Bench ever attempted. (Photo by Lawrence I. Charters, taken with a Kodak DC50 digital camera)

When first introduced, the floppy-based MacBench® could tell you that your 16 MHz Macintosh II was fantastically more powerful than your prior love, an 8 MHz Macintosh Plus. But today, MacBench® 4.0 ships on a CD-ROM, won't run on a floppy-based computer, and doesn't really care about computers older than a Power Macintosh 6100.

We say: balderdash. In coming up with our own system, we decided to get back to the basics, and note that the term "benchmark" was first used to describe a surveyor's mark, used as a reference point in measuring altitude. We believe the Washington Mac Bench System clearly stacks up higher as a benchmark; it would take several hundred MacBench® 4.0 CD-ROMs to even come close.

More significantly, the Washington Apple Pi Mac Bench System is far more inclusive, incorporating everything from the original 128K Macintosh to the latest Power Macintosh G3. [Editor's note: we are confident this is so, but Apple has yet to provide us with a half dozen or more G3 systems for testing. We consider this Apple's failure, and not a failure of the Washington Apple Pi Mac Bench System.]

We make the following bold claims:

- The Washington Apple Pi Mac Bench System works with every model Macintosh, including desktops, laptops and towers;
- The Washington Apple Pi Mac Bench System works equally well with Mac OS computers from other manufacturers;
- The Washington Apple Pi Mac Bench System is particularly well suited to multiple CPUs, and has astounding "scalability;"
- The Washington Apple Pi Mac Bench System supports heavy documentation, as illustrated in the photographs;
- The Washington Apple Pi Mac Bench System can be used all the time, even during power failures, and even by the non-computer literate;
- The Washington Apple Pi Mac Bench System does not conflict in any way with the Washington Apple Pi Computer Organ Donor program. In fact, all machines shown in the photographs have contributed, in large parts and small, to the health and well being of many other Macintosh computers;

In the interests of full disclosure, we should make one point very clear: we have not tested the Washington Apple Pi Mac Bench System as a shipboard system, nor have we tested it in areas prone to major earthquakes. We believe minor modifications would be required before the Washington Apple Pi Mac Bench System was suitable for either environment.

The first two working prototypes of the Washington Apple Pi Mac Bench System are at the Pi's offices in Rockville, Maryland. A much larger, more impressive Washington Apple Pi Mac Bench System (known by the code name "Wall of Macs") will soon join these two prototypes. Development and testing of this amazing multi-CPU system is awaiting the delivery of lumber. ■

A First Look: Power Macintosh G3/233 Desktop

by Bill Michael

WELL, WE got our G3/233 a couple of weeks ago, and it not only met our expectations, but has thus far exceeded them quite handily.

Expectations

For some reason, the G3 Macs have generated a flurry of controversy, with many long-time Mac users upset about perceived "cost-saving shortcuts" or downright shortcomings in these machines. Apple has (surprise!) not addressed these questions directly; however, reading between the lines of Apple's announcements, and actually looking at the machines, it's quite clear that this first round of G3s are aimed at the mid-range Mac market. Yes, they're faster than many "high-end" Macs, but Apple has specifically **not** quit building 8600 and 9600 models for the high-end. The G3 systems appear to be replacements (as supplies are exhausted) for the Power Macintosh 7300, and possibly the Power Macintosh 6500, and maybe even the Power Macintosh 4400. It may not be safe to make assumptions about Apple's future plans, but given the positioning of these Macs, and the superiority of the G3 (PowerPC 750) chip, we'd expect G3-based replacements for the 8600/9600 class of high-end machines to be "in the pipeline" for release sometime shortly after Christmas. Which in Apple-speak may be March.

Speed

By now you've probably seen the MacBench processor test results, reported just about everywhere, that show the Power Macintosh G3 with a score of 878-895 for the 266MHz models ("SpeedMark" 5.0) and 785 ("SpeedMark 4.5) for the 233MHz desktop. This compares quite favorably with the Power Macintosh 8600/300, the fastest non-G3 Apple product currently shipping, which rates 733 ("SpeedMark" 4.3). Although CPU speed is indeed the biggest improvement in the G3 Macs, the rest of the system is no slouch either; even the IDE hard drives used in these Macs are considerably faster than the "average" drive, whether IDE or SCSI. We could go on for pages about just how fast these Macs are (and what could be done to make them even faster) but for brevity, we'll just give three comparisons we ran on three readily-available machines. (See box below.)

Just for the heck of it, we ran the FutureBASIC test on a IIci; it took 930 seconds. Measured more realistically, that's 15 1/2 minutes. A very few years ago, we used a IIci quite happily. We didn't have non-PowerPC versions of the Whetstone or RC5 software.

Form And Function

What is there to say about the G3 Desktop? On the outside, and in many ways internally, it's a 7300-class machine. The main difference some users will care about is the space for two internal 3.5" devices, in addition to the hard drive, rather than one. The fact that the sound I/O subsystem is on a "Personality" daughtercard rather than on the motherboard is, right now, more a curiosity than a feature. The mini-tower model also has its video I/O on a daughtercard, and both cards have slots for an internal modem to be added. This case design has served Apple well for several years, and is still quite easy to get into for installing upgrades.

Memory is a "new" type for Apple, although it's a semi-standard part in the PC world, which isn't exactly known for standards anyway. We installed a 64MB SDRAM DIMM, after some difficulty locating one. Obviously, part of the problem was the fact that we couldn't tell the memory vendors what machine it was for until the Apple announcement, a problem you won't have, at least not now. Regardless, the day after the announcement, we located this memory for $245; quite a reasonable price. Prices were all over the board, ranging from the low at $245 to a high of $359 for this module. Installation was very easy, considerably simpler than the old 72-pin SIMMs which had to "angle" into the slot.

Just as easy was installation of an XCLAIM-VR PCI board for a sec-

604/120 (Power Macintosh 7600/120)
Whetstones = 53097.35 double precision kilowhets/second
RC5-2.001+ rate = 320 kkeys/sec
FutureBASIC = 145 seconds ("Compile All" on large app)

603e/200 (PowerBase 200)
Whetstones = 81190.80 double precision kilowhets/second
RC5-2.001+ rate = 527 kkeys/sec
FutureBASIC = 118 seconds

750/233 (Power Macintosh G3/233)
Whetstones = 109289.62 double precision kilowhets/second
RC5-2.001+ rate = 685 kkeys/sec
FutureBASIC = 56 seconds

ond monitor. The G3 Macs already have an ATI RAGE chip on the motherboard, and thus already have most of the software for the XCLAIM board installed; only a couple of extensions were needed to tell the Mac that it now had two monitors.

The G3s ship with Mac OS 8 and an "enabler" to tell Mac OS 8 the differences between this machine and the ones it already knows about. The machines only use the HFS file system, and not the still-unreleased HFS+ [developer nickname "Sequoia"] , file system scheduled for Mac OS 8.1 this winter. That promptly negated the increased storage we had on the supplied 4GB drive, over the hodgepodge of smaller drives on the G3s predecessor, due to the "smallest blocks" problem. Hopefully, an easy migration to HFS+ will be provided.

Stability was probably the biggest and best surprise of this system. We've had some problems with Mac OS 8 in the past, every one of which was eventually traced to some old software not being "Mac OS 8 aware", or to having installed Mac OS 8 over older system software versions. Getting a brand-new Mac with Mac OS 8 pre-installed at the factory was a revelation. This box has simply not crashed. Not once. True, it hasn't had months of rigorous testing at the hands of our resident "crashmeister", but we have used Netscape, Adobe Acrobat, and our own as-yet-not-quite- debugged software, and it has worked without complaint.

Complaints

As we said above, this is a mid-range Mac, with mid-range pricing, but top-of-the-line speed.

The mid-range nature of the G3 systems is also apparent when you look at Mathematica timings. Some people have bemoaned that the Power Macintosh 9600/350, no longer available, beats the Power Macintosh G3 systems, but the PowerPC alliance has claimed since inception that the PowerPC 750 chip, while faster in most respects, is not quite as fast as the PowerPC 604e in floating-point performance, a characteristic that some scientific and engineering users will need to consider.

Several have vocally lamented the internal IDE drive Apple used in the G3s, wishing for fast SCSI-2. Get over it! This IDE drive is quite fast enough for 95% of the Mac user community, and Apple needs profits right now. Likewise the 1:2 512k backside cache keeps these Macs from breaking the 1000 mark on MacBench. Sure, it'd be nice if Apple had a "niche" G3 system at the very high end, in the StarMax 6000 class, with SCSI-2, a 1:1 1MB cache, and so forth, but hopefully, that'll be coming soon.

We have heard others complain about only getting 2MB of VRAM, or only having 3 RAM slots, or only 3 PCI slots, or no built-in FireWire, but all we can say is to read the first sentence in this review. This is **not** a replacement for the 8600/9600 class of Macs. That box is hopefully coming soon.

And of course, still others fuss about the price; they aren't happy because they think Apple could sell these boxes for much less than the current price. Well, they may be right; but at those prices, Apple would still continue to hemorrhage money, and the $2000-$3000 price point is historically the best range to maximize both sales and profits. Is the G3 a bargain even at the current prices? We believe it is.

Our only complaint is with the noise level of the supplied 24X CD-ROM drive. The thing sounds like an electric weed-eater when it spins up. It's actually loud enough to interfere with our enjoyment of audio CDs on this machine, and we've dug out an old 2X external CD-ROM drive to work around the problem.

The Bottom Line

Should you buy a G3 Power Macintosh? If you currently have a 68K Macintosh, or one of the "first generation" Power Macintosh machines (6100/7100/8100), the answer is an unequivocal "yes". This is the machine you've been waiting for.

If you have a Performa or other 603-based Mac of any type with a processor slower than 200 MHz, or a low-end 604 (150MHz or less) and you are currently thinking about an upgrade, the answer is still yes. We almost bought a PowerBase 240 at "close out" pricing the day before Apple posted information on the G3; we would have been begging for a refund, or kicking ourselves all the way to the used-computer-outlet had we done so.

If you have a fast 603 (240MHz+) or a mid-range 604 machine, in the 150MHz to 200MHz range, you may want the G3/266 mini-tower. If you need a system right now, go ahead. But if you can wait a few months, it might be worthwhile to see what is coming out of the "Think Different" labs next.

And if you have a high-end Mac, the 8600/200 or above, then no, this Mac is not for you. It's a bit faster, but you'll miss the expandability and upgradability of the larger boxes; one co-worker just ordered two 9600/300 machines, passing up the G3s, simply because he has to have the internal bays and PCI bus slots.

Given the huge numbers of 68K Macs and low-end Performas out there, if Apple can successfully market these G3 Macs, even if only to their traditional marketing target of "current Mac owners," they should have a huge hit on their hands, and the beginning of a turnaround on profits. That is the big story of Apple's latest announcements, so far successfully ignored by the press. ■

Best of the TCS

by Nancy Seferian

THIS COLUMN highlights some of the best questions and answers found on the TCS, and just maybe, whet your appetite for some discourse there. If you want quick answers to your most pressing computer questions, the TCS is the place to ask them.

Moral: Upgrade Your System

(Note: The following questions were from one user, but many others chipped in with helpful answers.)

Q: *Getting desperate! I **cannot** dial the TCS when the Zip disk with System 7.5.5 is the startup. This is true for all three incarnations of ZTerm: ZTerm 0.9 on the hard disk, ZTerm 1.0.1 on the hard disk and ZTerm 0.9 on the Zip disk.*

The mode of failure is that the <Dialing> line in the dialog box reads <T&F> instead of <ATDT (phone number)>.

I also notice that if I try to dial manually, I get <TDT(phone number)> instead of ATDT and it still doesn't dial. If the hard disk with System 7.1 is the startup, all three ZTerms work fine.

Without System 7.5.5 there are some interesting and immediate things I cannot do. What should I do? TIA.

P.S. How does one switch the outlined font to a different phone number?

A: Install the current Apple Telecomm software. This is a GeoPort Adapter issue, requiring the right combination of supplementary system software. ZTerm, 7.5.5 — on their own they're probably doing just fine.

Q: *Before I got your message, I suddenly realized I did not have the Express Modem installed on the Zip drive (with 7.5.5). So I installed it. When I did, it said I had a newer Shared Library Manager and it would not install. So I (temporarily) took out the new one and let the old one go in. I restarted and was appalled to get the message:*

(Bomb) Sorry, a system error occurred. illegal instruction. [Their initial lower case.] To temporarily turn off extensions, restart while you hold down the shift key.

>>Install the current Apple Telecomm software.

What (where) is the current Apple Telecom software? Does it take the place of Express Modem, which is GeoPort stuff? TIA.

A: >> So I (temporarily) took out the new one and let the old one go in.

Ouch. Big ouch. ASLM isn't an extension — it's a collection of files and resources that are -very- intimate within and around your system file. I'll not be easily convinced this action was reversible.

>> What (where) is the current Apple Telecom software?

The normal places you'd expect to find Apple system software. The GeoPort-EM software is currently at 3.1.1. You need at least 3.0 (and maybe exactly 3.0) for your Quadra with 7.5.5. The version you installed, I'm willing to bet, is from an age prior to 7.5, let alone all the system software madness that took place between 7.5.1 and 7.6. It probably trampled 7.5.5 in a big way.

I'm sure this sort of thing leads one to think that upgrading to 7.5.5 is more trouble than it's worth. Pointing out the other side, though, this is really a result of skipping more than one major architectural overhaul in a shot — the upgrade process from 7.5.3 to 7.5.5, for example, is a snap.

And I keep saying this, but don't let 7.5.5 cloud your thinking about 7.6. 7.6 is a cleaned-up, tame, stable version of 7.5.5. And 8.0 is also cleaned up and tame, but it's also a lot of fun — and visually it reminds you that there've been major architectural overhauls, so you don't fall into traps.

Q: *O.K., I'm convinced! My 7.5.5 Zip disk will stay on the shelf until further notice. I will plug along with 7.1 until I get my new machine, which will be soon, really.*

A: >> I will plug along with 7.1 until I get my new machine, which will be soon, really.

It's official: upgrading [the Questioner's] machine is worse than pulling teeth.

Q: *Two lashes with a wet noodle. That belongs on the joke board.*

Upgrade MS Word?

Q: We have stayed with Microsoft Word 5.1 at my office. As we upgrade our 030 Macs in the next few weeks or months to Power Macs, I am wondering about upgrading to MW 6. I suppose with hard disks so large and RAM being cheap, there may be less reason not to upgrade. Would appreciate all advice along these lines. Also, M. Office is probably going to be included on some of the new Macs. Perhaps we can make do with that on a few. TIA.

A 1: I am wondering why you'd want to deal with Microsoft's Macro virus problem. Word 5.1 is immune; Word 6, despite everything you will

try, **will** not only get infected, it will infest every machine. Three new Macro viruses are created every two days.

My office has Word 5.1 and WordPerfect 3.5 (both; there is a reason, but don't ask). Word 6 is not something we miss.

A 2: I think that you should wait for the next release of Word or stay with 5.1a. The new version is supposed to be much more Mac-like and to have a Mac interface instead of the Windows interface. It is also designed and coded specifically for Mac OS unlike 6.0 which is a Windows port from their damn common code base.

Word 6 absolutely crawls on an 030 based Mac although it is not quite so bad on a Power Mac where it only walks slowly. I don't know about your users but mine don't like any loss in productivity with any new program. Word 6 on 030 translates almost to zero productivity.

The next version of Word is supposedly PowerMac native, file compatible with the next Windows version and Mac unique. I don't know if it will be recommended to run on an 030 but the initial reviews of the beta version are glowing.

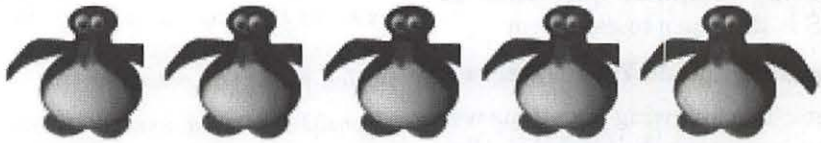
A 3: Actually, I would probably wait for Office 98 to come out near the end of the year. This is currently in beta and so far seems like a considerable improvement over Office 4.2.1. The interface is much more Mac-like than Word 6 and there are a lot of new features. Program launch is improved and the whole thing seems snappier than Word 6.

A 4: Our office has a mix of Word 5 and Word 6 users. Since I had read so many complaints about MW 6 on the TCS, I was surprised to find that it had a number of vigorous advocates, even among some of our more knowledgeable users. But I then noticed something else: the *only* people who seem to like MW 6 fall into two categories. They either have to deal all the time with MW for Wintel documents, or they upgraded from 5.0 rather than 5.1. (Our office never made an official switch to 5.1, but a few of us paid on our own for the upgrade.) The features jump from 5.0 to 6.0 is pretty dramatic, but since you are already at 5.1, I join the chorus recommending that you hold off and see what comes in Office 98.

Q: *Thanks guys for your input! I will stay happy with 5.1 for now. One of the biggest advantages of the TCS is not only the fast responses, but the *multiple* responses giving a range of information.*

Thanks again!!!

Note: You can help. If you see an exchange of ideas on the TCS that you would like to see included in this Journal column please send the entire messages to: <nancys@tcs.wap.org>.



CALLING ALL WAP KIDS!

by Dave Ottalini

ALTHOUGH Washington Apple Pi has lots of adult members, we also happen to have lots of great kids who are part of our Family Memberships. But we haven't heard much from them in the past. Now that's about to change.

The *WAP Journal* is interested in publishing a WAP KIDS page. But what would it contain? How about reviews, articles, pictures. Anything kids can do both serious and fun on a computer, we could include in a page for the *Journal*. Contributors would include ages up through and including high school.

But we're going to need help. What would you like to *call* your page? Is there a high schooler or two interested in Journalism willing to help put this together? Who would like to volunteer to do reviews?

Send an email to dave.ottalini@tcs.wap.org and let me know what you might be interested in. This project will likely also need an adult volunteer or two to act as "guides" to the students as they put their page(s) together. Let me know who you are too and we'll try to set up a meeting.

I think this could end up being both fun and educational for all concerned. I also suspect we could have it posted to our Web Site as another way to share the wealth with other kids online! So let me know what you think and we'll take it from there! ■

An Interview with Carol O'Connor— WAP Member At Large

by Nancy Seferian

YOU SEE SOME of Carol O'Connor's art every time you receive your Washington Apple Pi Journal. Her computer drawing of the capitol building on its cover identifies our users group as the Macintosh and Apple users group of Washington, D.C. She has been a valued member and volunteer for WAP for many years, writing articles about drawing on the computer and creating marvelous illustrations to accompany the text.

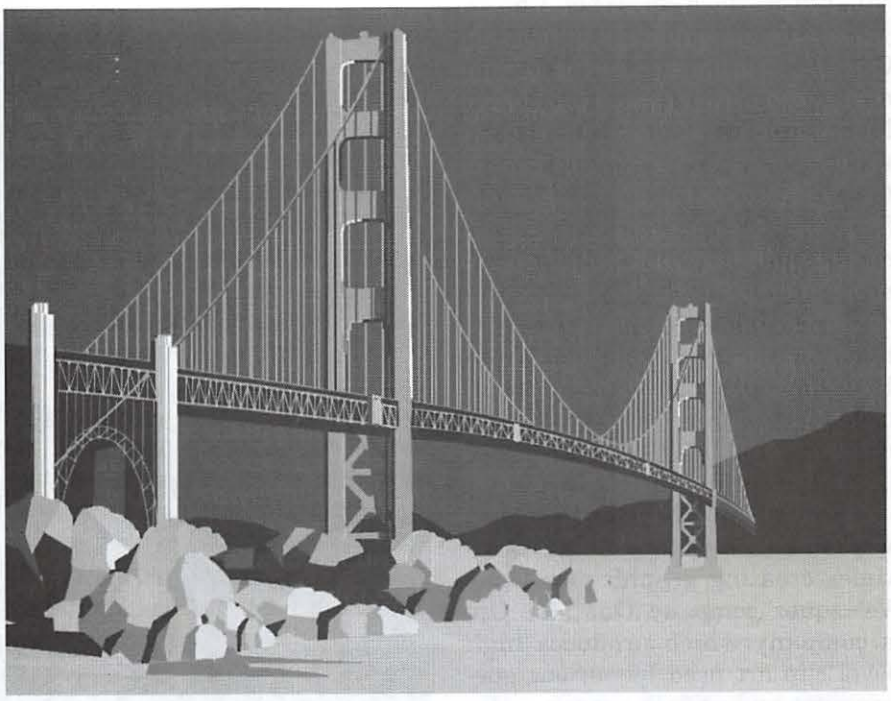
Many of us were introduced to her first through her Journal articles. Kathryn Murray, the editor of WAP's Journal says, "Even before I met Carol, and that was over the phone, I felt like I knew her to some degree. Her philosophical and whimsical insights, while introducing readers of the Journal to a variety of techniques on the computer, spoke volumes. And when I did get to know her I found that there was no exact way to define what contributed to the way in which she viewed the world and her computer—everything came into play."

Carol and I had decided to have lunch together during the interview, and while I put the food on the table I asked her about her first experience with computers. She said, "My friend showed me a Mac Plus and I fell in love with it immediately. I thought I had died and gone to seventh heaven, and those were the days of *MacPaint* and *MacDraw!* I had to have a Mac myself and bought my own." When I asked her if she has ever worked on a PC, she made a grimace and said, "Yes, but not happily. I hate the way one handles directories. Then, there's that little cursor flashing in the corner. You can push and touch every logical button or key, and the cursor won't budge. Now the Macintosh, that's intuitive. You are never wiped out entirely."

Carol always knew she wanted to be an artist. She graduated from Brentwood College on Long Island with a B.A. in education. She

received her M.A. in Art from the University Notre Dame in Indiana where she majored in sculpture. She also studied drawing at the Art Students League in New York on a one-year scholarship. After graduation from Brentwood College she taught Catholic elementary and high school students in Brooklyn and Queens and supervised art teachers in that school system.

Carol and her husband, Joe, have six children—two daughters



The Golden Gate bridge is an Adobe Illustrator file. To render the bridge supports it is handy to use the resize tool which will make each vertical appear to be further away than the one before it in true perspective.

This car is a no-name, no-brand auto, rendered entirely in Adobe Illustrator. The reflections and highligt effects are easy to accomplish in the new Illustrator if the artist has a clear understanding of what is required at each point. Where do reflections go? Where do highlights go? How are metals, glass and rubber rendered so that they look authentic?

and four sons. She has a mug which says, "My kid and my money went to Ohio State!" She wishes she had an identical mug from five other colleges and universities where her children finished up. When Carol's youngest child went to high school Carol began working (on a Mac) on a large military proposal in Manassas. After that experience she spent several years working for Systems Solutions Group (now Visual Solutions Group), which was then a small company with exciting leadership. She was charged with producing high level graphic presentations for the Pentagon, the White House and other government agencies. Most of that time she created classified Adobe *Illustrator* drawings of powerful Macintoshes.

For the last five years Carol has worked as a freelance artist, sometimes creating graphics for Gene Velazquez' company, One Mile Up, a company which produces high level clip art used by various government and private agencies. Her freelance work has even taken her to Mexico City, Guadalajara, and Monterey in Mexico, where she trained artists in the use of *Photoshop and Illustrator.*

She was particularly delighted, once, to do a drawing for Vice President Gore to bring to a major foreign power for the purpose of working out a sensitive trade agreement. Another job she enjoyed was drawing from scratch a complex grouping of machinery for a company which used her color rendering on the glossy cover of a trade journal.

I wanted to know how she learned all the applications she now uses, and you might have guessed it. She taught herself. She might begin with a project or drawing she wants to create, and in the process discovers how to accomplish the effects she wants by, would you believe, reading the parts of the manual that refer to what applies to her drawing. She acknowledges that, "I'm a *devoted* manual reader." In addition, she loves to experiment, and might try numerous ways to accomplish an effect or procedure.

Her all time favorite Macintosh book is an old one, entitled "Zen And The Art Of The Macintosh: Discoveries On The Path To Computer En-

A clip art file created for One Mile Up. Beginning with a posterized Adobe Photoshop file I created the multiple paths which were exported to Adobe Illustrator and edited further.

This illustration attempts of suggest a stamped, enameled metal road sign. It is an Adobe Illustrator drawing, opened in Photoshop where the Lighting Effects filter was applied.

All the leaves and one or two flowers were first created in Adobe Illustrator. In Photoshop, the flowers were distorted, resized and placed

lightenment" by Michael Green.

Carol also teaches tutorials for WAP, and gives private lessons in beginning and professional *Illustrator* and *Photoshop*. Recently she has been training artists and others of us in Internet Web graphics. At the last Women's SIG meeting the topic for the evening was "Visualizing Web Page Design," and as part of the presentation Carol showed the group how to reduce the size of a 20MB color scan of a photograph she took, to a 17K gif image that still looked spectacular.

The artistic gifts, knowledge of applications and teaching skills that Carol has offered Washington Apple Pi have enriched and informed many of us. As Kathryn Murray says, "Curiosity and creativity—they're two words that I'm sure figure largely into Carol's life. But they are important to her in an unpretentious way that makes her perspective all the more accessible to all of us. To be able to create and find new ways of expressing oneself is a lifelong task for someone who has never let her curiosity die—and to handle the twists and turns of life may also require a sense of humor. These tools, and more, she certainly has."

Favorite Applications:

Adobe Illustrator 7.0, Photoshop 4.0, Dimensions (a 3-D program for vector work), *Microsoft Word, PageMaker, QuarkXpress,* and *Macro Media Director* ■

Favorite URLs:

These URL's produce sites which I am currently exploring with great curiosity and pleasure.

Vatican Museum:
http://www.christusrex.org

Visit a long list of museums including both sacred and secular, Egyptian and Etruscan Museums, and the Sistine Chapel. View the art at various sizes. Some very interesting links for the curious.

Digitopolis E-Zine:
http://www.digitopolis.com

This is a delightful site with very friendly hosts! Good graphics, interesting design and informative chat about the business of being an artist.

Computer Magazine:
http://www.macaddict.com and http://www.macaddict/links.com

This is a relatively new Macintosh magazine with a dynamite web site. They claim that you can anything Mac related on this site and I think they are almost correct.

Another E-zine, a little like Vanity Fair:
http://www.salon1999.com

This magazine has a great variety of articles from literature to politics to recipes. Lively and timely. Great short story club with a chance to respond. Good stuff on child related matters.

Outlining in ClarisWorks

by Paul Chernoff

SOMETIMES people ask me, "Paul, how do you write such good articles for the journal?" The answer is easy, I have my wife edit everything for me. "But, Paul," they say, "I don't have a spouse who can edit my writing. What I really want to know is what software I can use to write better."

When it comes to writing, the most important feature to me is outlining. It helps me organize my thoughts, automate formatting, and rewrite.

What I Have Used Before

I've been an outline fan since using *ThinkTank 512* on a Fat Mac in 1985. I've also worked with its successor, *More,* and *Inspiration*. While all are great outliners and offer additional features, none can replace a word processor. *More* came closest to becoming my word processor, but its word processing features fell short.

For years I depended on Microsoft *Word's* outlining features. While *Word* is a weaker outliner than the dedicated outlining programs, it does a great job of integrating outlining with word processing. When *Word 5.1* came out, I moved all of my writing to *Word* because of its integration and my desire to write using a single application. *Word's* linkage of outlining to styles sheets, table of contents creation, automatic paragraph numbering, and the ability to switch between outlining and normal views made me a convert.

But I eventually gave up on *Word* after version 6 was introduced. This version changed the outlining shortcuts, and its slow speed and massive size proved to be too much. I moved to *ClarisWorks 4* because of its speed, size, features, and ease of use. But I was frustrated by *ClarisWorks'* outliner, which has not changed with the upgrade to version 5.

Initial Limits of ClarisWorks Outlining

ClarisWorks lacks a special outlining mode. *Word's* programmers understood the importance of showing the outline structure while displaying minimal formatting. The indents of the outline view need not be reflected in the normal view. This provides great flexibility in the outlining view without limiting formatting options. While *ClarisWorks* offers the typical outlining features—automatic indentation, paragraph numbering, hiding of subordinate paragraphs, and great ease in moving sections—it does this all as part of normal text editing.

ClarisWorks outlining assumes that you want to outline the entire document or individual subsections. Outline numbering is not continuous when you switch between outline and non-outline paragraphs. Whenever you insert normal paragraphs between outline paragraphs, paragraph numbering will restart at 1. This problem also occurs if you switch between different numbering styles. See Figure 1. *Word* does not have this limitation.

1. This is the first paragraph
2. This is the 2nd paragraph

This is the 3rd paragraph, but it is normal and not outline

1. This is the 4th paragraph. I wish it were numbered 3 instead of 1.

Figure 1 – ClarisWorks *does not always number paragraphs as desired.*

Customizing Outline Styles

The solution to *ClarisWorks'* weaknesses is to modify paragraph formats and to automate these changes through styles. This procedure, as it pertains to outlining, is not spelled out in the manuals.

One attribute that can be assigned to paragraph is "Label." The paragraph label is the numbering or

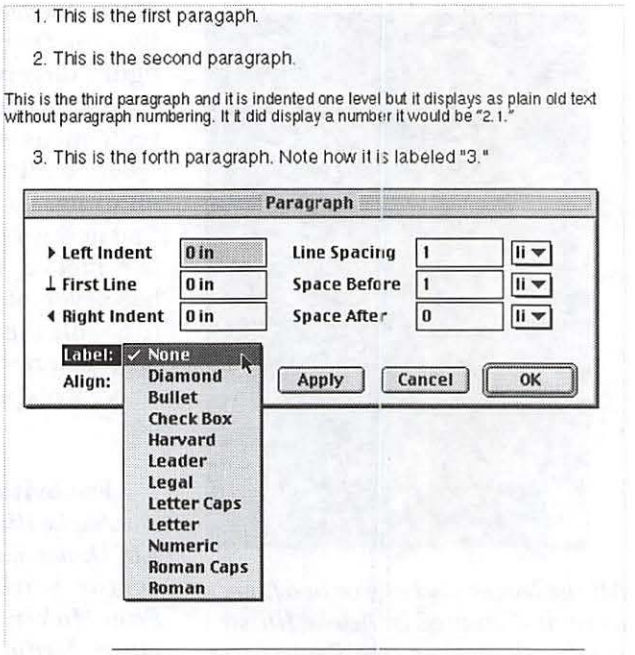


Figure 2 – Using paragraph formatting to make an outline paragraph appear normal.

symbol system used in outlines. For example, the Harvard labeling system puts a number or letter in front of every paragraph. The legal label uses a numbering system where a decimal point is added for every level. For example, a level 3 paragraph could be numbered "4.1.3." Labels supported in *ClarisWorks* include Harvard, legal, diamond, bullet, checkbox, Arabic numbers, Roman numbers, uppercase letters, and lowercase letters. It is possible to mix them within an outline.

Using labels, you can disguise an outline paragraph as a non-outline one. In Figure 2, the third paragraph has its label set to "none"—so it will not be numbered—and its indents set to "0." This paragraph will not appear in outline mode, but the numbering stays continuous from the second to fourth paragraphs. The third paragraph is actually subordinate to the second, so if it had the legal label, it would be labeled 3.5.

Instead of manually applying formats to each paragraph, you can use styles to automate formatting. Using styles, you can customize each outline level in terms of character—font, size, and style—and paragraph formatting—indents, leading, and justification. The user can define how each outline paragraph should look according to its level. In Figure 3, the level 1 paragraph is bold while the level paragraph is plain. The space between the paragraphs is created by making the "paragraph space before setting" one line. This last point is important because if you create spaces between paragraphs by pressing the "Return" key, you will sabotage paragraph numbering.

In order to edit one of the outline styles—diamond, Harvard, or legal—do the following:

- Select "Show Styles" from the view menu.
- Select the outline style to edit. They can be identified by the icon made up of three lines. See Figure 4.
- Click on the "Edit" button.
- Select the outline level to be changed.
- Select any paragraph and/or font settings using the "Format," "Font," "Size," and/or "Style" menus.

Click on the "Done" button when finished. Any paragraph of the given style and outline level will now reformat itself according to the specifications.

You might determine that you will use level 5 paragraphs for normal text and set label to "none" and indents to "0" to make them appear normal.

Styles can also be used to solve the problem of not having *Word's* separate outlining and normal views. You can create one outlining style that has minimal formatting and numbers each paragraph and another style designed for final presentation. You can write in the first—applying it to all paragraphs—and then apply the second style to all paragraphs when you are finished. And because styles can be copied between documents, once you

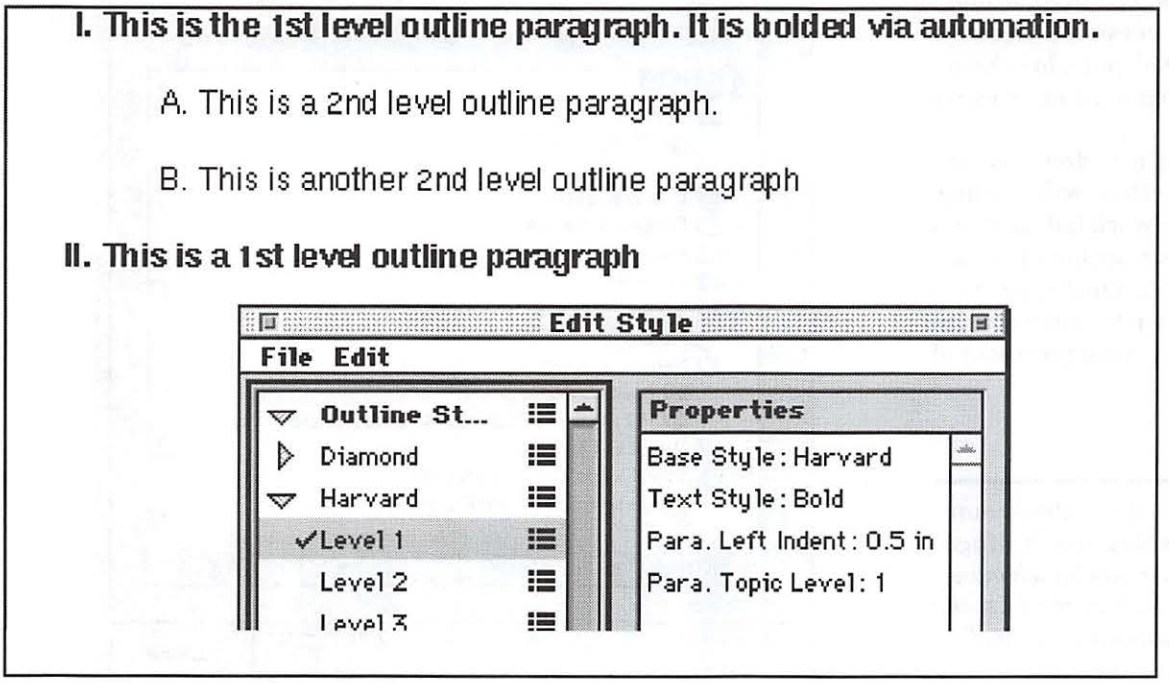


Figure 3 – Outline levels styled through a definition.

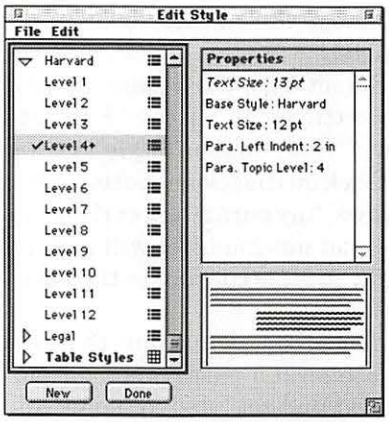


Figure 4 – Edit "Style."

create your perfect style, it is easy to use over and over again.

Conclusions

ClarisWorks 5 does not yet match Microsoft *Word's* outlining features. The latter still allows for using outlines for table-of-contents generation. More important, *Word* has a paragraph setting called "Keep with next paragraph" that helps with control over page breaks through automation techniques. I hope that Claris will finally adopt this feature in version 6 because manually inserted page breaks often need to be removed after every edit.

But outlining does work. *ClarisWorks'* method will require some changes in work habits if you previous did your outlining in another application. Outlining with *ClarisWorks'* other features continues to make it my word processor of choice. ■

Paul Chernoff is the systems manager at the Washingtonian *Magazine. He has been a Macintosh owner since 1985. He has worked in the worlds of international nonprofits, multimedia, and publishing.*

The Best of Both Worlds; Or, How I Learned to Love the Bomb

by Rick Zeman

HAVE YOU ever wondered what the digital equivalent is to an Elvis painting on black velvet? The answer is...Windows 95 running on a Macintosh. Yes, it's incredibly tacky, but there is a place for it.

Connectix Corporation, the people who have brought the Macintosh community so many indispensable utilities over the years (Mode32, RAMDoubler, SpeedDoubler), have brought yet another technological marvel to the Macintosh: *Virtual PC. Virtual PC* is an complete MMX Pentium PC wholly captured into bits and bytes and pressed onto a CD.

Installation

Installation is straightforward; in fact, it's easier than on *any* PC. The CD installer copies over 500 or so megabytes of pre-configured files with the final size depending on what size "drive" you select (my fi-

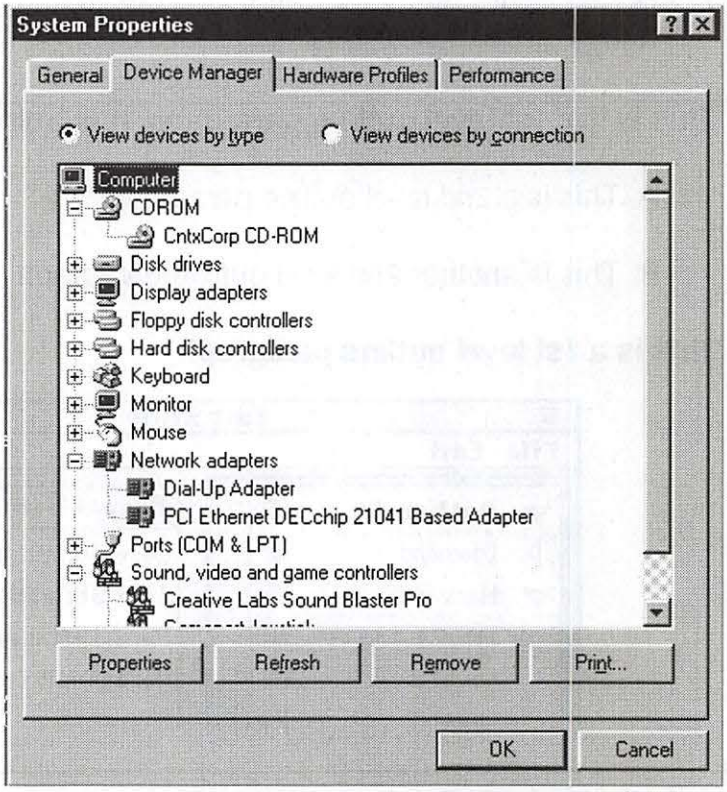


Figure 1. VPC Device Management

nal installation was about a gigabyte as I'd also added a 500 megabyte "D" drive). When done, there is the *Virtual PC* application and a fully-configured "C" drive. No shrug-and-pray, err, plug-and-play to contend with: Connectix has taken the inherent complexity out of a Windows 95 installation by already configuring the PC devices (see Figure 1) that are, in fact, Macintosh devices. Connectix has supplied Windows 95 OSR2, the latest OEM version of Windows 95, with *Virtual PC*.

System Requirements, and Wishing There Was a Santa

Connectix says that *Virtual PC* requires:

- Any Power PC processor running at 100mhz or faster
- Any Power PC 603e running at 180mhz or faster
- Any 604, 604e or G3
- 24 megabytes of physical RAM with 32 megabytes or more recommended

Connectix is a company of optimists. While *Virtual PC* will *run* on a PPC 604, it's not really useable. Test system #1 was a PPC 604/132/256k L2 with 32 megs allocated to *Virtual PC*. Lengthy pauses, lengthy screen refreshes and all-around malaise were noted. Test system #2 was a 604e/225/256k L2 also with 32 megs allocated to *Virtual PC*. Performance was good, with screen redraws and launch times fairly snappy. Test system #3 was a 604e/300 with 1 megabyte of Level 2 cache (Connectix says that *Virtual PC's* performance will markedly increase with increasing levels of L2 cache) and 64 megabytes allocated to it. Its performance was subjectively in the lower end of the Pentium class: It seemed as if I was actually working on a real PC instead of on an emulated PC.

I would amend their requirements to a minimum of a 604e/180 with at least 24 megabytes allocated to the program.

Up and Running

Upon double clicking the *Virtual PC* application, one is presented with the standard Win95 cloud splash screen. In fact, once you launch the application, you're—for better or worse—totally in the Win95 environment, so you have to do the final installation process as you would for any new PC.

> "Installation is straightforward; in fact, it's easier than on *any* PC. The CD installer copies over 500 or so megabytes of pre-configured files with the final size depending on what size 'drive' you select (my final installation was about a gigabyte as I'd also added a 500 megabyte 'D' drive). When done, there is the *Virtual PC* application and a fully-configured 'C' drive."

Connectix's integration of the Win95 environment onto the Macintosh desktop is absolutely superb. They have painlessly hooked the Ethernet hardware of the Macintosh with Win95's network architecture. With no configuration at all, *Virtual PC* recognized my Ethernet network, and allowed me to attach to the Novell NetWare file server via Microsoft's Client for NetWare. Replacing that with Novell's IntranetWare Client for Windows 95 also went flawlessly. The *Virtual PC* preferences which control how the platforms interact are located in a pull-down menu (see Figure 2). Most users, unless they want to add a shared directory between the Macintosh and PC sides, will probably never need to change any settings. A shared directory is a folder that's accessible to both the Macintosh and to *Virtual PC*. And, the files that are *Virtual PC*'s virtual hard drives are accessible to the Mac: double-click and they mount on

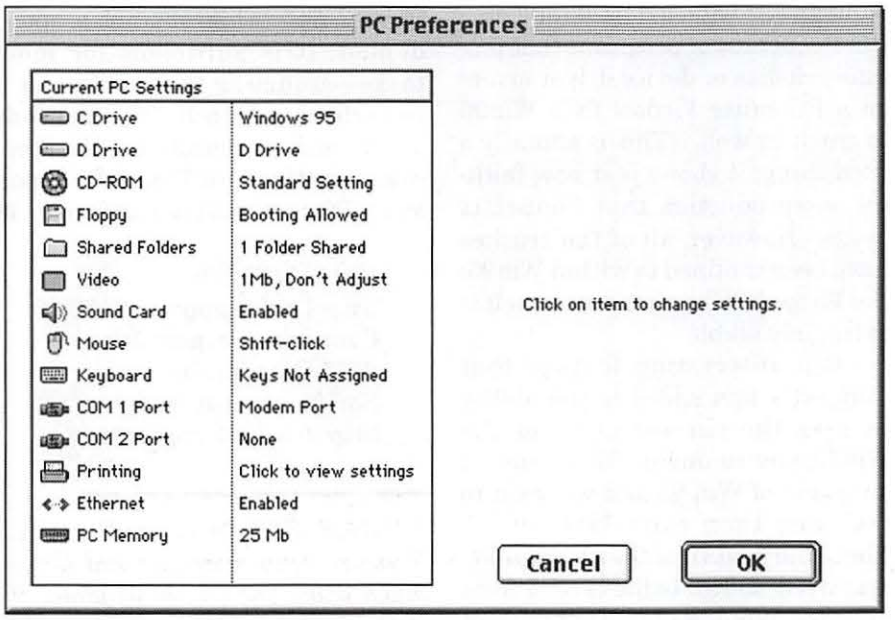


Figure 2. Virtual PC Settings

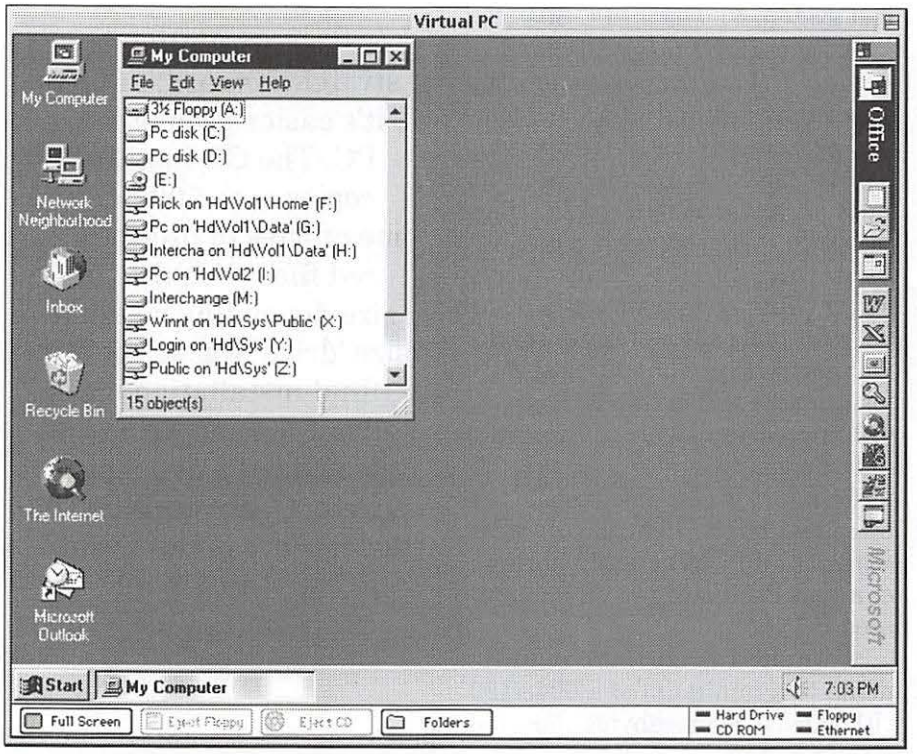


Figure 3. Virtual PC's desktop

the desktop as a virtual disk.

Virtual PC includes two Windows 95 print drivers: an Epson-compatible driver and a LaserWriter-compatible driver. These drivers match with the corresponding ImageWriter and and LaserWriter drivers on the Macintosh side to produce the printed output. Since I have print queues defined on the NetWare server, I could actually use Windows 95's "Add a Printer" wizard to select my printer type (a LaserWriter NTR) and point it to the queue on the network and totally bypass the Macintosh for printing. I'm still awed that this works....

Using Win95

Once you have finished configuring Windows 95, you're presented with the standard Win95 "desktop" (I use the quotation marks as it isn't a true desktop as in the Macintosh world) with a few twists (see Figure 3). At the bottom of the screen are eject buttons for the floppy drive and for the CD, plus indicator lights for floppy,CD and hard disk activity, plus an activity light for an Ethernet NIC, if present.

Unfortunately, though Connectix could do nothing to prevent this, *Virtual PC's* Windows 95 is just as ill-behaved as Win95 on a PC. Sequences or programs that produce crashes or device driver errors on a PC cause *Virtual PC's* Win95 to crash as well. (This is actually a good thing; it shows just how faithful a reproduction that Connectix made.) However, all of the crashes have been confined to within Win95; the *Virtual PC* environment itself is extremely stable.

One interesting feature that Connectix has added is the ability to save the current state of the Win95 environment. This takes a snapshot of Win 95 and writes it to disk and then exits *Virtual PC*. Then, the next time that *Virtual PC* is started, the state file is read from disk and Windows is reloaded right where it was when it was previously

> "Connectix's integration of the Win95 environment onto the Macintosh desktop is absolutely superb."

shut down. This can cut 75% off of the load time of *Virtual PC*.

Since *Virtual PC* also fully emulates a SoundBlaster Pro card, *Virtual PC* fully supports audio within Win95 and from within Soundblaster-compliant applications.

Other Notes

Virtual PC claims that it has the ability to run other x86-based operating systems (Windows 3.11, for which there is also a separate version of *Virtual PC*, Windows NT, NeXT and Linux). These were all untested, though I admit getting NT running on a Macintosh would be quite a challenge—and quite slow.

Anyone who needs to have some sort of Windows 95 compatability but doesn't want to invest in a dedicated PC should seriously consider *Virtual PC*. While it's not a speed demon, it is sufficient for most tasks—assuming that you've got a powerful Macintosh. If your needs are more demanding than the occasional use for which *Virtual PC* is perfect, a PC card could be considered. ■

Virtual PC 1.0
Street price approx. $150.00
Connectix Corporation
2655 Campus Drive
San Mateo, CA 94403
http://www.connectix.com

Rick Zeman is a Certified Netware Administrator and has so much experience with Windows 95 that he comes home and hugs his Mac each and every night.

QuickTime 3.0
Apple's Enhanced Multimedia Tool Nears

By Dennis R. Dimick

QUICKTIME came along in 1991, but it's just now turning three. In early December Apple released a public "Developer Preview" version of its flagship multimedia tool, and early indications show this new QuickTime 3.0 offers many improvements in features and cross-platform compatibility. Expect to see a final release of QuickTime 3.0 in January, perhaps around the time of MacWorld Expo in San Francisco.

QuickTime has always been among Apple's premier technologies. As other "cool" Apple tools like OpenDoc and QuickDraw GX came and went, QuickTime has only gotten better. Now an industry standard for creating full-screen broadcast-quality video productions via desktop computer, QuickTime also has become a central player for creation and delivery of video and audio on the World Wide Web. Since its inception, QuickTime has been an important standard for CD-ROMs.

Among many enhancements, what QuickTime 3.0 offers is a variety of improved toolsets like built-in video transitions and filters, and support for a vast array of new graphics formats. Movie Player, Apple's free QuickTime editing program, also comes with new capabilities.

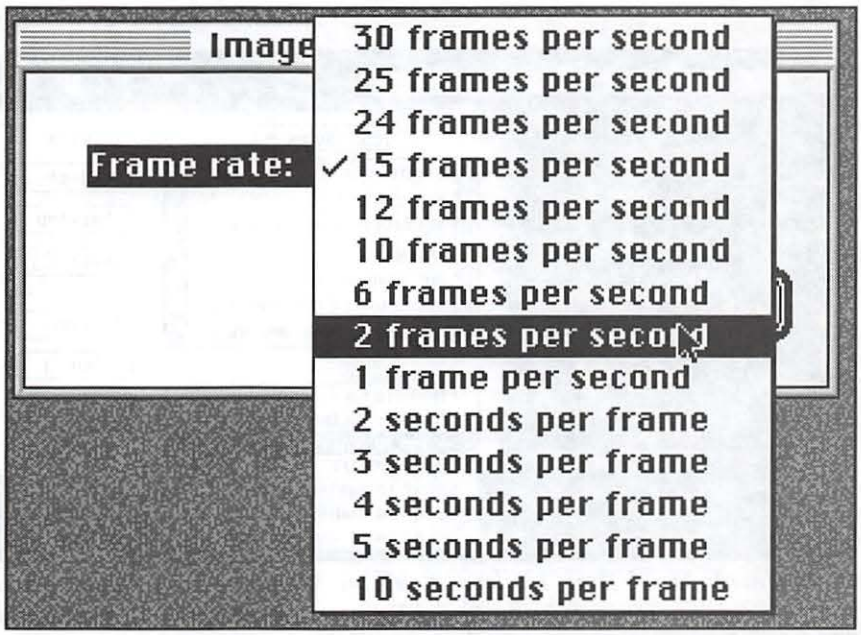
Windows computer users have been able to play QuickTime movies authored on Macs for a few years now. But now, they will have the same ability "under the hood" to create movies that Mac users have had for years. On first glance this may sound bad for the Mac, but not necessarily.

What this new-cross platform QuickTime ability means is that Microsoft's lame movie making tool "Video for Windows" (or AVI) could disappear as developers for both platforms standardize on Apple's superior QuickTime. Because the file types and feature sets in QuickTime on Windows and the Mac are now the same, this will make it easier for developers to create new QuickTime editing programs that work for everyone regardless of platform.

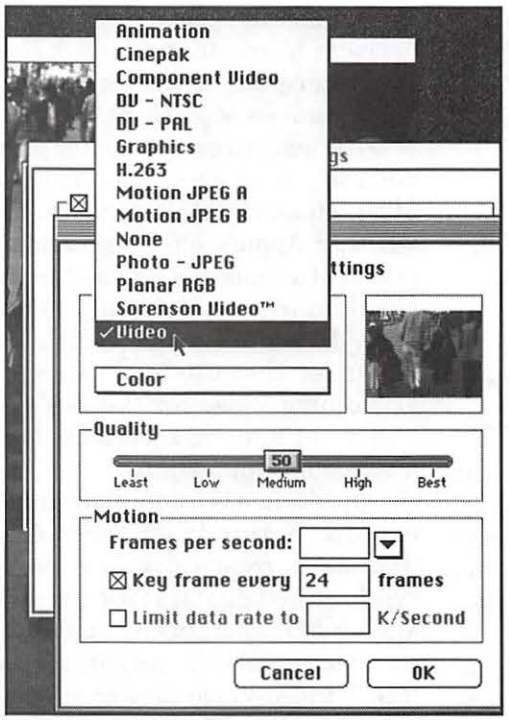
The mainstream computer press endlessly compares QuickTime to Microsoft and Intel alternatives, and whether Apple's offering stands a prayer of a chance in a Wintel-dominated future. For my money I don't care. If people want to drive a Chevrolet, they use Intel's Indeo or Microsoft's Video for Windows. If they want to drive a Porsche, they use Apple's QuickTime.

QuickTime is a superior, stable, mature, feature-laden technology that offers great value in creating synchronized digital motion media. Microsoft has nothing to compare in performance and adaptability. Intel's Indeo Video may offer some value but QuickTime is an open, diverse system that's widely used by people seeking multiple capabilities and wide compatibility.

QuickTime 3.0 offers enhanced 3D tools, VR tools, Web abilities, and support for more than two dozen file



Make a Slide Show: Movie Player now allows you to import a sequence of still images to create a slide show. This box shows the frame rate choices available when you are creating your movie.



What's New is Old: Though this compression dialog box looks like any other, what's new is that you can now select compression parameters like these from within Apple's Movie Player 3.0. This allows you to use this free program to make and compress movies without buying an editing program.

formats such as MPEG, vector graphics, alpha channels, MIDI, sprites, text tracks, multiple languages, CD-quality audio, IMA compression, uLaw, and more.

That said, I'll look at a few useful and interesting features available right now in QuickTime 3.0 and Movie Player. To take advantage of these new options, point your Web browser to *www.quicktime.apple.com*, download and install the QuickTime 3.0/Movie Player package. This stuff is free. This current "beta version" expires January 6, but Apple promises a newer beta or release version by that date.

Movies from Still Pictures

In the past if you wanted to create a movie from a selection of still photos such as Mac desktop screen shots, either you had to use an arcane tool called "Convert to Movie" from Apple, or you had to use a full-fledged editing program. No more. Movie Player 3.0 allows you to import an "Image Sequence," and you can choose how long each picture appears on screen: from 12 a second to one every 10 seconds.

> "Apple looks to make QuickTime appealing as an industry standard for both desktop computers and broadcasting where digital editing tools are used."

You create a folder of images (with same size dimensions) in graphics formats such as PICT, TIFF, or JPEG, and give them filenames including sequential numbers. Once the sequence has been imported, save this as a "self-contained" movie.

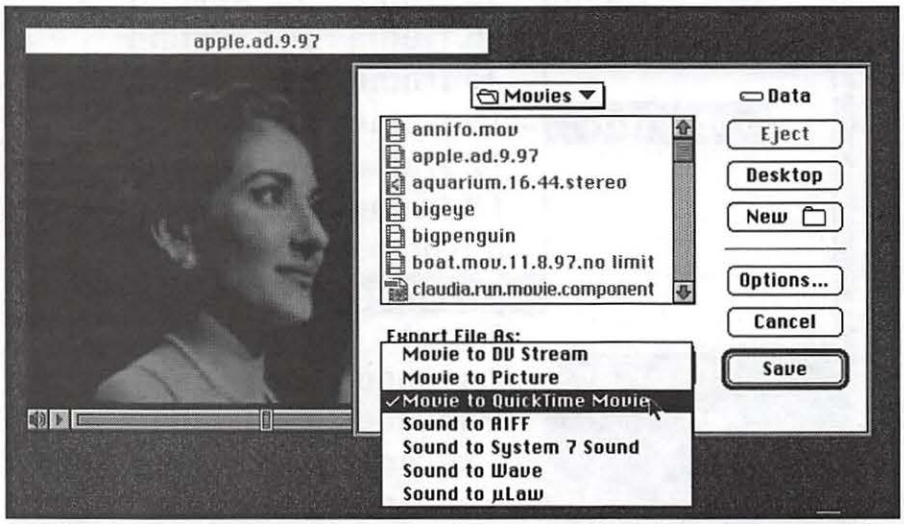
Movie Player Recompressions

Once you've saved your movie, you can use Movie Player 3.0 to recompress the slide-show movie into a different format or frame rate better suited for playback from a CD-ROM, or for posting to a web site. For that matter you can now use Movie Player to recompress any existing movie to a new format, frame rate, or audio quality. Previously you needed a (sometimes costly) editing program like Premiere to achieve this.

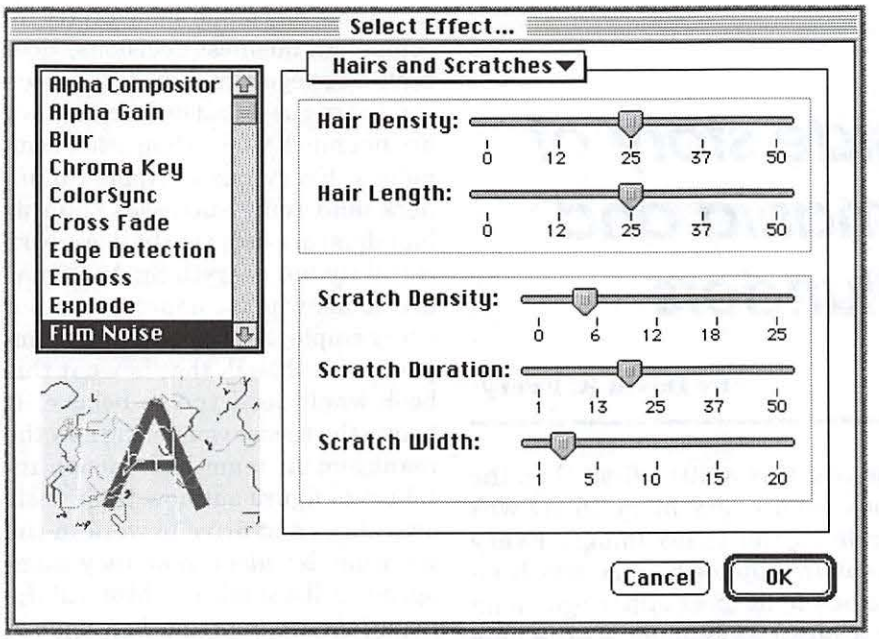
Video Filters and Effects

Say you've got a movie you want to make look like "old film" by adding dirt and hair, or you want to make it look like color film from the 1930s, or even black and white film. Perhaps you'd like to create an embossed look, sharpen the images, or change the color balance.

Now you can use QuickTime 3.0 and Movie Player to achieve these effects. Open an existing movie,



QuickTime to QuickTime: Under QuickTime 3.0 Movie Player also now allows you to export an existing QuickTime movie as a QuickTime movie. This new feature allows you to alter movie parameters such as frame rate, size, quality, or even add several video filters using a selection built-in to QuickTime.



That Old Time Look: Movie Player allows you to add video effects to movies under QuickTime 3.0 Here is a video effects selection box that will add hair and dirt to video, and you can choose parameters like hair size and length.

select the menu command "Export," and select format "QuickTime to QuickTime Movie." Once you've got that, select the "Options" button in the dialog box, and up comes another window that allows you to select filters, video compression options, frame rate, and audio format and quality. Select the filters, and save the movie.

Transitions

Apple redesigned QuickTime so it directly supports scene transitions like dissolves and wipes, this to establish tools inside QuickTime itself that mesh with SMPTE (Society of Motion Picture and Television Engineers) broadcast standards.

Apple looks to make QuickTime appealing as an industry standard for both desktop computers and broadcasting where digital editing tools are used. Right now the transitions feature set is still being completed. For end users to benefit from this change, existing and new QuickTime movie editing programs will have to be rewritten to take advantage of transitions.

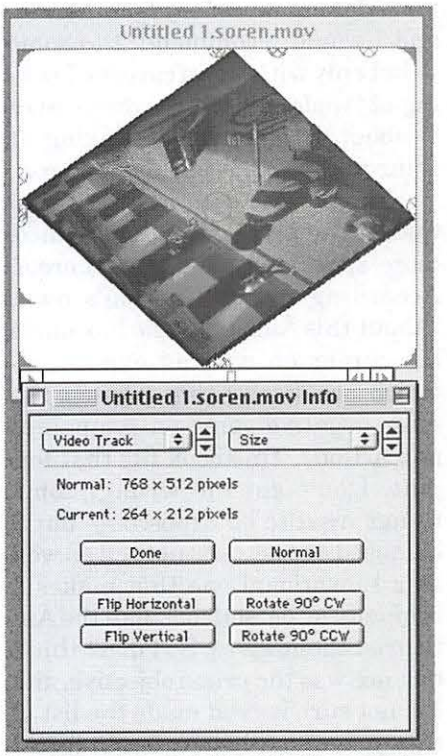
This means QuickTime itself will offer transitions on a system level, they will be standard across all computer platforms supporting QuickTime, and transitions will no longer depend on specific features built into individual QuickTime editing applications like Adobe Premiere, Paceworks' Object Dancer, or Avid Cinema. A movie created using these transitions will work seamlessly on a Mac, Windows or Silicon Graphics computer, for example, regardless of effects used.

Roll, Rotate and Flip

Movie Player now allows you to flip a movie 90 degrees, rotate the images, or skew them within the frame. You take advantage of this by using the "Get Info" menu item in Movie Player. Then select the video track and select the "Size" option. You can click the adjust button and then use the red handles that appear in the movie window to rotate, skew, and otherwise distort the video images. Why someone might want to do all this is beyond me, but at least you can now perform these manipulations where before you could not.

Once QuickTime 3.0 releases, look for many of the existing editing programs to release new versions to take advantage of QuickTime's added abilities. For the moment though, Apple's free Movie Player offers a significant glimpse at what the near future holds. ■

Pi member Dennis Dimick writes from Arlington, VA, and can be reached via email at: ddimick@aol.com



Backwards and Upside Down: Are you interested in making your movies play backwards? How about rotated onto the diagonal? You can now skew and flip movies using the size alteration features found in the "Get Info" menu of Movie Player.

Book Review

Apple: The Inside story of Intrigue, Egomania and Business Blunders

by David K. Every

Bias

OVERALL, let me say that the book was well written, and easy to read and had some interesting history. In fact it had a lot of history, and some unique details, and was obviously researched. It is a walk down memory lane for some, and offers new scenery for others — and I would recommend it to some — but only with lots of caveats. Looking at Apple through Carlton's eyes is about as objective as looking at yourself through a Carnival Mirror.

The book is definitely a "spun" tale — the problem is the balance, more specifically, the lack thereof. According to his Carlton's own, "About this Author" — he has made his career on writing exposés — which are stories that present the most negative spins on companies and actions. This book fits that format. Don't get me wrong, some things need to be exposed — but a balanced expose does not sell as well as a sensational one that makes a company or person look like the Antichrist themselves. So I don't think balance was the prime objective, and I'm not sure it even made the list of things to casually look for. In fact, I barely recognized many of the event that I remember happening from some of Carlton's descriptions.

The Title says it best "Apple: The Inside story of Intrigue, Egomania and Business Blunders". I think the title was written first, then the book (and every story in it) was made in the titles image. Every event in Apple's history has been molded to fit in as either egomania or a business blunder — the only intrigue is wondering how Apple survives based on all this incompetence. And almost every single thing Apple did was a blunder (according to Carlton's perspective:

- Apple was wrong for paying its employees much and having too many perks (and wasting money)
- Apple was wrong when they stopped [the perks] and employees started leaving
- Apple was wrong for hiring Scully, for keeping him as long as they did, for paying him as much as they did, and for getting rid of him (losing him)
- Apple was wrong for not focusing on the low end [machines], and then
- Apple was wrong when they did (because the customers wanted more high-end machines)
- Apple was wrong for innovating (and not following others that were following them), and
- they were also wrong for not innovating more

I don't see how anyone or any company could look good under Carlton's microscope of failure.

Apple has made some pretty incompetent business decisions, does have huge ego's, and there has been some intrigue — but on balance they are not much worse than other companies. Every one of Apple's blunders (and some successes spun as blunders) are listed in the book. Now certainly not everything Apple has ever done was incompetent (or not every employee of Apple was incompetent) — though that is what this book would lead you to believe. It leaves the reader wondering how the management team had enough intellect to figure out how to tie their own shoes and drive to work in the morning, let alone how they managed to sell a single machine. All the negatives are in the book — none of the positives.

The fact that most of the people bashed in this book as incompetent have gone on to have stellar careers, or create great products (either at Apple or elsewhere) seems to contradict at least some of the premises in the book. The fact that Apple grew from a bedroom operation into a $12+ billion-a-year industry seems to belie that premise. Even specific decisions (that Apple or individuals get bashed for in this book) have been successful (either at Apple or elsewhere) — so it seems many decisions were only wrong because it was Apple. So I think this book is about as unbiased as the *Wall Street Journal*'s reporting on Apple has been (which is not very unbiased).

It is easy to look at something in hindsight and say, "that was stupid" — but of course it is much harder in context to know (at the time) what is the right decision. To write about a subject objectively, one should address BOTH sides of the issue — and not just tell the part of the story that backs your views. But that concept doesn't seem to have crossed Carlton's mind — For example:

• Carlton describes an Apple project (Aquarian) to create their own Microprocessor in the mid-late 80's. He does nothing but ridicule Apple and attacks Apple for considering it — claiming they didn't have enough resources to pull it off, etc. During the same time (and earlier) SGI (MIPS) and SUN (both far smaller companies than Apple) had created their own processors, and were doing quite well with them. So while I tend to agree that Apple went a little overboard trying to tackle processor design, and I agree that it was a loss of focus, it is not nearly as ridiculous as presented. Balance would have been to point out facts that don't agree with your [the author's] conclusion (like the SPARC and MIPS processors done in the same era by smaller companies) — not just facts that make Apple look stupid. He could have just told the story, and let the reader make up his own mind — but Carlton instead offers many jabs and prods on how stupid Apple was.

• Apple's failure of the "Aquarian" Processor was not in trying to do a processor (as other companies had done), it was not understanding the scope of the problem and failing to commit enough resources to do it right (or bring in the needed expertise, or to partner with others with more experience). If they had known the scope of the problem then they may have wisely decided not to try — but Apple tried to do too much innovation for our industry. That is a fault — but not the fault the book attacks. The book doesn't discuss the technical merits, the marketing advantages that could have been achieved, or the other benefits any of the failed projects may have achieved — only that they failed and implies that everyone at Apple should be embarrassed for trying to make a difference.

There are dozens of examples like the one above — where the truth is not nearly as simply as Carlton describes. Many of the issues discussed were mistakes by Apple — but often not for the reasons described, and certainly not nearly to the degrees described.

Technology

One of the biggest problems with the book is that I don't think Carlton understands computers or technology (at least not as well as he thinks he does). To be fair, engineers almost never think that others are competent enough to discuss technology (especially when they make mistakes) — but there are many technical errors, omissions, and flaws. I started dog-earing pages that had some error, omission or bias — and the book ended up far thicker than when I started (I had to double dog-ear many pages because of errors on both sides of a page). Carlton may have been trying to brush over technical explanations with synopses — but the synopses he offers are so bad that it makes me think he doesn't understand the concepts very well at all. Even right up to the end of the book, every few pages there is some error or another. Whether he is saying that the Japanese are all Buddhists (they are 76% Shinto according to my Atlas, though Shinto and Buddhism have blended a bit), through every technical issue he discusses (like describing RISC as faster "because it has fewer instructions."?! It is faster because it devotes less resources interpreting complex instructions, and is more focused on making the instructions it has go faster.).

The book is interesting because of the people, politics and the history — which I suspect is what Carlton understands well. Whenever he gets into technical issues he makes mistakes, or oversimplifies to the point of being worthless. But as for a character-story it is interesting — even if it is somewhat extreme. I've met some of the people discussed, and did enjoy the extra insights into events and discussions — but I think you are left with caricatures of what each person is like — not wholly inaccurate, just their worst traits magnified, and few of their positives discussed.

I imagine Jim Carlton would describe Mother Theresa as "a short, socialist, religious zealot with bad fashion sense."

Apple as a company has many flaws, and many "characters" in their management teams. But all companies have issues, problems and failures. This whole book is about characterizing everything Apple did in the worst light. Carlton does take a few jabs at Bill Gates — but also spins myths and other errors about him as well (to try to contrast Apple's stupidity with Microsoft's genius). Other times Carlton pretends that "poor" Gates, who was deserving of sainthood, was shanghaied and double-crossed by the evil Apple.

Continuity

One of the most subtle errors in the book, is the lack of continuity. Each product is seen as separate from all the rest. But engineering is about evolution and building on predecessors. Products evolve, and in engineering, many products are just stepping stones to successors. Calling a product a failure because of its sales, is not always realistic, because these products are often enablers to other products. You can't get from point A to point B without traveling in between.

For example, Multiplan (by Microsoft) was only out a few months for the Mac, it was also a tad late and a bit buggy, Microsoft quickly moved to Excel (also late and buggy), which far outsold Multiplan.

Does that mean Multiplan was a failure? If it had been an Apple product, I guarantee that Carlton would have portrayed it as a failure.

Newton is seen as a failure, because the first Newtons did not achieve the hype — ignore the 5 generations after that, and all the awards. He tears apart Jaguar (an early RISC machine) and the Hurricane (a later RISC machine), but then ignores that the Hurricane built on the Jaguar (to some extent) and the Hurricane eventually became the PowerMacs (one of Apple's great triumphs). It is like looking at all of man's ancestors and calling them failures, because they died out — but we couldn't have come about without evolving from them.

The whole book is filled with blotchy, disjointed tales, to spin Apple and the technology in the worst light, with little to tie them together — even though MOST are intertwined. No company could look good in this light. DOS would be a failure, because it was supplanted. Trains would be seen as useless scrap iron, because they have been mostly replaced by truck and air freight. Isaac Newton would be a moron, because Einstein's theories replaced (extended) many of Newton's.

If readers don't know how one of the story evolved into another part, then the bias is much worse. Yes, Apple got somewhat jerky towards Microsoft and Bill Gates, and sued him at many opportunities (Apple should have probably been more mature about it) — but this is after a 10 year history of Bill Gates pulling products (or threatening to) and stealing technology, making slimy deals, and doing other things that were not exactly "cool" or fair to Apple. Without that frame of reference, the story is spun that Apple is the provocateur, attacking "poor Microsoft." Hitting back is not always the right thing to do, but ignoring that they were hit first (repeatedly) is not realistic or honest — even when we don't always agree with Apple's responses.

Conclusion

So you may chose to read the book, I am actually glad that I did — it was a refresher of many Apple projects that I remember hearing about (or got to see), and does have some new stories. Most of the stories are not untrue — just half-true or one-sided — so you should take the book with a grain of salt ... and make it a rather large one. There are technical errors (many of them), but most don't destroy the point of the story — they just don't give the reader the full picture either. The stories also have no continuity and flow, and so almost every product is seen as a failure, instead of a temporary success or stepping stone that leads to the next successful product.

I will probably be seen as a zealot by some, for not agreeing with revisionist history or oversimplifications. However, I can not see Apple as wrong for everything they did (because of their failures), nor Microsoft as always right (because of their successes). Unfortunately, I can not see the world as simple and as "black and white" as many others do. Issues that are very complex can be OVERsimplified — but that simplification does not lead to true understanding. In many ways I am saddened by the fact that this book could have been really good, and really looked into what happened. Instead it is more a rationalization for Carlton (and the *Wall Street Journal*'s) bias against Apple.

Picking Nits: Some of my many specific complaints with the book.

I had so many problems with the book, that I started dog-earing pages. My book grew rather large, and looks pretty tattered, even though I grew bored with doing this. Here are a few of the specific complaints I had with the book, and only with the first few chapters (or this would become a book in itself).

• Chapter 1: In the Beginning — this chapter is all about Apple's creation. Jobs, Woz and Markulla.

Page 9 discussed the fallacy that Paul Allen and Bill Gates "came up with a programming language" that made the Altair usable, and later created Microsoft. I realize that Carlton was trying to edit for brevity — but this is like saying that Henry Ford created the car and the internal combustion engine. Gates and Allen implemented a language that had been around for a decade, developed it mostly on stolen computer time (with some "borrowed" code), and used other questionable practices — then they charged as much for "language" as it cost for the computer itself. This is not "coming up" with a language. But much of the book just perpetuates myths instead of really discussing the issues, or offering any new insights. There is no depth in the issues presented, no value, no balance, and little accuracy (usually because of the oversimplifications) — just a sensationalized one-sided set of half-truths, meant to fit a spin.

• Chapter 2: The Glory Years — the implication of this section seems to be that everything Apple ever did right was in the 70's (or early 80's) — ignoring all that they have done right since then (and ignoring much of what they did wrong early on).

Page 25 tells the Myth of Paul Brainderd (PageMaker) as the start of Desktop Publishing. PageMaker had an impact because it was more successful than it's predecessors like Ready-Set-Go — but we should not ignore that other products were on the market first (and other were arguably superior). So

another opportunity to teach people the truth is passed up for the easier "myth".

There are also lots of "little" details, like on the same page (25) where Carlton says, "[Dot Matrix printers] generated the same clackety-clack sound as an old-fashioned typewriter," Maybe the author has never been around both, maybe he was just lazy — but he is wrong. Some dot matrix printers made a loud noise — but it is (was) a "buzz" noise that was distinctive and nothing like a typewriter. Other Dot-Matrix printers were "thermal transfer" and almost completely quiet. It is a very minor point, but one of a hundred such mistakes that make me believe he is either ignorant of the subjects, or willing to take "literary license" to the extreme. Why mention it, if you are only going to misstate something (it wasn't even relevant to the point)?

Page 27 discusses Bill Gates lack of charisma. While Bill Gates does have a lot of quirks, and a lack of charisma when it comes to dealing with most human-beings — engineers are a different species. Many engineers were drawn to him like moths to a flame. Bill Gates was nicknamed "the Demo-God" because he could demonstrate the most buggy demonstration program, and convince you that it would feed your dog, mow your lawn, and was almost ready to ship (when it was barely started). That is certainly a form of charisma, and Gates high degree of intelligence is also admired in many circles. He is not the genius he is made out to be by the press — heck, I could have made quite a successful company if you loaned me IBM's name and a few billion in R&D like Gates had, others probably could have been more successful than he was — but Gates is still a sharp guy, and engineers listen to that. It was just too easy for Carlton to go for a cheap shot, use clichés or go to extremes, rather than to offer any balance. So Gates is just a poor "deer in the headlights" — when the truth is more like a panther in the spotlight.

The story then goes on to talk about Gates securing the language market including Basic, Cobol and Pascal. As I remember it, Gates never got control of languages (other than Basic) and was more interested in Apps market during this time. Microsofts Pascal, Cobol and Fortran were never real successes. It wasn't until later (late 80's and early 90's), that they came back to Visual Basic, C and C++ market and made the big difference there. Microsoft especially made a difference when they copied Apple's MacApp Framework (and Borlands OWL, which was a copy of Apple's MacApp Framework) and created MFC and Visual C++. But that was nearly a decade after what he was discussing.

• **Chapter 3 :** The Licensing Debate — the implication of this is very annoying. It is that Apple should have licensed in the 80's. While there are some elements of truth to that points, it is not nearly as clear cut as people today think (and no where near what Carlton implies). This chapter does nothing to discuss the strengths and weaknesses of licensing, it only portrays Apple as foolish and stupid for not doing so.

Page 39 describes an Operating System — very poorly. Computers are not paralyzed without OS's. An OS just gives program writers a big head start (without an OS, every program would have to include the functions of an OS — and would be bigger and probably more buggy). Not a big point, but it could have been explained far better.

The opening of this chapter describes Intel as "standard" and Motorola as "non-standard". The problem is that this is not clear — certainly not at the time we are discussing. Motorola was a "standard" maker of chips, and had far better processors than Intel did. IBM used the Intel processors because they were NOT the standard — as many companies were using Motorola processors (if not more than Intel). IBM chose Intel because they could buy a piece of the company cheap, because the processors were worse than Motorola's — and so less of a threat to IBM's lucrative mini-computer and mainframe computers which is where they made their money. Intel only became standard because of IBM's name, and later because of the volume of clones that used them. When Apple and IBM were choosing processors for their machines (1980/81 time frame) — Apple made the choice for the better processor, IBM chose the worse one — and Intel became a standard only because of the IBM name (and far after Apple's choice of processors).

The chapter then has a letter from Gates to Apple about the advantages of cloning, but fails to point out ANY of the real issues or balance.

1. Apple was roughly a $2 billion company — Microsoft was a $25 million company. It was around the same time that Microsoft (Gates) threatened to pull all Apps from the Mac if Apple didn't cancel their MacBasic product (which was superior to Microsofts), and tried to force Apple to license some the Mac functions of the MacOS to Microsoft for Windows 1.0. Gates tantrums were well known. Microsoft was being a thorough pain in the ass, and doing things that was in THEIR best interests, not Apples.

2. MacOS was successful because Apple was in control of the hardware, and could integrate hardware and software — for a better

user experience. Then Gates says to Apple (after fighting with them on other issues), "Hey, why don't you license — and we'll handle it for you for a piece of your pie". Or in other words, "Why don't you give us some of your market so you can be big like us" — when Apple was 8 times their size.

3. Apple had just been burned by clones eating their market in the Apple][era.

4. Apple was getting slammed in the press as "doomed, because the Mac is a toy".

5. Then there were the practical issues like; not having the infrastructure to license, that clones were not yet that popular in the PC market, and IBM was being seriously hurt by cloning, and more.

6. Then you have the issue that no matter what, if Apple had started cloning, they would have LOST money or growth (and R&D) for at least a few years (and in the computer industry this can mean your death).

Cloning was certainly not in Apple's stockholders (or boards) best interests, at least short term (like anything under 5 years). Long term cloning/licensing MAY have paid off (probably would have), but it was not that clear then, and is not even that clear today. Is IBM better off for cloning? Not sure — the PC market is, but not necessarily IBM. There is little to think Apple would be different. It would have been in the Macs best interest — but in Apples? Carlton's review of cloning/licensing has no balance, and are no counter-points, Apple is just portrayed as stupid — that is not objectivity.

There are many other little nits in this chapter. Carlton writes about Digital Research (without pointing out all of the evil things Microsoft did to them — which eventually drove the founder, Gary Kildall, to suicide). Carlton refers to DR (Digital Research) as "Digital" — everyone in the industry uses "Digital" as the abbreviation for "Digital Equipment" (DEC), a far older and bigger company than Digital Research.

Carlton makes some jabs that Mac technology "originated" with Xerox — while not completely untrue this is like saying that the 747 originate with Zug the caveman, the official inventor of the wheel (because everyone knows that 747's have wheels). The issues are far more complex than expressed, and there is a big difference between Apple taking a few rough concepts from Xerox (concepts that existed before Xerox PARC as well, which the author fails to point out), and Microsofts Windows which stole code and architectural design from the Mac — but I doubt Carlton even knows these issues, or if he does, the truth doesn't fit the format.

• **Chapter 4:** A Noble Village — all about Sculley's management, and those he chose as leaders (and the politics).

I have yet to work in a big company that doesn't have back-stabbing and politics. Nor have I met any human that doesn't have "quirks" that can exaggerated into making them into the motley fool. Carlton does give us some insights into the politics, but the rest of his book has been so extremely one-sided that I have to question the accuracy of what is being said. I imagine the events and concepts are true to a point (like much of the book), just so exaggerated as to be barely recognizable. Of course I don't know the people discussed (or most of the motivations behind the events), so it would be stupid of me to comment further. (See, I can get quiet and humble — when I don't know what I am talking about).

• **Chapter 5:** Engineering Morass — This section is about Apple's corporate culture. Much of the stories in here are again true — in that Apple was anarchy and fiefdoms. But Carlton implies that "Engineers were in control". The truth is that no one was in control. Engineers are almost uncontrollable as it is, and without corporate focus (and a firm hand) the engineers did not produce focused products. Apple did (does) have lots of problems. But that doesn't change the fact that Carlton and the book are biased.

Carlton describes a few of Apple's failures — but none of the successes. Carlton also describes everything that was questionable as a failure. This is where he discusses the Aquarian Processor, but doesn't describe that others succeeded doing the same thing.

Carlton goes into the Newton and describes it as a failure. Commercially the Newton has not achieved its goals — but as far as making a difference in the lives of users, it has been a major success. Ask a regular Newton user what they think about the product and "failure" is seldom in the vernacular. It has also lead the industry (and progress) - with many trying to mimic it today [Apple would have been less likely to develop the successful eMates without first having created Newtons]. Apple was overly ambitious, and was too aggressive in their predictions and trying to make a positive difference in our lives — but the concepts were 100% valid, and later usually proven to be right — the thing holding Apple back was the technology and the market acceptance (that goes along with being an innovator). Market acceptance has more to do with

Continued on page 52

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

Name	Telephone	Heading	Subjects
Apple General			
Bob Sherman	305-944-2111	Communications	DBMaster
Ron Evry	703-490-1534	Hypermedia	Hyperstudio
Bernie Benson	301-951-5294	Miscellaneous	IIe Card for the LC
Harvey Levin	301-299-9380	Programming	Apple Script
Eric Sheard	908-782-6492	Spreadsheets	Advanced Visicalc (eves) 908-782-6492 (days) -2242
Allan Griff	301-654-1515	Spreadsheets	Apple Works
Eric Sheard	908-782-6492	Spreadsheets	Visicalc (eves) 908-782-6492 (days) -2242
Ken DeVito	703-960-0786	Telecomm	
Apple //			
Bernie Benson	301-951-5294	Accounting	Apple SSC (Super Serial Card)
Neil Laubenthal	703-691-1360	Apple IIGS	General
Allan Griff	301-654-1515	Apple Works	General
Ken DeVito	703-960-0786	Apple Works	General
Paul Campbell	313-255-6497	Apple Works	General
Ray Settle	410-647-9192	Apple Works	General
Allan Griff	301-654-1515	AppleWorks	General
Ken DeVito	703-960-0786	Beagle Buddies	
W. T. Cook	410-995-0352	Beagle Buddies	
Don Avery	202-362-1783	Beagle Buddies	
Dale Smith	301-762-5158	Communications	
Allan Griff	301-654-1515	Database	Apple Works
Morgan Jopling	410-721-7874	Database	Apple Works
Milt Goldsamt	301-649-2768	Database	Apple Works
Guy Durant	202-575-0414	Epson Printers	
Ron Evry	703-490-1534	General	
Harold Polk	301-662-6399	General	
Ken DeVito	703-960-0786	General	
Dave Jernigan	540-822-5137	Graphics	Print Shop (before 9 PM)
Joan Jernigan	540-822-5137	Graphics	Print Shop (before 9 PM)
Guy Durant	202-575-0414	Hard Drives	
Guy Durant	202-575-0414	Hardware	
Ron Evry	703-490-1534	Hypermedia	Hyperstudio
Bob Sherman	305-944-2111	Laser Printing	
Dave Jernigan	540-822-5137	Operating Systems	(before 9 PM)
Joan Jernigan	540-822-5137	Operating Systems	(before 9 PM)
Joan Jernigan	540-822-5137	Word Processing	Apple Works II (before 9 PM)
Ron Evry	703-490-1534	Word Processing	AppleWriter
Allan Griff	301-654-1515	Word Processing	
Apple // e			
Morgan Jopling	410-721-7874	Upgrade	
Apple // GS			
Rich Sanders	703-450-4371	Drawing/Graphics	Deluxe Paint II
Dick Grosbier	301-898-5461	General	
Eric Grupp	410-315-8331	General	
Seth Mize	410-766-1154	General	
Rich Sanders	703-450-4371	Word Processing	Multiscribe GS
Apple // GS			
Ken Carter	301-834-6516	General	
Apple ///			
Dave Ottalini	301-681-6136	General	
Paul Campbell	313-255-6497	General	
Seth Mize	410-766-1154	General	
Robert Sambolin	787-841-1641	General Repair	
Steve Truax	304-263-5749	Integ. Packages	3 Easy Pieces
Dave Jernigan	540-822-5137	Integ. Packages	3 Easy Pieces (before 9 PM)
Paul Campbell	313-255-6497	Repairs	
Dave Jernigan	540-822-5137		3.5" Super Drive (before 9 PM)
Dave Jernigan	540-822-5137		SCSI Drives (before 9 PM)
Steve Truax	304-263-5749		Stemspeller
Dave Jernigan	540-822-5137		Stemspeller (before 9 PM)

Name	Telephone	Heading	Subjects
Carey McGleish	313-332-8836		Word Juggler (evenings)
Cross Platform			
Ken DeVito	703-960-0786	Transfers	MS/DOS-Apple-Mac
IBM/Compatibles			
Louis Saunders	301-648-7332	Hardware	Troubleshooting & Repair
Etana Finkler	301-891-2821	Illustration	General best to call 9 PM to Midnight
Louis Saunders	301-648-7332	Network	Connectivity
Louis Saunders	301-648-7332	Printers	Connectivity
Tom Cavanaugh	301-627-8889	Printers	General
Louis Saunders	301-648-7332	Printers	Troubleshooting & Repair
Internet			
Dan White	301-843-3287	General	
Walt Francis	202-966-5742	General	
Will DeKroney	410-626-7716	General	
Curt Harpold	301-762-0887	Programming	JAVA
Craig Contardi	410-674-2752	World Wide Web	Netscape Navigator
Seth Mize	410-766-1154	World Wide Web	Sailor
Jaque Davison	703-644-7354	World Wide Web	Web Site Builder
Macintosh			
Nancy Seferian	202-333-0126	Art & Video	General
Robert Sambolin	787-841-1641		General
John Enberg	301-262-9347 or 301-604-8348		Basics
Tho. Snowberger	410-757-4656	Contact Managers	Now Contact/UTD
Mort Greene	703-522-8743	Database	File Maker Pro
Tom Parrish	301-654-8784	Database	File Maker Pro
Bill Waring	410-647-5605	Database	Filemaker Pro
Bob Wilbur	703-426-0556	Database	Filemaker Pro
Rick Shaddock	202-321-2110	Database	FoxPro
Harvey Levin	301-299-9380	Database	Helix
Bob Wilbur	703-426-0556	Database	Helix Express
Mort Greene	703-522-8743	Database	MS-File
Tom Parrish	301-654-8784	Database	Overvue
Elizabeth Mangan	703-750-2710	Database	Pro-Cite
Dave Weikert	301-963-0063	Databases	Panorama
Bob Wilbur	703-426-0556	Database	General
Blake Lange	301-942-9180	Desk Top Pub.	PageMaker
Mort Greene	703-522-8743	Desk Top Pub.	PageMaker
Eric Grupp	410-315-8331	Desk Top Pub.	Quark Xpress
Paul Schlosser	301-831-9166	Desk Top Pub.	Quark Xpress
Ron Johnson	410-315-8764	Drawing/Graphics	Adobe Illustrator 3.0
Nancy Seferian	202-333-0126	Drawing/Graphics	Aldus Freehand
Tom Parrish	301-654-8784	Drawing/Graphics	Canvas
Bob Wilbur	703-426-0556	Drawing/Graphics	Canvas
Lloyd Olson	410-544-1087	Drawing/Graphics	ClarisDraw
Etana Finkler	301-891-2821	Drawing/Graphics	Freehand (best to call 9 PM to Midnight)
Nancy Seferian	202-333-0126	Drawing/Graphics	General
Neil Laubenthal	703-691-1360	Drawing/Graphics	General
Etana Finkler	301-891-2821	Drawing/Graphics	General (best to call 9 PM to Midnight)
Bob Wilbur	703-426-0556	Drawing	General
Blake Lange	301-942-9180	Drawing/Graphics	Illustrator
Etana Finkler	301-891-2821	Drawing/Graphics	Illustrator (best to call 9 PM to Midnight)
Tom Parrish	301-654-8784	Drawing/Graphics	MacDraw
Mort Greene	703-522-8743	Drawing/Graphics	Photoshop
Blake Lange	301-942-9180	Drawing/Graphics	Photoshop
Mort Greene	703-522-8743	Drawing/Graphics	SuperPaint 2.0
Dave Jernigan	540-822-5137	Foreign Languages	FlashWorks (before 9 PM)
Dave Jernigan	540-822-5137	Foreign Languages	Greek Tutor (before 9 PM)
Dave Jernigan	540-822-5137	Foreign Languages	Hebrew Tutor (before 9 PM)
Dave Jernigan	540-822-5137	General	(before 9 PM)

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

January 1998

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Graphics SIG (call)	Genealogy SIG (call)		1 Columbia Slice	2	3
4	5 *Intro to the Mac–Part 1*	Clinic 6	7	8 Stock SIG	9	10 Frederick Slice
11	12 *Intro to the Mac–Part 2*	Clinic 13	14 WAP BoD	15	16	17 Annapolis Slice
18	19 *Intermed. Mac–Part 1*	Clinic 20	21 Excel SIG	22 Women's SIG	23	NoVa ComCol WAP General Meeting 24
25	26 *Intermed. Mac–Part 2*	Clinic 27	28 Retired SIG	29	30	31

February 1998

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 *Intro to the Mac–Part 1*	Clinic 3	4	5 Columbia Slice	6	7
8	9 *Intro to the Mac–Part 2*	Clinic 10	11 WAP BoD	12 Stock SIG	13	14 Frederick Slice
15	16 *Intermed. Mac–Part 1*	Clinic 17	18 Excel SIG	19	20	21 Annapolis Slice
22	23 *Intermed. Mac–Part 2*	Clinic 24	25 Retired SIG	26	27	NoVa ComCol WAP General Meeting 28
	GraphicArts SIG (call)	Genealogy SIG (call)				

***** See pages 54-59 for all the tutorials available in January and February***

UPCOMING GENERAL MEETING DATES—

JANUARY 24, FEBRUARY 28, MARCH 28

Meeting Notices

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

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

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

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

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

DataBases (Mac) SIG
Volunteers needed to restart this SIG

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

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

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

Genealogy SIG
2nd Tuesday of the month; 10 AM to noon; WAP office.

Graphic Arts SIG
Call office for future details.

Mac Programmers' SIG
Volunteers needed to restart this SIG

Newton Developers' SIG
Volunteer needed

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

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

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

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

Telecomm SIG
Call SIG chair for times & locations.

WAP Garage Sale—June and December

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

Women's SIG
Upcoming 1998 meetings: January 22, March 26. At the Pi Office at 6:00 PM dinner ($2) followed by 7:00 PM meeting/presentation. Call SIG chair, Kathleen Charters at 410-730-4658 for details.

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

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

Name	Telephone	Heading	Subjects
Joan Jernigan	540-822-5137	General	(before 9 PM)
Dan White	301-843-3287	General	
Dick Grosbier	301-898-5461	General	
Russell Robinson	301-739-6030	General	
Neil Laubenthal	703-691-1360	General	
Tom Cavanaugh	301-627-8889	General	
Tom DeMay	410-461-1798	General	
Tom Witte	703-683-5871	General	
Bob Wilbur	703-426-0556	General	
Louis Saunders	301-648-7332	Hardware	Troubleshooting & Repair
Joan Jernigan	540-822-5137	Hypermedia	HyperStudio (before 9 PM)
Jerry Iler	410-987-5432	IIsi	General
Bill Geiger	703-237-3614	Integ. Packages	ClarisWorks
Sandy Kowalczuk	410-268-3149	Integ. Packages	ClarisWorks
Ray Settle	410-647-9192	Integ. Packages	Clarisworks
Joan Jernigan	540-822-5137	Integ. Packages	ClarisWorks (before 9 PM)
Jim Ritz	301-770-1405	Integ. Packages	MSWorks
Ray Settle	410-647-9192	Integ. Packages	MSWorks
Tim Childers	301-997-9317	Integ. Packages	MSWorks
Dave Weikert	301-963-0063	MacDisketeria	Disk Library
Dave Jernigan	540-822-5137	Mail List Manager	My Mail List Manager (before 9 PM)
Mort Greene	703-522-8743	Miscellaneous	File Transfer & Backfax
Sandy Kowalczuk	410-268-3149	Miscellaneous	HyperCard
Blake Lange	301-942-9180	Miscellaneous	Hypercard
Tom Witte	703-683-5871	Miscellaneous	Hypertalk
Jeff Dillon	301-434-0405	Miscellaneous	MX-80
Dave Jernigan	540-822-5137	Miscellaneous	Online Bible Mac
Dave Jernigan	540-822-5137	Miscellaneous	Soft Windows Mac
Rick Chapman	301-989-9708	Miscellaneous	Hypercard
Tom Witte	703-683-5871	Miscellaneous	Hypercard
Peter Combes	301-445-3930	Multi Media	Director
Peter Combes	301-445-3930	Multi Media	Language
Mort Greene	703-522-8743	Multimedia	Image Studio
Mort Greene	703-522-8743	Multimedia	Macro Mind Director
Stuart Bonwit	301-598-2510	Multimedia	Quicktime
Tom Witte	703-683-5871	Multimedia	Quicktime
Mort Greene	703-522-8743	Multimedia	Video Works
Jerry Iler	410-987-5432	Older Claris	General
Jerry Iler	410-987-5432	PB180C	General
Lester Morcerf	410-987-0685	Performa 550	General
Tho. Snowberger	410-757-4656	Performa System	General
Rick Shaddock	202-321-2110	Pers.Contact Mgr.	ACT
Mel Benson	410-647-6873	Personal Finance	Dollars & Sense
Bill Geiger	703-237-3614	Personal Finance	Manage Your Money
Mel Benson	410-647-6873	Personal Finance	Manage Your Money
Clarence Goldberg	410-263-5189	Personal Finance	Quicken
Henry Miller-Jones	703-478-3721	Personal Finance	Quicken
Bob Wilbur	703-426-0556	Personal Finance	Quicken
Louis Saunders	301-648-7332	Printers	Connectivity
Louis Saunders	301-648-7332	Printers	Troubleshooting & Repair
Tom Cavanaugh	301-627-8889	Printers	General
Walt Francis	202-966-5742	Printers	General
Michael Hartman	301-942-3717	Programming	C
Michael Hartman	301-942-3717	Programming	General
Harry Erwin	703-758-9660	Programming	General (e-mail at herwin@gmu.edu)
Michael Hartman	301-942-3717	Programming	Pascal
Charles Schindler	410-437-4624	Spreadsheets	Excel
Lloyd Olson	410-544-1087	Spreadsheets	Excel
Walt Francis	202-966-5742	Spreadsheets	General
Roger Burt	301-424-6927	Spreadsheet/Chart	ClarisWorks
Bob Wilbur	703-426-0556	Spreadsheet	ClarisWorks
Mark Pankin	703-524-0937	Spreadsheet/Chart	Excel
Dick Byrd	703-978-3440	Spreadsheet/Chart	Excel
Mort Greene	703-522-8743	Spreadsheet/Chart	Excel
Rick Shaddock	202-321-2110	Spreadsheet/Chart	Excel
Tom Cavanaugh	301-627-8889	Spreadsheet/Chart	Excel
Bill Waring	410-647-5605	System	General Mac Help
Lloyd Olson	410-544-1087	System	Mac OS
Neil Laubenthal	703-691-1360	System	Mac OS Modems General
Bernie Benson	301-951-5294	Telecomm.	Modems Hayes Smartmodem
Jaque Davison	703-644-7354	Virtual Reality	Alien Skin Texture Shop
Jaque Davison	703-644-7354	Virtual Reality	Bryce 2
Jaque Davison	703-644-7354	Virtual Reality	Specular Logomotion
Jaque Davison	703-644-7354	Virtual Reality	Virtus - 3-D
Jaque Davison	703-644-7354	Virtual Reality	Virtus Walkthrough Pro
Tom Parrish	301-654-8784	Word Processing	Think Tank-More
Dave Jernigan	540-822-5137	Word Processing	Word Perfect (before 9 PM)
Charles Schindler	410-437-4624	Word Processing	WordPerfect
Eric Grupp	410-315-8331	Word Processing	WordPerfect
Bob Wilbur	703-426-0556	Word Processing	WordPerfect
Walt Francis	202-966-5742	Word Processing	General
Tim Childers	301-997-9317	Word Processing	Hebrew
Tom Cavanaugh	301-627-8889	Word Processing	MS Word
Harris Silverstone	410-435-3582	Word Processing	MS Word
Joan Jernigan	540-822-5137	Word Processors	Claris Works (before 9 PM)
Dave Jernigan	540-822-5137	Word Processors	Word Perfect
Macintosh & Apple			
Ginny Spevak	202-244-8644	Miscellaneous	Dvorak Keyboard
Mike Spevak	202-244-8644	Miscellaneous	Dvorak Keyboard
Bob Sherman	305-944-2111	Telecomm.	General
Dale Smith	301-762-5158	Telecomm.	General
John Barnes	301-652-0667	Telecom	AOL
Dale Smith	301-762-5158	Telecomm.	TCS
David Harris	202-966-6583	Telecomm.	TCS
Nancy Seferian	202-333-0126	Telecomm.	TCS
Paul Schlosser	301-831-9166	Telecomm.	TCS
Networking			
Louis Saunders	301-648-7332	Mac	Connectivity
Douglas Ferris	301-924-4180	Networking	Novel
Douglas Ferris	301-924-4180	Networking	Windows
Dave Weikert	301-963-0061	Networking	Mac/AppleShare

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

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

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

Telecommunications Help Sheet

A quick reference sheet for use while on the TCS

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

Main Menu

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

File Transfer Menu

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

File Area Menu

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

Editor Menu

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

Change Conference Menu

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

Conference Menu

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

Bulletin Board Menu

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

User Preferences

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

Electronic Mail Menu

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

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

Book review of *Apple: The Inside Story of Intrigue, Egomania, and Business Blunders*

continued from page 46

people not being able to adapt as fast as technology, and has bitten all technology companies at one time or another.

Carlton describes QuickDrawGX (and TrueType fonts), Handwriting Recognition, Speech Recognition, QuickTime and QuickDraw3D. All failures in his eyes — yet they achieved varying degrees of success in the marketplace, and pushed the envelopes of technology and innovation. At worst they forced Microsoft to copy them and "innovate at gunpoint", which seems to be the only way Microsoft will innovate. When you are a pioneer, you are going to take some arrows. Carlton focuses on the arrows and ignores the contributions of the pioneers — and ignore what the products did for Apple or the industry.

There are the usual mistakes, like Carlton calls QuickTime a "Three-Dimensional Graphics Technology" (on page 94) — that technology is called QuickDraw 3D, unless he is referring to time as the third dimension (which would be confusing usage). Apple is considered wrong for exploring "small devices" — even when those devices lead to revolutionary products like WebTV, Pippin (the forerunner of the NC or NetPC), Newtons and other products... and have helped push innovation (inside the company and out). He probably loves the Gateway Dimension — but probably thinks Apple's MacTV product (4 years earlier) is a flop.

On page 103 he starts implying that Apple's $4,000 machines were too high priced (I agree) — but then does nothing to address the price of IBM or Compaq machines at the same time (which were priced similarly or higher). Yes, you could buy cheaper clones, and many did so — but you could not usually buy cheaper name-brands (certainly not with nothing close to the same features), so it is all more an issue of branding and size. He constantly misprices things throughout the book. I think he assumes that full retail (and then some), on introduction is the price things stayed at — yet Apple had a very fat markup, which allowed for pretty heavy discounts, and special programs for schools, developers, and many others. I usually bought machines (and have had most of the machines he quoted) for less that half the prices he rambles on about. The issues are more complex than a sound-bite ... but Carlton doesn't offer any depth.

Carlton goes into the Story of Pink (Taligent), and makes a few errors... but worse than that, he doesn't really seem to understand what it was, or what it did. It is ridiculed because of what it was — but that was not why it failed. What it was is basically the same thing (product wise) as Rhapsody or what Microsoft promised Cairo would be (a product along the same lines that they never shipped). The concept was 100% on target, but it died (as a product) because of the complexity of the merging of goals and direction with IBM — but as a concept Pink lives on. Rhapsody IS pretty much Pink (in concept), just using a different foundation — but most of engineering is about trying something, making mistakes, and then starting over and trying again, until you get it right. Again, instead of looking at the eventual success, each of the failures as seen as an ends — instead of as learning and a fresh beginning (insight).

Carlton then says that "[1989] was as close as Pink would ever get to shipping". He either doesn't know about Taligent (which was Pink), or just brushes the truth aside. Pink became Taligent, which shipped, and became (part of) IBM's Common Point. The graphics architecture of Pink/Taligent was similar to QuickDrawGX (and I think the code and design were cross-pollinated). IBM (who owns rights to the code through the Taligent agreements) licensed that Graphics engine to Sun as part of JavaBeans — so it is still in use today. Taligent was certainly not a market success, but it did ship, and much of the design and research work lives on, as well as some of the code.

Carlton's last bash for the chapter, is against the Mac Portable (nicknamed the luggable). Yes, it was a beast. It was big and powerful. It also had one of the first commercially used Active Matrix displays, I believe the first trackball, and the best battery life of any machine of its time. It didn't thrive in the marketplace by any measure — but was not quite the bomb implied either. It was also a great foundation piece — that helped lead to many other innovations like the rest of Apple's PowerBooks (which have been hugely successful). In fact if you look at most portables today you can see how much an influence that Apple has had overall — but all that is brushed over, and instead he focuses on Apple's biggest failure in portables. Is this "balance" and "objectivity"?

• **Chapter 6:** The Fall of Gassee — Carlton starts by presenting Spindler as a paranoid. I don't know the true story — but I have been losing faith in any balance while reading this book. The story is probably true, but my faith in Carlton is evaporated — it seems more likely to me that Spindler once got on the floor of his office to stretch out his back, and this has evolved into him hiding under the desk snapping at

invisible flies. It isn't that I don't think the story is possible — I am just beginning to believe that with the other extreme mischaracterizations, that this is probably one as well.

Carlton has been criticizing Apple through the whole book for their "high-right" strategy (creating the best quality products, which are more expensive and have the most margin) — while ignoring some of the greatest corporate growth in history, achievable because of that strategy. I as a consumer would have rathered lower pricing and more market share — but I don't think that all of Apples problems were because of these decisions alone, nor do I think they could cure the love of IBM and the hate of Apple that existed in Fortune500 companies. So again, it is just that lack of any balance in this book that is annoying.

On Page 109 Carlton says that Apple (Sculley) was at fault for MS's Windows. Basically that because Apple licensed some technologies to Microsoft in '85, it allowed for the proverbial camels nose into the tent. It is true — to a point. But Apple had a decision to make — to license to Microsoft, or to not license and to create an adversary out of an ally (Microsoft — well sorta ally). He criticizes Apple for not playing nice with others — then criticizes them when they do. Failing to license may have ended many critical Mac Apps (like Excel, Word, etc.) and destroyed what acceptance the Mac was getting (and possibly destroy the Mac entirely). Yes, Apple was at fault for allowing such a slickster as Bill G. to get a "future product" clause written in (and not catch it), which allowed Microsoft to rip-off the Mac even more blatantly in subsequent versions of Windows. But I have a hard time blaming Sculley for a legal error of his chief counsel. Nor was it wrong for Apple to try to protect their intellectual rights (and suit Microsoft later) when Microsofts started stretching the letter of the law (again). We also must remember that Microsoft has a long history of screwing everyone they have been in business with, and catching IBM (and almost everyone else) in legal technicalities. So it is not that surprising that Apple got out of bed with Microsoft feeling screwed — just like IBM and every other "ally" of Microsoft ever has.

Then we get into the story about Adobe Postscript and Warnock (Chief High Mucky-Muck of Adobe). Again, not a completely untrue story

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"But overall, I couldn't recommend it to most people because without a frame of reference, most of the stories are just too biased to be of value. It would be like reading a history of the plight of the Jews by Adolf Hitler."

— just so one-sided as to be insane. According to Carlton's story, poor Warnock (the savior of Apple because of the technology Apple used in its laser printers) got a knife in the back, just for the heck of it, when Apple decided that they could outdo Adobe at their own game.

Yes, in the 80's Apple created their own imaging technologies including outline fonts. Why? Because Adobe was charging a fortune for theirs and had become fat and lazy and unresponsive to customers (like Apple's) needs. Apple had looked at doing an imaging engine (like PostScript) before they learned of Adobe's product — but Apple wisely licensed and even invested in Adobe and help them get started in the first place (Apple was the first big adopter of Adobe's technology). But when Apple was being forced to pay $100's of dollars for fonts (and there were many fonts in LaserWriter), it was making it impossible for Apple to bring technology to the people (like affordable Laser Printers). On page 112, Carlton implies that PostScript fonts were the only ones that could accurately reproduce on a printer what was displayed on the screen — but that was actually the problem, it couldn't. Apple wanted a better relationship between the screen and printer, and the only way they could do that was to put the same imaging engine in both. To do that Adobe's way would require Apple to pay large royalties to Adobe for the fonts (or imaging engine) that would be used in every computer. This would have driven the price of machines up (by $100's per computer). Apple was forced to develop their own font/graphics engine that would be the same on screen and on printer. Adobe's arrogance forced Apple into developing a competitor to Adobe's product — and Apple's technologies turned out to be far superior to Adobe's — and Adobe blames Apple for it . After Apple did this, Adobe wised up and played nice (they opened up their fonts a little, and changed licensing to be more reasonable) — but remember that it was Adobe that was forcing Apple's hand. Carlton's recounting is great if you want to see the story as "Poor Adobe" — but has only a passing resemblance to the truth.

By page 115 Carlton is going off the deep end claiming that "TrueType was inferior to PostScript" and that caused it's lack of acceptance. Ummm, it is still being used today, and has been since 1989. How much more acceptance do we need that use on 99% of all Macs? The technology is better than

Adobe's in almost every way — and got far better with QuickDrawGX and GX-Fonts (a super set of TrueType fonts). Apple doesn't hype the technology much (because it is old shoe), but it is still used — A LOT! The reason that it didn't become a standard on all of Apple's printers, is because it is automatically used on printers (whether built-in to the printer or not). All of Apple's low-end printers used it, without the added processing power having to be built into the printer (saving cost) — and on the high end, the publishers had huge investments in Adobe fonts, and wanted to be able to use both (which they did automatically).

The most ironic thing about his chapter is its title, as it spent most of its space bashing Spindler — but Gassee leaves at the end, so I guess that is close enough.

• **Chapter 7, 8, 9...17:** I would have to write a book of my own just to catalog the errors and half-truths. I have a feeling most people will have tired of reading this review long before getting to this point. Suffice it to say that the book gets no better.

There are lots of events that did happen, and some different opinions as to why (mixed with Carlton's negativity and bias). It was worth reading just to review some of the events, and to understand how Carlton (and the *Wall Street Journal*) sees Apple — which explains their bias and motivations. But overall, I couldn't recommend it to most people because without a frame of reference, most of the stories are just too biased to be of value. It would be like reading a history of the plight of the Jews by Adolf Hitler. However, if you are an Apple insider, developer, or have been around the Macs for years — and you want some reminders of different projects and code names — and you don't mind stomping around your house calling Carlton all sorts of naughty names because of the bias and one-sidedness of some story or another — then this book is for you.

Carlton also does bring up the mistakes Apple has made — and Apple is certainly not flawless (no more than they are completely without merit). So if you do want to review any of the bone-headed errors Apple has made, they are in this book, in painful detail... all of them, and then some... to the extreme. This book is full of ammo for those that hang out in the <Comp.Sys.Advocacy> newsgroups, bashing Macs — and the style is reminiscent of those news groups as well.

These are my opinions and what I remember from the various events. I am not an Apple employee, but I have known many — I have been in the "rumor mill", and was around as a developer when many of these decisions were being made. I have not re-researched all of these issues — these are just questionable issues (that contradict what I know or remember). If you doubt any of them, I recommend that you research them (and get back to me on the issues). I suspect you will conclude as I did, that Carlton has a chip on his shoulder, and this book is his opportunity to get back at Apple, make money, and make himself look "cool" in the eyes of the other Apple bashers (some of whom seem to also work at the Wall Street Journal). ■

Apple: The Inside Story of Intrigue, Egomania, and Business Blunders
By Jim Carlton
Random House, 463 pp.
$27.50

This review is courtesy of MacKiDo, a non-commercial MacReferenceSite

For more infomation, reviews, history, and opinions, visit: <www.mackido.com>

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 the Mac Part 1

You should go through the Guided Tour disk that comes with your computer or system upgrade kit prior to the class. You'll learn: how to safely turn your Macintosh on and off; the basic dos and don'ts; how to understand common Macintosh terminology found in manuals and other documentation; and how the basic components of your Macintosh system, hardware and software work. You'll also learn why the Macintosh user interface is consistent across all applications and how this makes learning and using software easier. This is part one of a two part class. Both parts of the class must be taken in the same month. The price is $70 for both parts ($100 for nonmembers).

Introduction to Mac Part 1
1/5/98 7-10 p.m.
Introduction to Mac Part
1 2/2/98 7-10 p.m.
DAY TIME DATES
Introduction to Mac Part 1
1/15/98 9:30 a.m. - 12:30 p.m.
Introduction to Mac Part
1 2/5/98 9:30 a.m. - 12:30 p.m.

Introduction to the Mac Part 2

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

Introduction to Mac Part 2
1/12/98, 7-10 p.m.
Introduction to Mac Part 2
2/9/98, 7-10 p.m.
DAY TIME DATES
Introduction to Mac Part 2
1/16/98 9:30 a.m. - 12:30 p.m.
Introduction to Mac Part 2
2/6/98 9:30 a.m. - 12:30 p.m.

Intermediate Mac Part 1

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

Intermediate Mac Part 1
1/19/98 7-10 p.m.
Intermediate Mac Part 1
2/16/98 7-10 p.m.
DAY TIME DATES
Intermediate Mac Part 1
1/22/98 9:30 a.m. - 12:30 p.m.
Intermediate Mac Part 1
2/12/98 9:30 a.m. - 12:30 p.m.

Intermediate Mac Part 2

How to maintain and troubleshoot your Mac. Topics will include: organizing and managing your hard disk; backing up information and

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 nonmembers. 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.

Other Educational Opportunities

- **Apple Computer Inc.,** Reston, VA. 703-264-5100 or www.seminars.apple.com
- **Mac Business Solutions** 301-330-4074
- **Micro Center** 703-204-8400
- **Piwowar & Associates** 202-223-6813
- **Carol O'Connor** 703-430-5881 (Photoshop Special Effects and Photoshop for Web Graphics)

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

Intermediate Mac Part 2
1/26/98 7-10 p.m.
Intermediate Mac Part 2
2/23/98 7-10 p.m.
DAY TIME DATES
Intermediate Mac Part 2
1/23/98 9:30 a.m. - 12:30 p.m.
Intermediate Mac Part 2
2/13/98 9:30 a.m. - 12:30 p.m.

Introduction to ClarisWorks

This class will introduce the student to the integrated software package, ClarisWorks. The course will begin with an introduction to the fundamentals of the ClarisWorks environment: the window layout, the help menu, and the universal commands. Each of the six modules (Text, Draw, Paint, Spreadsheet, Database, and Communications) will be treated separately but the emphasis will be on text and draw documents. The course will conclude with an examination of some basic integrated applications. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to ClarisWorks
1/15/98 1 pm - 4 pm
Introduction to ClarisWorks
2/21/98 9 am - 12 pm

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. Coverage will focus on: combining different elements in multi-column documents, and documents with multiple elements, such as newsletters, tables, bulleted lists, outlines, mail merge, etc.

Prerequisite: Introduction to ClarisWorks or a good knowledge of the basics of ClarisWorks and its interface. The price is $35 ($50 for nonmembers).

Intermediate ClarisWorks
1/16/98 1 pm - 4 p.m
Intermediate ClarisWorks
2/21/98 12:30 pm - 3:30 p.m.

ClarisWorks Database: Introduction

This course covers basic principles of using a database to organize information, defining fields, discussion of field types, how to use multiple Layouts, entering data into fields, use of online Help function, and searching for information in the database. The class is appropriate for versions 2, 3, or 4 of ClarisWorks. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to ClarisWorks Database 1/17/98 9 am - Noon

ClarisWorks Database: Intermediate

This class will focus on modifying a database to provide ease of use; improving the appearance of a database by importing graphics; integration with other ClarisWorks modules (for example, the Draw and Word Processing modules); importing and exporting data from ClarisWorks; recording and using Macros; and the use of formulas. The class is appropriate for versions 2, 3, 4 or ClarisWorks. **Prerequisite:** ClarisWorks Database Introduction, or equivalent experience. The price is $35 ($50 for nonmembers).

ClarisWorks Database: Intermediate 1/17/98 12:30 pm - 3:30 pm

ClarisWorks Drawing: Introduction

This course covers an introduction to the basic drawing tools, the integration of draw documents with other types of documents, and the showing of how to integrate graphics in a brochure/newsletter.

Prerequisite: Introduction to the Macintosh Part 1 and 2, or a general knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Call Office for Dates

Introduction to FileMaker Pro

This course covers the following topics: what FileMaker Pro does, what

a database is, database terms, using a database, creating a new database, entering and editing information in a database, and formatting and printing. **Prerequisite:** Introduction to the Macintosh Part 1 and 2, or a general knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to Filemaker Pro
1/22/98 1 pm - 4 pm
Introduction to Filemaker Pro
2/6/98 1 pm - 4 pm

Introduction to Quicken

Course will be an introduction to Personal use of Quicken v6.0 or 7.0, and will cover the following: Entering Accounts, Use of Quickfill, Split Transactions, Categories, Writing Checks, Preferences, Passwords, Help, Reconciling Accounts, Reconciliation Report, Credit Card Accounts, Transferring Money. If time permits, or the class prefers to emphasize it, we will demonstrate online banking and bill paying. An experienced general user of Quicken will introduce the program to anyone already at ease with using a Macintosh. The instructor is not an accountant, and is terrible at math (which is why he uses such software), but has been using the program successfully since it first was available for the Apple II. His principal use has been to maintain records for tax purposes and to aid in doing the latter with MacIntax. He is now up to v7.0 on a Powerbase 180 and an established online bill payer having used both CheckFree and Crestar Bank. Please have played a bit with the program and made some attempt to use it before class; bring your questions well prepared in advance; the class will be taught using Quicken 7 (not the deluxe version).

The instructor will try to answer all questions as long as they are within the curriculum outlined above.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to Quicken
2/5/98 7 p.m. - 10 p.m.

Making Quicken really useful as an interface to your Bank

Online banking and bill paying. Instructor will go over the general concept of this new service that several area banks are using, with focus on using Quicken with a Crestar Bank account. The principles are the same with most financial institutions, so if you use or plan to sign up with another bank, this will still be valuable. You need to have been using Quicken at least to maintain a checking account register, and understand and follow basic Quicken terminology. You MUST know how to troubleshoot and setup a modem for use with other online services; this class will ONLY deal with Quicken's interface with your modem, and through it, your bank. To use any of these services, you need at least a 14,4 modem and Quicken 7 (you cannot use earlier versions). If you plan to use Citibank's service or some other financial institution (certain Credit Unions, for example) which have proprietary software, this class will be only of limited use, but may be helpful in understanding how these systems generally work, security issues, etc. Instructor has approximately one year experience with 3 different banking institutions/services. The price is $35 ($50 for nonmembers).

Call office for Dates

Internet

A thorough introduction to the features and services of the Internet. The primary focus will center around detailed demonstrations of the major Internet applications for the Macintosh.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $70 for both parts ($100 for nonmembers).

Internet Part 1 & 2 1/29/98 and 1/30/98 9:30 am - 12:30 pm
Internet Part 1 & 2 2/19/98 and 2/20/98 9:30 am - 12:30 pm

Using the World Wide Web

Class members will explore the configuration options and features of Netscape, Microsoft Internet Explorer and Cyberdog. Topics include adding functionality with browser plug-ins, using multiple browser windows, searching the Web, and an introduction to Java and ActiveX. You will learn how to download and use helper applications. We will review file compression, encoding, and virus protection, and explore download alternatives: FTP with Fetch and Anarchie. **Prerequisite:** Internet tutorial or equivalent experience. The price is $35 ($50 for nonmembers).

Call office for dates

Email to the Max

Class members will explore the configuration options and features of stand-alone applications (Eudora, Claris) versus email functions in Web browsers. Topics include using mail filters to manage multiple mailboxes, configurations for more than one username or account, and sending and receiving attachments to email, with a relevant discussion of compression, encoding, and virus protection. You will learn how to find, subscribe to and unsubscribe from Listserv and majordomo mailing lists, and how to set up and maintain a mailing list. We will also look at a new direction in email: HotMail, a free Web-based emailer. **Prerequisite:** Internet tutorial or equivalent experience. The price is $35 ($50 for nonmembers).

Call office for dates

HTML Part 1—The basics

An introduction to HTML (HyperText Markup Language) with a review of the Internet and the World Wide Web; what it is and how it works; what you need to worry about (bandwidth, standards); and what you need from an ISP (Internet Service Provider). Web documents are examined, looking at format and content; images (particularly fast-loading and transparent images); HTML (what a tag is and how does it work with browsers); and HTML editors; and concluding with how to use Web sources for more information.

Prerequisite: Internet tutorial or equivalent experience. The price is $35 ($50 for nonmembers).

HTML Part 1 1/14/98 2- 5 p.m.

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). **Prerequisite:** HTML Part 1. The price is $35 ($50 for nonmembers).

HTML Part 2
2/11/98 2 p.m. - 5 p.m.

Making Web Graphics without PhotoShop

This class is for those who would like to make images for the Web without the expense or learning curve of Adobe PhotoShop. Students will learn about the image file types used on the Internet. They will learn how to resize images, reduce the number of colors in image and make transparent backgrounds. They will learn about the various graphic formats used on the Web and when and where to use each type. They will learn how to use programs like ClarisWorks to edit images. The use of the shareware program Graphic Converter will also be covered. **Prerequisite:** Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Making Web Graphics without PhotoShop 1/29/98 1 pm - 4 pm
Making Web Graphics without PhotoShop 2/19/981 pm - 4 pm

Making Web Animations

Web sites with animated graphics are the rage and these images can be made by any Macintosh user with the freeware program GifBuilder. In the class students will learn how to use programs like ClarisWorks to draw simple images. They will learn how to put image files together with GifBuilder and how to use transitions and special effects to improve the animations. They will also learn how to insert the image files into web pages.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Making Web Animations 1/30/98 1 pm - 4 pm
Making Web Animations 2/20/981 pm - 4 pm

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

Learn how to configure ZTerm (a telecommunications program); and how to log on to the TCS and send and receive Internet e-mail. You'll also learn how to navigate around the TCS's conference system, and both read and enter messages and download files.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Learn how to use the TCS!
1/23/98 1 pm - 4 pm
Learn how to use the TCS!
2/13/98 1 pm - 4 pm

Introduction to Adobe PhotoDeluxe

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

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to Adobe PhotoDeluxe 2/5/98 1 pm - 4 pm

Introduction to HyperStudio

Schools everywhere are using HyperStudio to make multimedia projects and slideshows. The school licensing permits each student to take home a copy of the program for use on a home computer to work on their stacks. This class will cover the basics of how to make cards and add graphics, sounds and buttons to produce HyperStudio stacks. It is appropriate for people who would like to learn a simple multimedia program, teachers who would like an introduction to HyperStudio and parents who would like to learn a little about the program to be able to help their children at home.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to HyperStudio
2/12/98 1 pm - 4 pm

Introduction to Pagemaker

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

Prerequisite: Introduction to the

Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to Pagemaker 2/24/98 7p.m. -10 p.m.

Introduction to Quark XPress

Learn the basic fundamentals of Quark Xpress, the most widely used page layout program. Learn the proper way to configure the Xpress defaults and how to use the tool, measurement, color and documents palettes. You'll learn how to properly create new documents, define four-color process and spot color, create master pages and manipulate text and graphic objects. Also covered will be style sheets, hyphenation and justification settings, tabs, fonts, and checking document spelling. Learn how to correctly use Xpress font and picture usage windows and how to configure the document for the laser printer or high-resolution imagesetter.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to Quark XPress 2/4/98 7 pm - 10 pm

Adobe Photoshop Part 1

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

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

Adobe Photoshop Part 1 2/25/98 7 pm - 10 pm

Adobe Photoshop Part 2

This class will cover use of the plug-in filters, scanning, exporting files for use in other applications, and more on layers, channels, and paths.

Prerequisite: Adobe Photoshop Part 1 or a knowledge of the topics covered in that class. The price is $35 ($50 for nonmembers).

Adobe Photoshop Part 2 2/10/98 7 pm - 10 pm

Introduction to Adobe Illustrator

This course will cover the basics of vector graphics, drawing straight lines, curves, and shapes, tracing images, using paint tools, working with layers, and creating and editing text.

Prerequisite: Introduction to the Macintosh or a good knowledge of the Mac OS and its interface. The price is $35 ($50 for nonmembers).

Introduction to Adobe Illustrator 1/20/98 7 pm - 10 pm ■

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Feb. 28, Mar. 28,
Apr. 25, May 23

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Aug. 22, Sep. 26,
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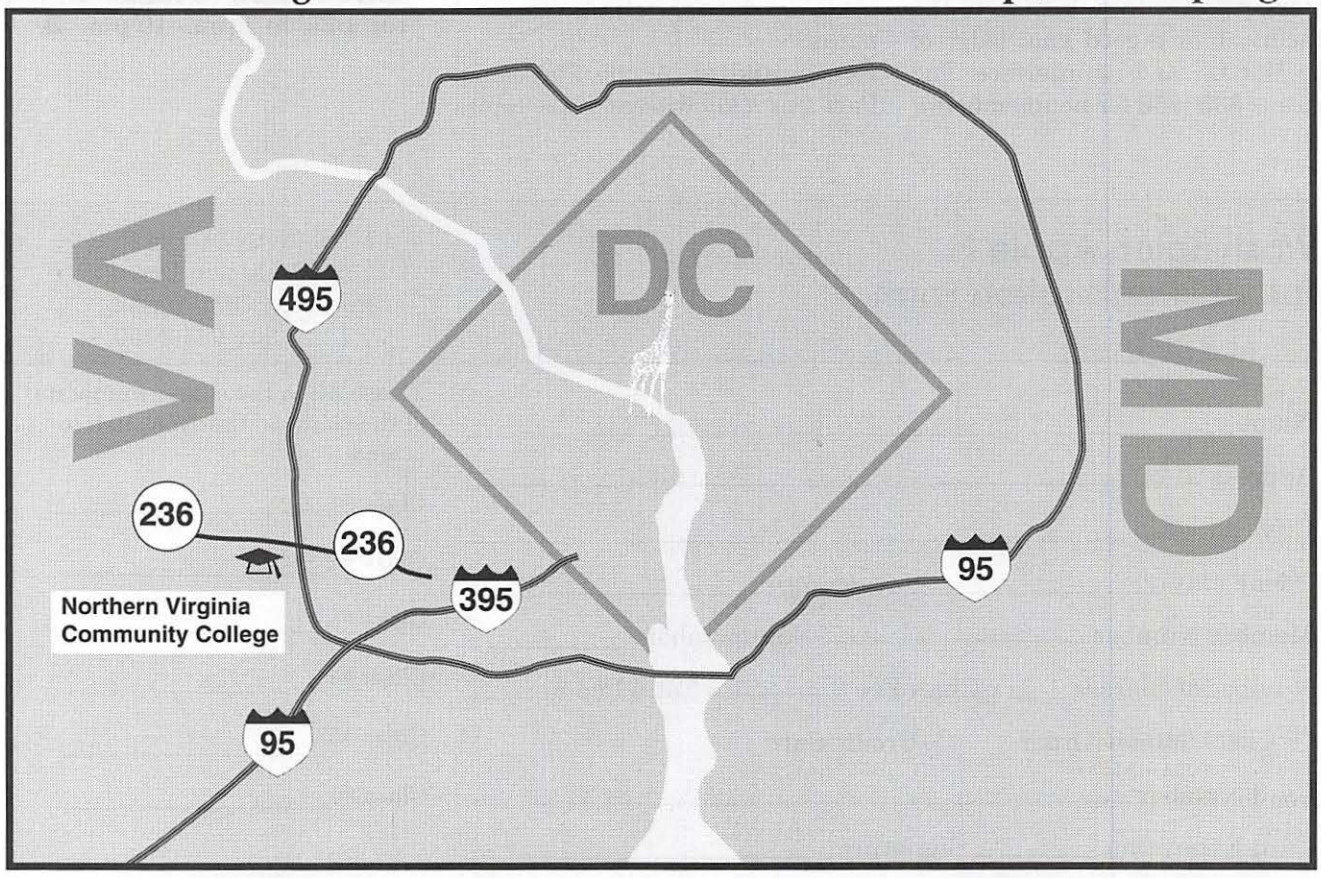
For schedule changes check the TCS or the Pi's Website at http://www.wap.org/



Seniors Internet Training Project: An Interview With Thelma Leaffer

Bethesda, Maryland, 1997.

[The following is the partial transcript from a recently conducted video interview with Thelma Leaffer and Dan Syed, from the Seniors Internet Training Project. These interviews were conducted to elicit information about pilot projects to provide retirees with Internet skills so that they can play an active role in their health care management. The projects are being funded by the National Institutes of Health. Thelma Leaffer is the principal investigator for these projects, and Dan Syed is the Internet training specialist for the projects.]

Phil Shapiro: Hi, this is Phil Shapiro with the One World Media Center. [One World Media Center is a new nonprofit video training center that trains DC area residents on how to produce news and documentaries, covering relevant news of interest to the community.] I'm talking today with Thelma Leaffer and Dan Syed. Thelma Leaffer is the principal investigator of a National Institutes of Health (NIH) study called the Seniors Internet Training Project. Dan Syed is the Internet training specialist for this project. The project is funded by the National Institutes of Health, and administered by the SPRY Foundation. Can you tell me, what's the SPRY Foundation?

Thelma Leaffer: SPRY is an acronym for Setting Priorities for Retirement Years and they are a nonprofit corporation in Washington DC.

Phil Shapiro: And tell me, how did you get involved? Where did the idea for this project come from?

Thelma Leaffer: Well, originally it came from a colleague, who is a retired computer scientist named John Knight, who retired from NIH's division of Computer Research and Technology, and he formerly worked for my colleague Day Syed, whom you'll be interviewing shortly.

And it was his idea to find out how to motivate seniors in acquiring computer and Internet skills so that they can take a more active role in the health care management. And I facilitated a team problem-solving for TECHY, which is a technology transfer organization in Bethesda, Maryland, and John presented this problem. So after facilitating this with a team, I became aware that I thought this was a different problem. I didn't think that it was so hard to motivate seniors. I thought it was a funding problem.

So I translated his problem into: "How do I get funding to set up a training program so that we can empower seniors to acquire computer and Internet skills, so that they can play a more active role in their health care management?"

Phil Shapiro: And then how did you run this program? Can you tell about the training sessions that happened?

Thelma Leaffer: Well, I think Dan can tell you that in greater detail, because he was actually the technical director. But essentially, it was about 12 and 12.5 hours of hands on training conducted in a computer lab that was set up at Holiday Park multiservice senior center in Wheaton, Maryland. Holiday Park is the largest senior center in the Montgomery County area, and possibly also the largest in Maryland. And they serve about 2000 seniors, on an average basis, monthly.

They were able to get donations of computers, and under funding from NIH we were able to provide Internet access. We had five student terminals and the computer terminal for the instructor. And in addition to this training, we had supplementary educational seminars that were conducted at the Wheaton Regional Library. And at NIH, at the National Library of Medicine, and also elsewhere at NIH.

Phil Shapiro: How long has this project been going on for?

Thelma Leaffer: Well, the first project was nine months, and that was completed at the end of July (1997). We have a new project in the works, which involves a joint partnership between the National Library of Medicine, the Heart and Lung Institute, the Office of Research on Women's Health, and HCFA, the Health Care Financing Administration, to provide training to 18 trainers of senior classes that are conducted at public libraries, senior centers, government subsidized housing, and community colleges, as well as area aging centers.

Phil Shapiro: And approximately how many people have received training?

Thelma Leaffer: One hundred and fifty people were trained in the first Holiday Park project, and we sent out announcements through newspapers, through flyers that were distributed at Holiday Park and other senior centers and

through other organizations, and from this comprehensive community outreach public relations effort, we attracted 600 people who expressed an interest in participating in a project that could only accommodate 150 people.

Phil Shapiro: So you must have been quite surprised at that kind of response?

Thelma Leaffer: Yes, we were. And we were particularly surprised at the number of people interested in participating in the more advanced course, because before we started recruitment we didn't have any data on how many seniors have computers and are connected to the Internet.

Phil Shapiro: Can you talk a little about what happens when a patient gets access to information that can help them become a more informed consumer of health care?

Thelma Leaffer: There are a variety of instances in which this would be useful. If they are diagnosed with an illness, such as cancer, [they would want to find out] what kinds of treatments are available, and what are the benefits and risks of such treatments. It's helpful for them to know things for prevention — things about nutrition — things that they can do to help themselves by maintaining a better diet, by exercising, by avoiding certain types of foods and beverages.

Phil Shapiro: Do you have any stories to share from people who reported back to you after the trainings?

Thelma Leaffer: One of my favorite stories demonstrates the motivation of older adults to acquire this kind of learning. Last winter, during a blizzard, six students in the basic Internet course at Holiday Park, drove in these conditions to Holiday Park, and when they were told that the class had been canceled and that the instructor wasn't going to be coming in, they asked if they could use the computer lab so that they could practice what they had learned. And they practiced for three solid hours during this tremendous blizzard.

That's one story. Our participants have used this information not only to help themselves, but to help their children and grandchildren. One of our participants used his health search skills to do research on Tourette's Syndrome. His youngest grandchild has Tourette's Syndrome and now he and his son and daughter in law are in a competition to see who can come up with the best information on the Internet for the pediatric treatment of Tourette's Syndrome.

Another person has a close friend who has Hodgkins disease. He has done a number of searches. He was so highly motivated to acquire Internet skills — he is a semi-retired accountant — that he motivated his employer to get him a modem so that he could have access to IRS documents (that's what he does in his working hours), and during his off time hours he does research on Hodgkins disease, so that he can help his friend.

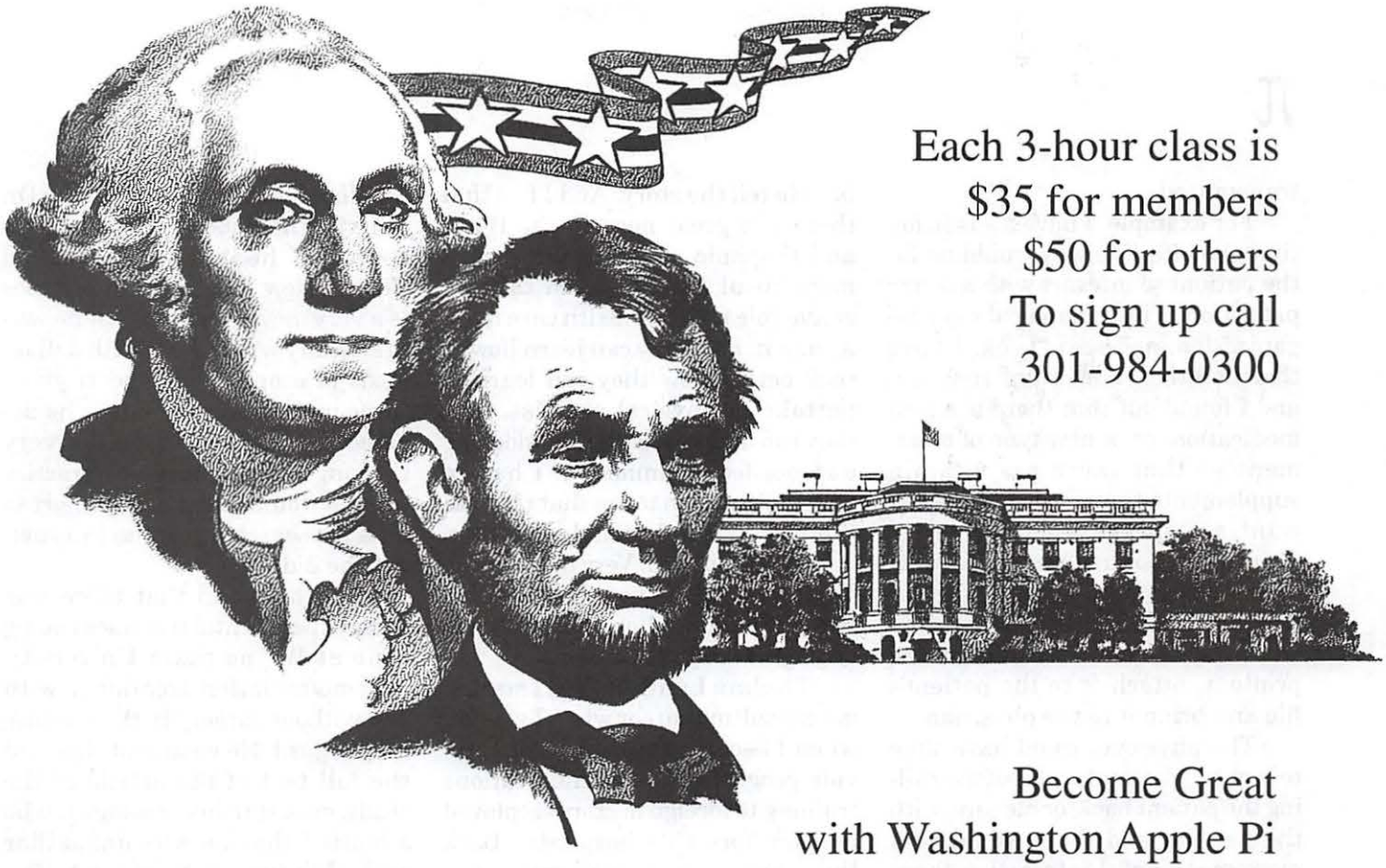
Phil Shapiro: Before you started this project, did you investigate whether any kind of similar kinds of investigations might have happened in other parts of the country?

Thelma Leaffer: I certainly did, because having co-founded the Inventors Association of Connecticut, and having served on its executive board for twelve years, I certainly didn't want to reinvent the wheel. There are so many great minds out there, and if someone had already had a great program, I didn't want to replicate their efforts.

I contacted various organizations and discovered that there are a number of good programs out there training seniors on computer skills, but there were virtually none training them on Internet skills, or how to access health care information resources on the Internet. So to my knowledge, we were one of the first, and we were different from these others programs inasmuch as we provided both computer and Internet skills. We focused on health care information resources. We had rigorous evaluations. We designed six customized questionnaires to evaluate, from both an instructors perspective and a student's perspective, the ease of use of the Internet, and performing specific navigation skills, and how comfortable they were in determining the credibility and appropriateness of the health care information they got on the Internet.

Phil Shapiro: Do you have anything else to share about this topic that someone interested in the topic might want to know about?

Thelma Leaffer: Yes, I'm interested in the other side of the coin. Helping to empower seniors and younger health care consumers with reliable information is only one side of the coin. The other side of the coin is to educate clinicians and the executors of managed care organizations that they need to play a role in determining what type of information would be the most useful, would be the most cost-effective for patients to search for to bring into the physician/patient interaction and adopt and adapt the paradigm shift in doctor/patient relationship which is now centered on the patient — where there is more of a partnership. We need to have acceptance on the part of the physicians. We don't want them to feel threatened when a patient comes in with health care information and challenges them — challenges their authority and their credibility. We want them to work in partnership. And one way doing this is by helping educators like myself and my colleague Dan Syed determine the type of information, and how this information should be



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transmitted.

For example, I have a suspicion that one effective way would be for the patient to interact with a nurse practitioner in a managed care organization, and say: "Look, I have this condition. I have hypertension, and I found out that there is a new medication, or a new type of treatment — that there are vitamin supplements that I can take, and I want a response from my doctor about that. So then the nurse practitioner who probably is Internet trained, or could be easily Internet trained, could do the search, get the printout, attach it to the patient's file and bring it to the physician.

The physician could have time to review the material before calling the patient back, or meeting with the patient, and there would be a more meaningful interaction there where the doctor would not feel threatened and he or she would be playing an interpretive role, which would be a higher level of functioning than just patient information intake.

Phil Shapiro: What are the long range plans for this project?

Thelma Leaffer: Yes, I would like to reach out to low socioeconomic, minority, rural, and mild to moderately visually impaired seniors. That's what this second project, with the National Library of Medicine, and the Heart & Lung Institute, and the Office of Research on Women's Health, and HCFA will concentrate on. I am particularly committed to reaching lower socioeconomic people, in part for personal reasons.

Back in the late 1980's I was involved in a near fatal automobile accident involving a collision between a garbage truck and my father's stationary van, and I was knocked unconscious, on the ground. And if it hadn't been for two Black women who helped to save my life, according to witnesses, I wouldn't be here to tell the story. And I feel that there is a great need in the Black and Hispanic populations to learn more about how they can take an active role in their health care management, how they can learn how to cook better, how they can learn to partake in physical exercise, how they can dialogue with their doctors, and not feel intimidated. I have a personal mission to see that they get this kind of training on the Internet.

Phil Shapiro: Very interesting. Talk a little about your background. Have you worked on related kinds of projects in your career?

Thelma Leaffer: Yes, I started my consulting career when I was 26, when I became a consultant to provide programs for communications training to foreign doctors employed by New York City hospitals. Back then their were a great many foreign doctors staffing New York City hospitals. And then later I went on to do a number of other projects — I did a study for the Food and Drug Administration on doctor/patient communication problems relating to information about the adverse effects of medications and also about malpractice problems and just the way they communicate with patients in a humane way.

And so that was done back in the late 1970's, and now I'm reaping the fringe benefits of some of that research in helping to empower patients now.

Phil Shapiro: Would it surprise you to see in a newspaper headline, say in the next year, or two, or three a headline that read: "The Internet Helped Save My Life?" Would that kind of headline be surprising to you?

Thelma Leaffer: No, because I've already read it, and it was in an article that appeared in the National Library of Medicine's newsletter, which helped me to pursue the first proposal to NIH. And it said: "I Saved My Own Life by Going on Medline," and it was written by Dr. Marvin Thalenberg, who is the director of health for Rockland County, New York, and he describes is a very moving way of how he was practically written off [with a diagnosis of esophageal cancer] given three months to live, and so he decided that after selling his very thriving internal medicine practice that he would make a best effort to do some searching on the Internet. And he did.

And he found that there was some experimental treatment being done at Wayne State University. [Chemo/radiation treatment with and without surgery in the thoracic esophagus.] He went and obtained the full text of the article of the study, gave it to his oncologist, who admitted that he was unfamiliar with this type of treatment. The oncologist agreed to work with him in a partnership arrangement, and that was nine and a half years ago. He is now here, thriving — knock on wood — but that certainly was one of the strongest testimonials that I read.

Phil Shapiro: Thanks so much. Talking with Thelma Leaffer, from the Seniors Internet Training Project. Do you have contact information that so that people interested in this subject can reach you?

Thelma Leaffer: Yes, people can reach me via email at: deltasquare@webtv.net

This interview was conducted by volunteer members of the One World Media Center, a new nonprofit video and multimedia training center in the Adams Morgan neighborhood of Washington DC. News reporters from One World Media Center cover important community stories that are often overlooked by the mainstream media.

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onewmc@aol.com
http://www.digitalfunk.com/oneworld/

Phil Shapiro, who helped plan this interview, is the Washington DC Regional Coordinator for the Community Technology Centers' Network (CTCNet), a national nonprofit helping to extend access to technology to those who currently do not have access. For the past two years he has been volunteer teaching "Introduction to Internet" classes at the Chevy Chase DC Public Library. pshapiro@his.com http://www.ctcnet.org http://www.his.com/pshapiro/friendschch/

Paula Benson, who filmed this interview, is a longtime member of the Washington Apple Pi users group, which has a separate special interest group for seniors. benson.family@tcs.wap.org http://www.wap.org

In the early 1980's, Paula and her husband Bernie volunteered their time to help introduce computers to seniors in Rockville, Maryland.

Contact info Washington Apple Pi Seniors SIG:

Chuck James, Chairperson
chazza@imssys.imssys.com
(301) 530-6471

Recommended Reading:

Wolff, Michael. Your Personal Net Doctor: Your Guide to Health and Medical Advice on the Internet and Online Services. 360 pages, softcover. Wolff New Media, NY, 1996.

(A copy of this book can be signed out from the Mount Pleasant branch of the DC Public Libraries. Call number: 004.67 D249) http://www.ypn.com ■

Hottest Downloads

by Nancy Seferian

THIS SMALL column is intended to keep you up to date about which are the most popular downloads on the TCS. In the last "Hottest Downloads" column you saw that the documentation for setting up Open Transport/PPP and the TCS Explorer Service was *the* most downloaded file.

The next most often downloaded files are text files too, TCSFILES.SIT and MACFILES.SIT. They're both located in File Transfer Area 2, the TCS Help Area, and they are updated often and regularly. The first one, number 23, lists *all* the files which are in the file transfer area, and the second one, number 24, lists all the Macintosh files which are in the file transfer area.

They're big text files, so SimpleText won't open them. However, there is a ClarisWorks template in this same area, FTA 2, if you use ClarisWorks. You could just open that template after downloading it, and then open this file from within ClarisWorks. The whole list will import nicely formatted listing all the file transfer areas, the numbers and names of the files, how large the files are and give a short description of each file.

You could do this same thing in any word processor you use. Import the text file into your word processor. Then set the tabs to separate the columns, setting up the page horizontally instead of vertically to include all the columns.

These documents are wonderful to have handy if you're ever looking for a file you want to download because once it's set up in your word processor you can do a search for certain key words and the search option of your word processor will do the work for you.

As you can see in the graphic at the base of this page the long description notes the original file was uploaded on July 2, 1994 and is updated often. If you haven't tried this method of finding files, give it a try.

What do you think is the *next* most popular download? Watch for this column in the next Journal to find out. If you have a personal favorite file you've downloaded from the TCS, I would love to hear about it: <nancys@tcs.wap.org>. ■

```
00023  TCSFILES.SIT     272k  SIT  Complete file list, updated periodically

This file is the same as TCSFILES.TXT, a database of all files on the TCS in a
tab-delimited text format suitable for loading into your favorite application.
This version, however, is stuffed and MacBinaried manually from time to time,
perhaps once a week, from the original TCSFILES.TXT file.
Uploaded by JON THOMASON on 02 Jul 94

00024  MACFILES.SIT     149k  SIT  Mac file database, updated periodically

This is the same as MACFILES.TXT, only stuffed for faster downloading.
Updated usually once a week or so, from the current MACFILES.TXT file.
Uploaded by JON THOMASON on 02 Jul 94
```

Hot and helpful downloads on the TCS

The Anal Retentive Macintosh

"Pull My Apple"

by Jim Kelly: globedc@aol.com

IN LAST ISSUE'S column, we covered how Mac users can better organize their hard drives. This issue we'll be covering the Apple Menu.

Since the earliest Macs, Apple has included the Apple Menu in the upper left hand corner of our screens. It provides us with a convenient place from which to launch programs and open control panels. I'd like to share some suggestions that I've gleaned from several sources. I would recommend to you "The Little Mac Book" by Robin Williams.

First of all, how do you add or delete items from the Apple menu?

The system file has a folder in it called "Apple Menu Items." In order to launch your favorite programs from the Apple menu, just add an alias for the program to this folder. The easiest way to do this is click once on the application icon and pull the Apple menu down to where it says "automated tasks" and select "add alias to Apple menu." Simple huh?

For ClarisWorks users out there, you might consider adding boiler plate "stationary" documents to the Apple menu folder so you can get at your frequently used form letters.

Desk accessories: These are small mini-programs that Apple thoughtfully puts in the Apple menu items folder such as calculator, and you can add your own favorite share ware desk accessories like "Easy Envelopes" and others.

Power user tips: Ok here's where things get fun.

First of all add an alias of your hard drive to the Apple menu folder. Click on it once and pull down the apple to automated tasks then to "add alias to Apple menu" and give your Mac a few minutes. Why should you do this? Because with system 7.5 and on, you will be able to access any folder and launch any program on your hard drive by simply pulling down the apple to Hard Drive, then over to a sub menu, and over once more until you sift through to the proper directory. I'd include a screen shot here, but I haven't figured out how to do that of the Apple menu items.

"In order to launch your favorite programs from the Apple menu, just add an alias for the program to this folder. The easiest way to do this is click once on the application icon and pull the Apple menu down to where it says 'automated tasks' and select 'add alias to Apple menu.' "

Ordering your Apple menu items: You can push items to the top of the Apple menu list by inserting spaces in front of the item name. Under the Mac file system items with four spaces come first, then items with three then two then one then none.

I've got divider lines between groups of items on my Apple menu items by creating 32 x 32 pixel blank white pict file in photo shop, copying it to the clipboard, then creating a new folder on the desktop (command N), then I single click on the folder and do file > get info, lastly I click on the folder icon in the get info window and paste the pict file from the clipboard onto the icon box. I then change the name of the folder from "untitled" to space————————. I insert spaces in front of the name to position it vertically in the Apple menu and I'm done. I can send a Pi member a copy of one of these divider folders I've just described, just e-mail me.

One final suggestion would be to put a folder in your apple menu items folder entitled Networking or AppleTalk. How many times have you tried to set up an ad hoc AppleTalk link between your desktop Mac and a power book or another Mac. What I've done is create this folder inside my apple menu items folder and include within it aliases for The Chooser, File sharing and Users & Groups control panels. There! Now I've got all my AppleTalk controls in one easy to get at place. ■

Review: Dynamic Duo: Connectix's RAM Doubler 2 and Speed Doubler 2

by Paul Gerstenbluth (ARIEfound@aol.com)

TURN ON the Batsignal. Imagine you are in Wayne Manor and the Dynamic Duo is needed urgently.

Batman and Robin must find a cure for Macintosh computers' hazardous RAM and Speed problems. Plus they have to save Gotham City from Poison Ivy and Mr. Freeze.

In the same way, you can call up the new Dynamic Duo. Imagine Batman and Robin helping you use your Mac computer. The new Dynamic Duo, RAM Doubler 2 and Speed Doubler 2 work in unison. They fight off criminally bloated programs and slow-thawing applications.

Connectix knows the secret ingredients for combining RAM Doubler and Speed Doubler for capturing the most RAM and Speed from your Macintosh Computer.

RAM Doubler 2 offers memory options such as double memory, triple memory and memory savings for PowerPC native applications. When you run Excel 5 on your Macintosh computer it runs with 4 MB of RAM instead of the usual 13 MB. RAM Doubler 2 is twice as fast as RAM Doubler 1.0 and uses an all new RAM compression system.

Using Speed Doubler 2 results in faster responses while accessing files on your internal and external hard disks as well as ZIP drives. In addition, non-native applications run twice as fast on your Power Mac with Speed Doubler.

RAM Doubler 2's Technical Points

RAM Doubler 2 is not a solution for applications that require more memory than you have installed in physical RAM. A Mac with 8MB of physical RAM installed should not run an application that requires 10MB of RAM.

The amount of memory reported in "System Software" by the RAM Doubler 2 Control Panel may not match the About This Macintosh report of System Software memory.

The Disk Cache size reported in "System Software" by the RAM Doubler 2 Control Panel may not match the Memory Control Panel report of disk cache size. The actual memory used by the disk cache is typically 50K to 100K larger than the amount reported in the Memory Control Panel.

Speed Doubler's Technical Points

• System 7.5 users should install as a minimum System 7.5 Update 2.0 to avoid performance and compatibility problems. Speed Doubler™ 2 Mac users MUST use RAM Doubler version 2.0.1 for compatibility with Speed Doubler 2's faster network copies.

Speed Doubler includes three extensions: Speed Emulator (PowerPC only), Speed Access, and Speed Copy. The Speed Doubler Installer automatically sets the disk cache size to 1/16th the amount of physical RAM. If the cache amount is already larger than 1/16th the amount of RAM, it makes no adjustment. You can adjust the size of the disk cache at any time by using the disk cache setting in the Memory control panel.

Pro

• With RAM Doubler 2, you have up to three times your computer's memory to open more applications and keep them open. RAM Doubler is an affordable decision to buying more RAM and installing it yourself.

• With Speed Doubler 2, you can copy files up to three times faster, Also, Speed Doubler gives you faster disk access for ZIP drives and hard drives. You can run on non-native PowerPC applications up to twice as fast.

• Without Speed Doubler 2, when I use Microsoft Word 6.0 on my Mac-it's very slow. With Speed Doubler, I found that penguin-slow Microsoft Word 6.0 runs 3/4 as fast as Word 5.1 program.

Con

• RAM Doubler 2 is not a solution for applications that require more memory than you have installed in physical RAM.

• Strongly suggest System 7.5 users install System 7.5.5 to System OS 8 that addresses compatibility issues.

• I found it best to remove RAM Doubler 2 and Speed Doubler 2 before upgrading my Mac OS System. I than reinstall both of them in unison and avoided computer freezes on my Performa 6200 CD (Power Mac).

Bottom Line: Batman and Robin-Dynamic Duo are Great!

I consider it a crime not to buy award winning RAM Doubler 2 and

Speed Doubler 2. You need both of them to gain the most RAM and Speed from your Macintosh Computer.

Get into the fast lane with this Dynamic Duo and use your new Mac license to speed through your Macintosh programs. Note: You will increase your effectiveness with RAM Doubler 2 and Speed Doubler 2.

• RAM Doubler 2 rated highest award by *Mac User* Magazine and *MacHome* Journal in 1996. There's no more need to quit applications to free-up memory.

A final note from Batman and Robin that should have been in the Movie. "Robin: I need a sign that you've turned over a new leaf. Poison Ivy: How about so many Mac programs to run... so little time."

Connectix's RAM Doubler 2 and Speed Doubler 2's System requirements:

Speed Doubler 2 with 68030 processor or faster with 8 MB of RAM , System 7.5.3 or later.

RAM Doubler 2 with 68030 processor or faster with 8 MB of RAM , System 7.5.5 or OS System 8.

RAM Doubler 2 and Speed Doubler retails for $55 each and both are available from Connectix Corporation, 2655 Campus Drive, San Mateo, CA 94403, call toll free (800) 839-3632 for latest pricing. Also, call the User Group Connection for any special discounts. ■

Paul Gerstenbluth when he is not writing reviews is President of the ARIE Foundation. As Batman would have said, " ARIE Foundation does the job of providing VA patients with hobby materials within the USA and Puerto Rico."

RealVideo: Letting Community Voices and Images Be Heard and Seen

Note: This article about RealVideo follows-up on an earlier article about the use of RealAudio by nonprofit community organizations. Both articles were written for the newsletter of the Community Technology Centers' Network, a national nonprofit working to expand access to technology by those who do not have access. http://www.ctcnet.org

REALAUDIO is an exciting software program for compressing sound so that it can be delivered over the web, or as relatively small files on floppy disks, Zip disks and CD-ROM's. When I first heard about RealVideo, the follow-up to RealAudio, I wondered whether it could deliver on its promise. But having used RealVideo for several months, I can attest that RealVideo is every bit as miraculous and useful as RealAudio.

First, I ought to point out that RealAudio and RealVideo software require at least a Pentium or Power Mac computer. (There are a few notable—but convoluted—exceptions to this requirement. I haven't been able to find any easy way of to run RealAudio or RealVideo on earlier computers.)

The power of RealVideo came alive for me in July, 1997, when a colleague, John Rosenthall, asked me to videotape the television news story of a press conference being held by the National Urban Internet—an organization doing excellent work getting donated computers for public-housing sites around Washington DC.

Channel 5 (Fox) did a wonderful job of covering this event. Their crisply delivered news story inspired me to create a RealVideo movie. Knowing how small RealAudio files can be, I had a hunch that I might be able to compress this 4-minute video clip to fit onto a single floppy disk. Lo and behold, my hunch proved true.

For others who might wish to create RealVideo movies, here are the basic steps. The process is straightforward for those with strong general computer skills. I performed the following steps on my Power Mac. (You would perform similar steps on a Pentium.)

The first step is to download the free RealVideo Encoder software from the Real Networks web page. You can use Netscape or Internet Explorer to perform the download from http://www.real.com

The second step is to digitize your video source to create a Quicktime (Mac) or AVI (Windows) movie. I used an Apple TV Tuner/Video Input card on my Power Mac. This card (actually 2 cards) sells for about $80 to $110, can be installed as easily as installing RAM. As they say, "Easy enough that an adult can do it." <grin>

You can use the Apple Video Input card to play video from any source on your Mac's screen. The source can be a VCR, a camcorder or live television from the Apple TV Tuner card. Just hook up your video source (via either RCA connectors, or S-Video and RCA-audio connectors) to your Video Input card, and you're off and going.

I used the Apple Video Player software that came with my Performa

6360 to digitize the video clip from Channel 5 news. I clicked on "Record," right underneath the "Capture Movie" part of the "Controls" screen, to digitize the movie that was playing on my screen. In about 15 minute I had a 35 meg Quicktime movie on my hard drive. (I chose the smallest screen size for the movie, 160 x 120 pixels, so that the 4-minute RealVideo movie could have a fighting chance of fitting onto a floppy disk.)

Then I "encoded" (or compressed) the movie. The 35 meg Quicktime movie on my hard drive would be the "source" movie in this compression process. The very small (about one meg) compressed RealVideo movie would be the "destination" movie.

I started the RealVideo Encoder software and chose "Open" from the File menu. I then chose "Add" and navigated around my hard drive to find the Quicktime file I wanted to encode. After choosing the Quicktime movie, I clicked on the "Select" button to create a name of the "destination" RealVideo movie. All RealVideo movies have a suffix of "rm" (standing for RealMedia), so any file name you choose is fine as long as it ends with a period and an "rm" suffix (without the quotation marks).

Choose a file name for your "destination" movie, and then click on "Save." (This file name can always be changed later.)

Here's where the fun begins. The RealVideo Encoder software gives you many choices for how much you want to compress your movie. You can compress your movie to a very small file size, but it would look and sound grainy. In my experiments, I've developed a fondness for what is called "LAN 250" compression. This compression setting gives good sound and picture, while at the same time making small movie files.

The key to the RealVideo treasure chest, in my view, is the choice of "frame rates," which is a slide-bar setting at the bottom of the screen when you double click on LAN 250 (or any of the other "advanced settings.") I've gotten the best results by choosing a frame rate of .20 to .40 frames per second. (Note the small decimal before .20 and .40.) This setting gives me a "slideshow" movie with frames that change every 5 seconds, or every 2.5 seconds.

Interestingly, the faster frame rates of one frame per second, or 5 frames per second, can annoy the eye. A slower frame rate not only makes smaller RealVideo files, the smaller files are easier on the eyes.

After you've chosen your frames per second, click on the "Save" button. On my Power Mac it takes about 5 seconds for the computer to save these settings. Only then can you move on to the next step. After the settings are saved, click on "Close."

Click on the "start" button to start encoding your movie. A rough rule of thumb is that encoding a movie takes anywhere from 4 to 20 minutes. (Encoding a movie can take over an hour if you're encoding a large movie at the fastest frame rate.)

When the movie has finished encoding, a screen will appear on your screen saying so. This screen will give you some statistics about the encoding process. The statistics are not too relevant to anything, but you can impress people by looking over the numbers and nodding your head wisely, saying, "Hmmmm, very, very interesting."

At this point you can hastily quit the RealVideo Encoder program, and rush over to the folder where your Quicktime source movie is located. Opening the folder will show you a file with the sweetest little RealVideo movie you could ever imagine. If the free RealMedia Player software has been installed on your computer, you can double click on the RealVideo file, and sit back to enjoy your handiwork.

If, perchance, the RealVideo movie you create is slightly too big to fit on a floppy disk (1.3 megs), you can easily go back and re-encode the movie at a slower frame rate. You do have to experiment a bit to come up with RealVideo movies that make people want to stand up and applaud. But if your source video has good lighting and clear sound, your RealVideo movie ought to look and sound good, too.

Having tasted early success in creating RealVideo movies, I'm ready to tackle more challenging RealVideo projects. My next project involves finding a way to fit all 4 hours of Dr. Zhivago onto a double density floppy disk. It's going to be a bit tight, but I think I can squeeze it in. <grin> ■

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Phil Shapiro works as the Washington DC Regional Coordinator for the Community Technology Centers' Network (CTCNet), and is easily distracted from serious work when creative projects beckon.

Heartfelt thanks are owed to Alfred (Alf) Bawcombe and Miles Fawcett at Interactive Applications (iapps), a web solution company in Washington DC, for introducing me to RealAudio and RealVideo, and for encouraging me to discover how these programs can be best put to use.
alf@iapps.com
miles@iapps.com
http://www.iapps.com

And thanks are owed to everyone at the One World Media Center, who gave me free rein to experiment with RealAudio and RealVideo on the Power Mac and Pentium computers at their nonprofit video training facility in the Adams Morgan neighborhood of Washington DC. http://www.digitalfunk.com/oneworld/
onewmc@aol.com

Graphic Arts SIG Meets

By Blake Lange

The Graphic Arts SIG has gotten off to an encouraging start. Seventeen people attended the October and November meetings, and several others have expressed their intent to join but were unable to attend either of these meetings. With the large number of graphic artists in the DC area, the potential for growth of the group is considerable.

The SIG is going to continue to meet monthly on the second Saturday from 10:00 to noon at Mac Business Solutions. For the next few months that is— January 9, February 14, and March 14. The intent is that the only exceptions would be if the Washington Apple Pi had another major activity on that date. For 1998 the only such activity planned so far is the December Computer Show and Sale.

At the November meeting we went around the room introducing ourselves and each explained what we were looking for from the group. There were freelance artists, a graphic arts business owner, web designers, a sign maker, printers, a technical manuals writer, and others. The group was a real cross-section of talents.

The discussion was open with much dialogue taking place as each person made their presentation. When someone asked questions of the group there were answers from all different perspectives— a very valuable aspect of the meeting. One particularly practical topic was the discussion of which removable drive would best service the graphic artist. There was a wide range of knowledge about the costs and reliability of different choices. For those in the group who would be making such a purchase this discussion could have saved them both money and trouble.

Quite a few of the people in attendance had attended the Desktop Publishing SIG several years ago— so there was a lot of discussion of the good and bad points of that group as they might apply to the Graphic Arts SIG. At this point we are still exploring what are the best ways to conduct our activities. A couple of the attendees brought things that they had been working on to share with the group and this was well received. It was decided that bringing projects should be a regular part of our meetings.

The idea that we could also use our pool of capabilities in support of the Washington Apple Pi also came up. There were a couple of volunteers to work of a SIG web page and a couple of other volunteers to work on a CD-ROM for the Pi's 20th Anniversary next year. In addition, one person volunteered to prepare a presentation for the Janu-

Here at the November meeting of the Graphic Arts SIG the discussion was open and casual. Although not completed the renovation of Mac Business Solutions is progressing nicely.

"Quite a few of the people in attendance had attended the Desktop Publishing SIG several years ago—so there was a lot of discussion of the good and bad points of that group as they might apply to the Graphic Arts SIG."

ary meeting. Things are starting from scratch but it won't be long before we build a respectable momentum in a number of areas.

Our home at Mac Business Solutions was much improved in October and then again in November, with still more to come. From an open storefront, a quite attractive space is being constructed. We really appreciate what a great opportunity is being made available to us by Sonny Tohan—allowing us to use Mac Business Solutions for our monthly meetings. After the meeting was over almost everyone stayed for a while looking at the equipment that was on display, picking up literature about the latest Apple products, and getting to know each other better. ■

Directions

Mac Business Solutions is located at 9057 Gaither Road, Gaithersburg, Maryland 20877. The phone number is 301-330-4074. From Interstate 270 and Shady Grove Road go East two lights, make a left onto Gaither Road, then almost immediately turn into the second entrance on the right. Above you can see what the sign for the Shady Grove Center Court Yard sign looks like where you would enter off of Gaither Road. From the Shady Grove Metro stop it is just a short taxi ride.

Schedule

Meetings are scheduled for Saturdays January 10. February 14, and March 14. They will be from 10:00 AM to Noon.

Adobe Type Manager Deluxe 4.0

I HAVE used *ATM® 4.0 Deluxe* since I got a Mac. It's a simple application—install it, let it go where it wants to, you never see it again, you never know what it does and it doesn't bug you with a lot of messages, errors or crashes. Lately however, I get Adobe messages about missing fonts but these are sent by Acrobat Reader complaining its fonts are missing. I've read several reviews of *ATM® 4.0 Deluxe* that seem to say it is an essential tool for people who have a thing for fonts or for those who use fonts a lot.

Pre-ATM® 4.0 Deluxe font habits

I plead guilty on all counts. I love fonts and I love to use fonts. I spend hours trying out and selecting fonts for the projects I design. I can happily spend hours opening and closing suitcases to sample fonts. I worry and fuss over several which are similar trying to choose the best one for a document. I nitpick little things to be sure each font is "perfect" for the effect I want. My font menu looks more like a hard drive listing than a font menu sometimes. The system labors to carry all this excess baggage without slowing down enough to annoy me.

After agony sufficient to produce quintuplets, the document is done. I print it out and save it very carefully. I even make multiple copies to be sure I don't lose it. I move on to the next project and find nothing suitable in my font menu. I clean it out and go back to the CD's to commence this process all over again. Suddenly, I need another copy of the first document. Not a problem, I simply pick one of the saved copies and print it.

What happened? This doesn't look anything like what I saved. What happened to the fonts? Then I remember, I threw them out when I started the new document. I scramble around, frantically trying to retrace the steps I followed when selecting the fonts originally, hoping that process will jog my memory to locate the missing fonts. Pretty soon fonts are flying recklessly left and right as I open, view, discard, swear, search and panic. I once had about 80 MBs of HD space tied up trying to keep track of the fonts I was using for several projects. I had carefully saved the fonts with their documents, I thought. OOPS, I cleaned out redundant files after that.

Help!!!

These elusive little devils (fonts) seem to constantly migrate and mutate right before my eyes. I've tried a bunch of font utilities, none of which seemed to solve my problems. There were a lot of near misses—utilities that would work for one problem but not for all. I finally made a template of sorts, I typed a sentence or short passage representative of the document I was working on and copied it many times so I could then select a different font for each copy. I would print out the ones that I preferred to see if they translated to print or if they just looked good on screen. This system seemed to be the best one I devised, but it still took a lot of time. I also used some of the font utilities to do the things they did best but all these work-arounds consume major time expenditures with inadequate returns.

Needless to say, I was primed for a "Do-It-All" font utility. *ATM® 4.0 Deluxe*, Master Juggler Pro and Suitcase 3.0 all debuted about the

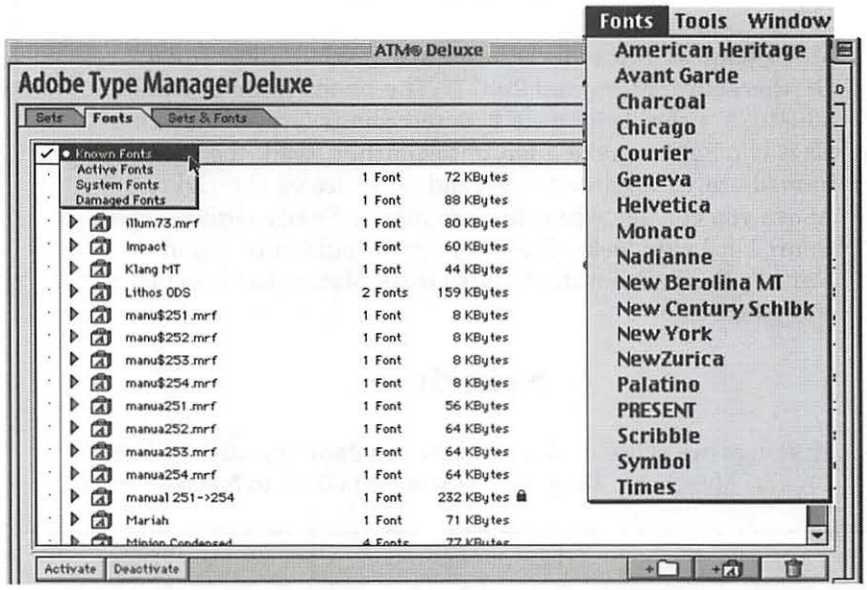

Fig. 1. ATM font menu showing pull down menu choices. Fonts in Pull down menu are the "resident" fonts in the fonts folder inside the System folder

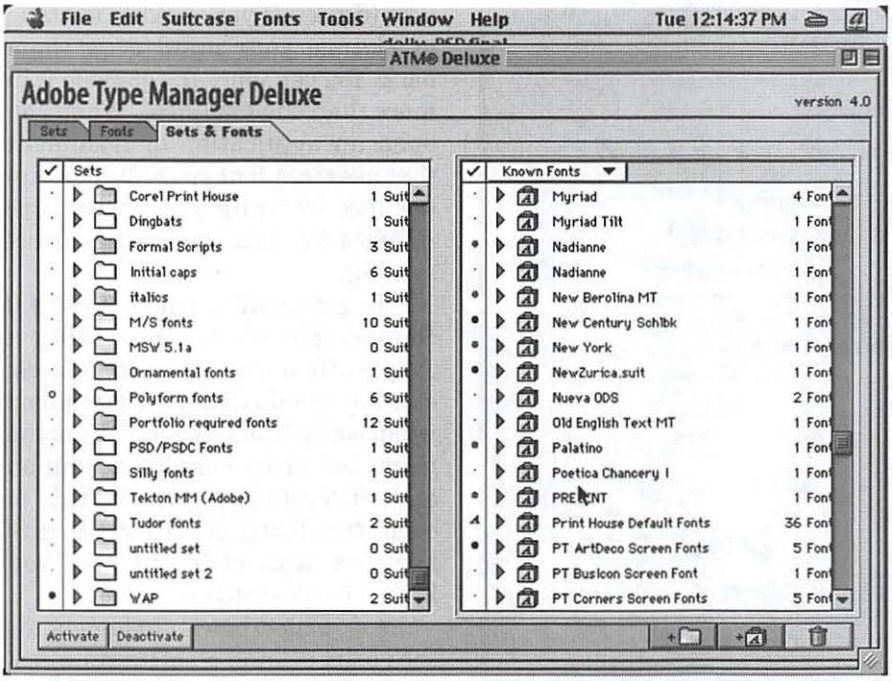

Fig. 2. ATM showing "clues" to font/set status. Notice the color (black & gray) and type of circles and dots. Note the letter "A" in the fonts list

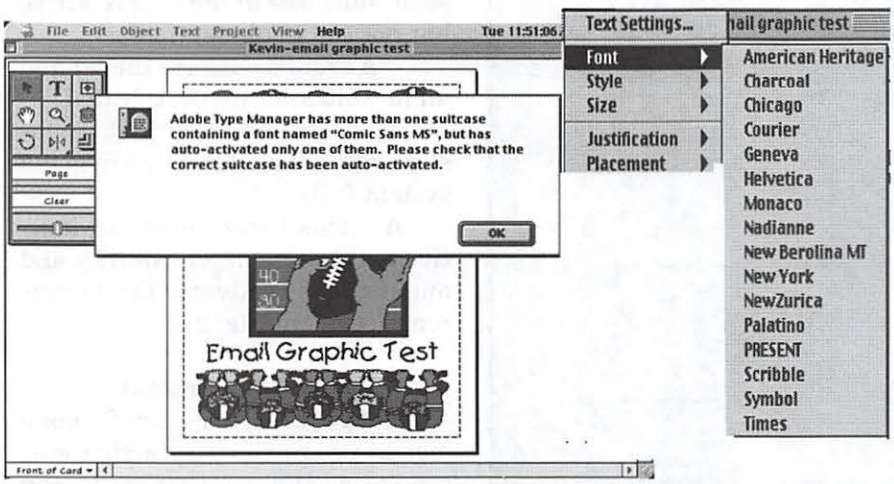

Fig. 3. Font is in multiple sets" dialog box. The document contains the font "Comic Sans MS" which is not currently in the "active font list. ATM auto-activated "Comic" which is seen in the words "Email Graphic Test" at the bottom of the graphic

same time. Each had appealing features. But the most appealing features were not in a single utility, rather they were scattered between the three. One feature kept standing out—the ability to open documents with the original fonts without having to move fonts in and out of the system folder. Did this mean I could create a document, archive the fonts somewhere on my HD and have *ATM® 4.0 Deluxe* fetch them, move them temporarily into the system folder, print the document and put the fonts back in their proper home again? Wouldn't it be nice if the utility could also make a font file of the fonts used in the document so the correct fonts could be saved with each document, especially the ones that were sent to printers? When I saw the announcement that a copy of *ATM® 4.0 Deluxe* was available for review, I immediately volunteered for the job.

ATM® 4.0 Deluxe — the product

Installation is straight forward and quick. After installation is finished, *ATM® 4.0 Deluxe* asks if you want to search the HD for fonts to catalog. You can say "yes" or you can "add" fonts later. Fig.1 shows the "known" font list. This is a list of the fonts *ATM® 4.0 Deluxe* collected from the system fonts folder and everywhere else I stuck fonts on my HD. The pull down menu shows the only fonts living in the font folder in the system folder after installing *ATM® 4.0 Deluxe.* The user decides how many and which ones become the "resident" fonts. Notice the two other grayed out tabs labeled "sets" and "sets and fonts".

There are several ways to work in *ATM® 4.0 Deluxe*—the menu bar, drag 'n' drop or the icons in the lower right hand corner of the window (folder, suitcase and trash can). I find "d ' n' d" works best for me. It's less confusing, you can even arrange the windows (font "home" folder and *ATM® 4.0 Deluxe* font" folder tab) side by side and drag between them. If you prefer, collect all your fonts in a blank desktop folder and move from there. The easiest way to get them collected the first time is to let *ATM® 4.0 Deluxe* go fetch all your fonts from all nooks and crannies for you. They will then be listed in the "fonts" side of the window and you can drag them in and out of the "sets" window.

Creating Sets

The next task you should tackle is creating sets for the work you do. Manually clean everything out of the system font folder except the minimum required fonts used by the system. Place all other fonts in a folder labeled "fonts," "standby fonts," "de-

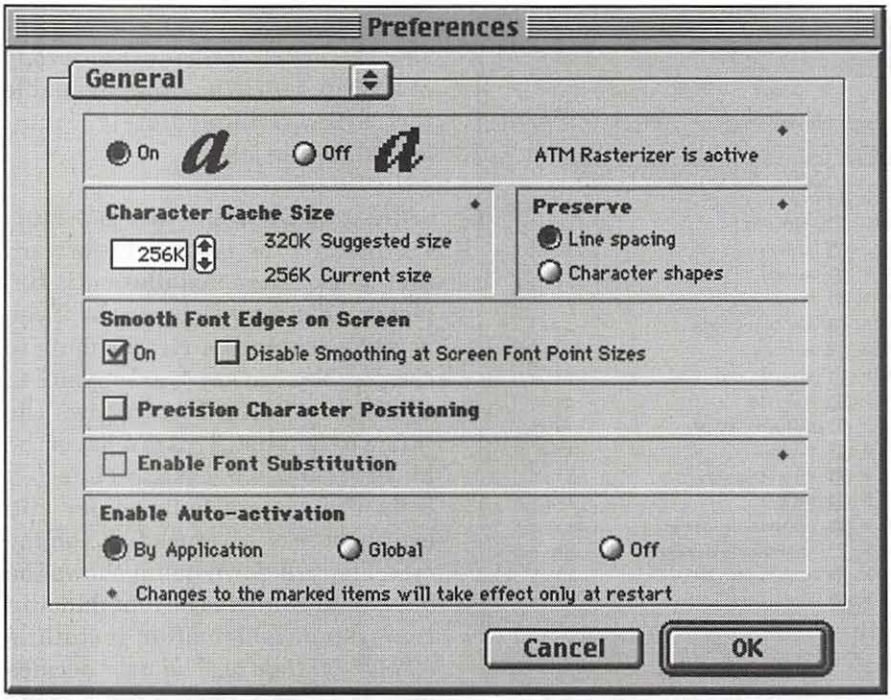

Fig. 4. "General" preferences menu

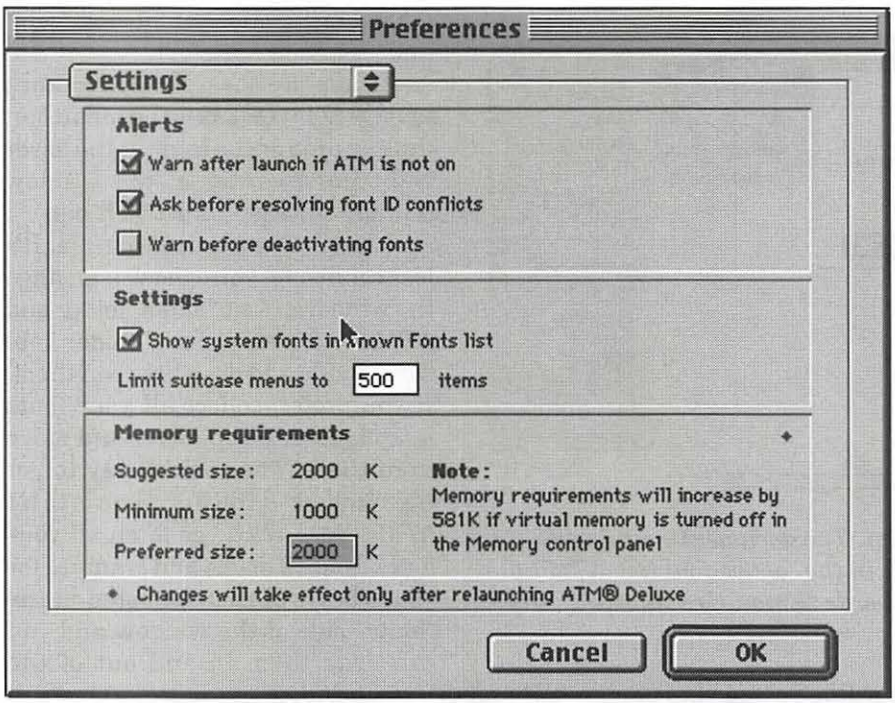

Fig. 5. "Settings" preferences menu

activated fonts," or something you can remember. Click on the tab "sets and fonts." Choose your very favorite fonts, the ones you use the most and put them in a folder labeled "favorites" or something of the sort. Go through the list of things you do most often—write letters, make cards, database entry, graphics design, homework, spreadsheets, etc. For each category make a folder (set) and label it appropriately then drag the necessary fonts from the "font" side into the "set" side of the window (fig. 2) If you make a mistake or change your mind drag them back. You can place the same font in more than one folder/set. When you open an application or document that uses that font you will get a dialog box warning you to be sure *ATM® 4.0 Deluxe* opened the correct set. (fig. 3)

To get familiar with *ATM® 4.0 Deluxe* "clues", try activating a couple of fonts, suitcases, typefaces, etc. You can do this from all tabbed windows by "shift-clicking", from the menu bar or by simply clicking on and off the little dot at the side of each item listed. *ATM® 4.0 Deluxe* has a wardrobe of dots to "clue" you in to a font's status—

- Filled black circle denotes the entire set and all of its suitcases are active.
- ° An empty circle indicates some suitcases in the set are active but not the whole set (folder).
- · A small dot means the set and all its suitcases are deactivated.
- Grayed out filled circles show which fonts actually live in the system folder.

A This letter means an inactive font has been temporarily and automatically activated for the current document (fig. 2)

Preference menus

There are three preference menus where you can further customize *ATM® 4.0 Deluxe*. In the "general" preference menu, (fig. 4) the selections relate to *ATM® 4.0 Deluxe's* jobs—on/off, character cache size (plays a role in how fast windows scroll and redraw), preservation of line spacing and character shapes, on screen anti-aliasing, auto-activation, etc. The "settings" menu (fig. 5) governs "housekeeping chores", i.e., how many fonts can be in the "known fonts" list, how much memory it can have, when to use warning boxes, etc. The "printing" preference menu lets you enter or change the text used for printing "in-

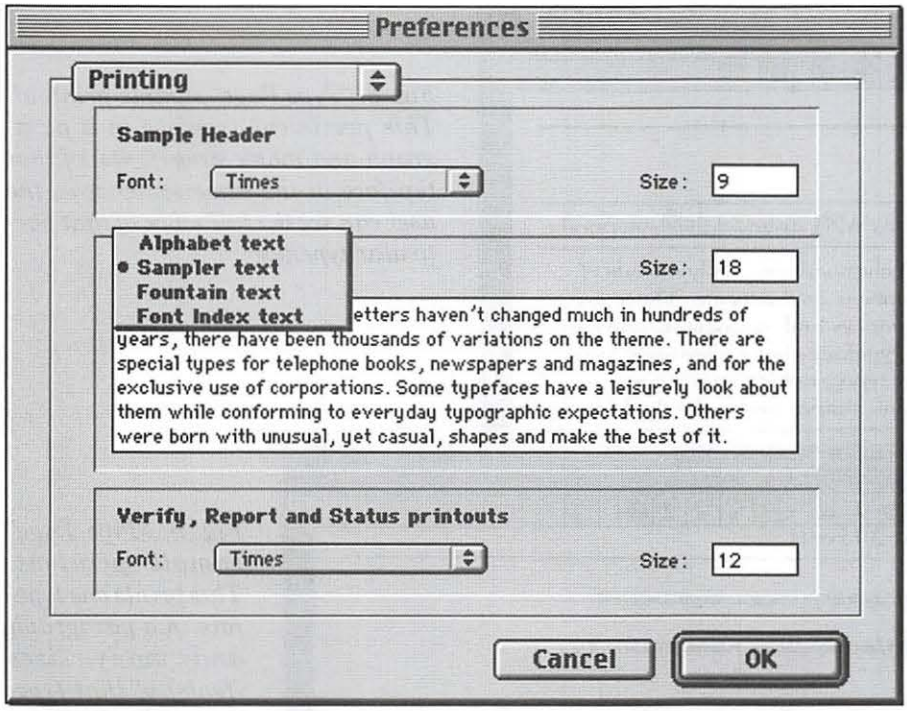

Fig. 6. "Printing" settings menu with pull down menu to select which sample sheet to display and print

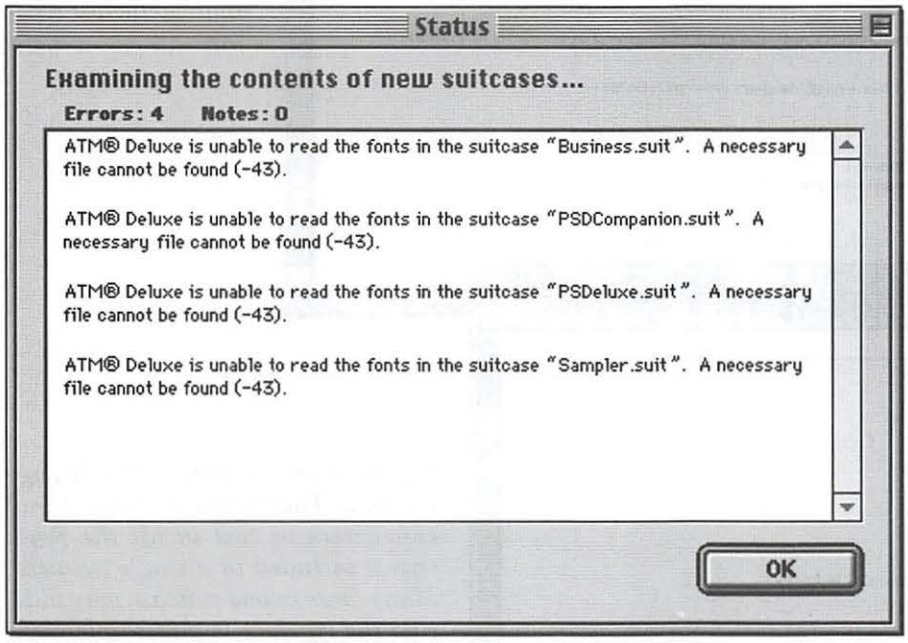

Fig. 7. Missing fonts dialog box

dex samples" and "type page" samples. You may also choose the "utility font" and size used in the print sample headers and reports. There are four different types of print samples you can select from and each one can be customized by the user. (fig. 6) Your part is done now.

How ATM works

Essentially, *ATM® 4.0 Deluxe* creates a sophisticated Rolodex or database file, listing all the fonts you have and where they live. The fonts may be installed somewhere on your hard drive or they may live on CD's, zips, or diskettes which are not loaded until *ATM® 4.0 Deluxe* asks for it. As long as you never move the fonts from their original home, seamless operation occurs.

When you move a font out of its home or remove an external storage disk, you must deactivate that disk or folder in *ATM® 4.0 Deluxe*, otherwise you will get a dialog box asking for the disk back. If the font's resident folder has been changed, you will get a dialog report box listing the missing fonts. (fig. 7)

In addition to the rolodex file, *ATM® 4.0 Deluxe* "gives" you a "virtual administrative assistant" whose full time job is to run behind and in front of you carrying the rolodex file so (s)he can have the required fonts ready on a moment's notice. This assistant also keeps lists of the fonts used in each document created **after** *ATM® 4.0 Deluxe* is installed together with any information required to make the document page look the way you intended.

ATM's trash can

You should have noticed a trash can in the lower right hand corner of the tabbed windows. (figs. 1&2) It is **very important to get a clear picture** of how this trash can works. It belongs to the "rolodex file". When fonts, suitcases or sets are put in this trash can, the corresponding "rolodex card" is taken out of the rolodex file and all references are erased from *ATM® 4.0 Deluxe*. The actual files are not erased or trashed. They will still live where you stored them—HD folder, Zip cartridge, diskette, CD, etc. **It is only the reference in *ATM® 4.0 Deluxe* that has been trashed, not the actual files themselves.** If you decide to return these items to a set folder or the known fonts folder, a **new** rolodex card is made.

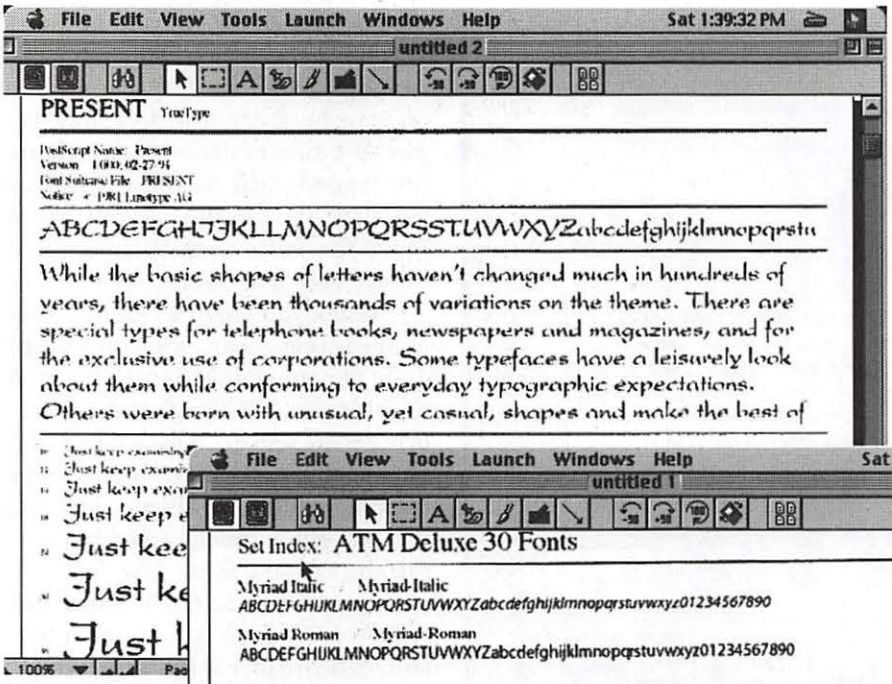

Fig. 8. "Type Page" sample printout. This prints one typeface in a paragraph and many sizes (fonts) of that typeface in the same sentence so the user can see the full scope of that particular typeface

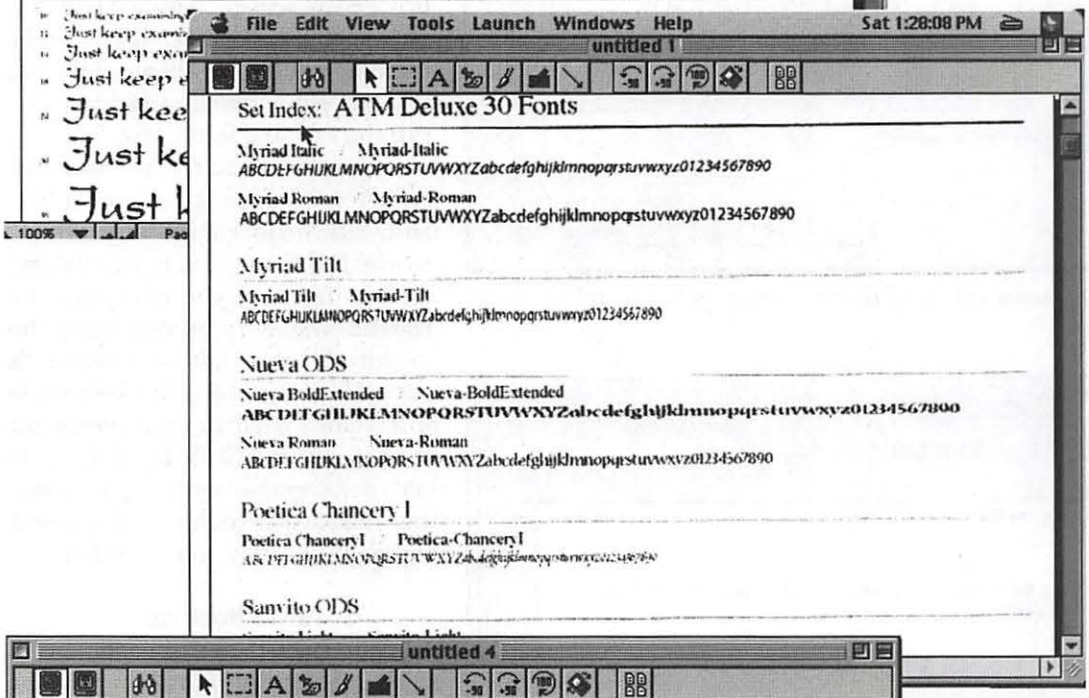

Fig. 8. "Type Page" sample printout. This prints one typeface in a paragraph and many sizes (fonts) of that typeface in the same sentence so the user can see the full scope of that particular typeface

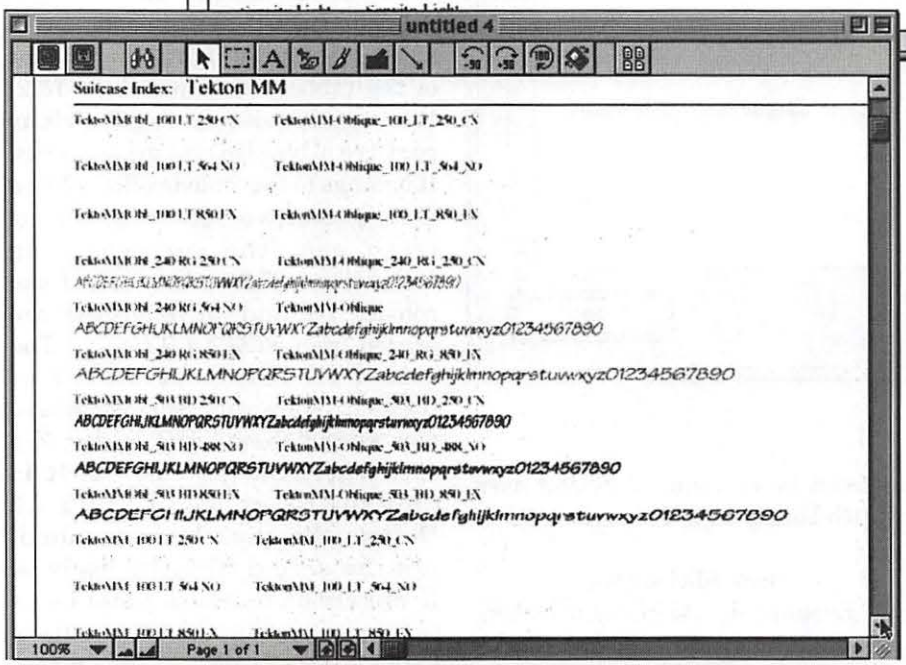

Fig. 10."Suitcase Index" sample page printout. This prints the same line of characters or text in all the fonts (sizes) included in a single suitcase. Many fonts in one suitcase may indicate the typeface is a Multiple Master font.

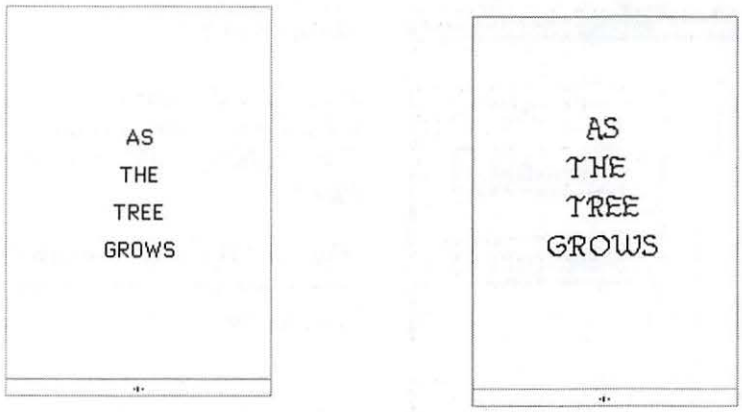

Fig. 11. Page Layout showing how ATM ***preserves*** *the look and spacing of a page with substitution fonts. ATM* ***does not recreate*** *the font.*

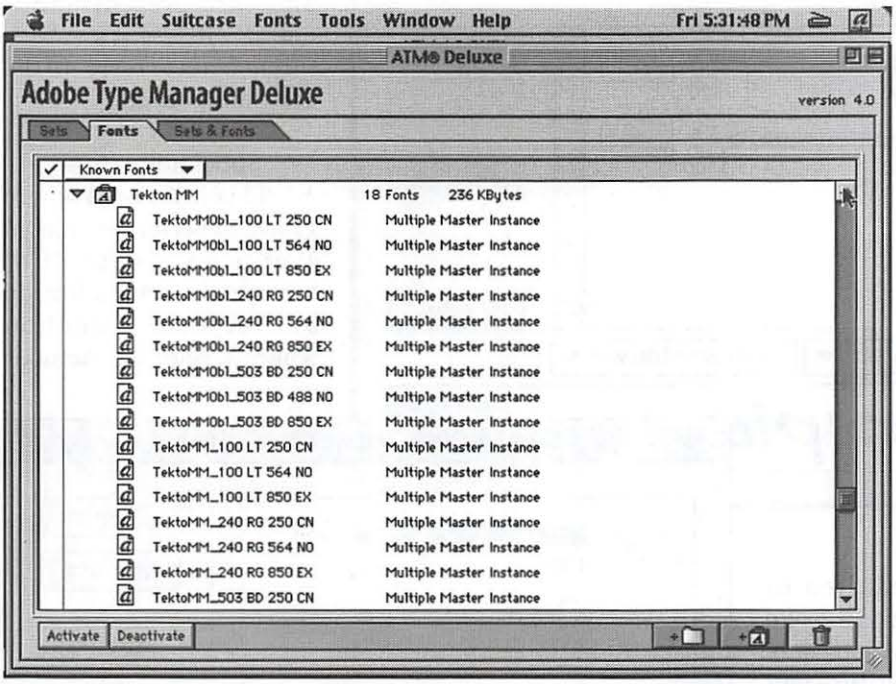

Fig. 12. Tekton MM font suitcase with its "alphabet soup" contents

Auto-activation

When you open a document, *ATM® 4.0 Deluxe* runs to find and temporarily open the fonts required by that document (fig. 3) As soon as you close the document, *ATM® 4.0 Deluxe* closes the fonts that live outside the system's font folder. Auto-activation has another job if your project goes to an outside print shop.

If the print shop also has *ATM® 4.0 Deluxe* installed, they can read the information about your fonts that *ATM® 4.0 Deluxe* stores in your documents. Then their *ATM® 4.0 Deluxe* will automatically open the required fonts on their system so they can print your docs with the correct fonts. (This is the only **legal** way to get accurate font reproduction currently according to Adobe). If the printer is missing some of your fonts, he will get a missing font report (fig. 7) and request you change to a font you both own.

If you open a document that was created prior to installing *ATM® 4.0 Deluxe*, you will have to manually activate and deactivate the fonts it requires. If you then save that document with all fonts in the activated mode, *ATM® 4.0 Deluxe* creates a "rolodex" card and the fonts will be automatically activated in the future. For safety, use the "Save As" command and let the new file replace the original one so the font information is properly stored within the document.

Deactivation

Remember to deactivate fonts/suitcases when you are through with them especially if they live on external storage devices. If you don't, every time you want to do something, you will get a prompt to insert the removed CD, disk, etc. If that happens, simply go to *ATM® 4.0 Deluxe* and deactivate all missing fonts and sets.

Type samples

There are three basic sample sheets that can be printed—a "type page" sample (fig. 8) which devotes an entire page to each font, a "set index" sample (fig. 9) which prints a limited text selection in all the typefaces included in a particular set (this sample uses the same style, size and text for each typeface) and a "suitcase index" page (fig. 10) where all the fonts in a suitcase are printed using the same text sample for comparison purposes.

"Type page" samples are helpful when you have narrowed down or actually chosen your font and you need to decide what size is best used where. "Index samples" on the other hand, give you a lot of different things to compare in a condensed space. Each characteristic, i.e. size, weight, width, etc. is consistent so each font is being judged by the same exact criteria. Size 10 may be huge in one font and too small to

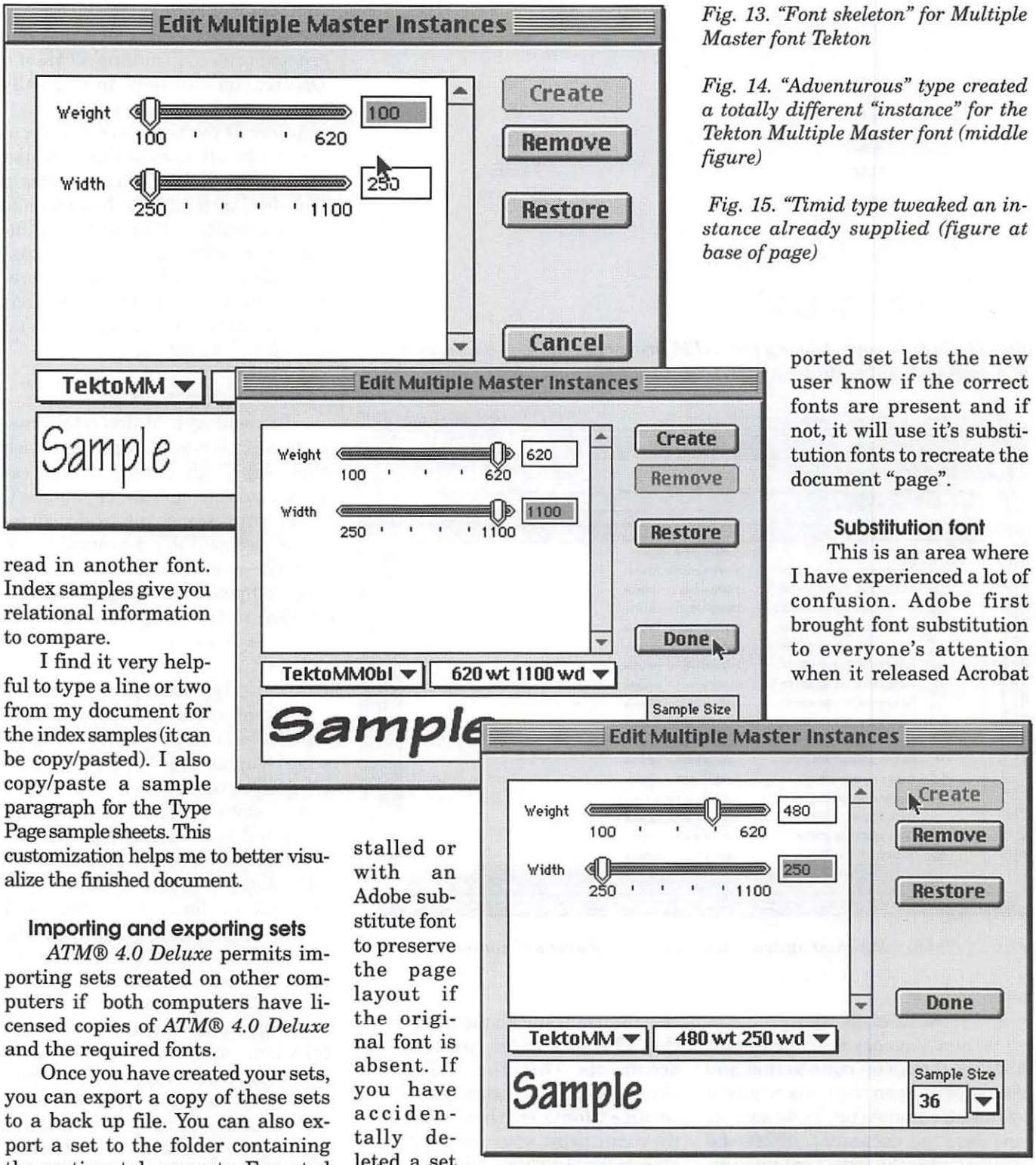

Fig. 13. "Font skeleton" for Multiple Master font Tekton

Fig. 14. "Adventurous" type created a totally different "instance" for the Tekton Multiple Master font (middle figure)

Fig. 15. "Timid type tweaked an instance already supplied (figure at base of page)

read in another font. Index samples give you relational information to compare.

I find it very helpful to type a line or two from my document for the index samples (it can be copy/pasted). I also copy/paste a sample paragraph for the Type Page sample sheets. This customization helps me to better visualize the finished document.

Importing and exporting sets

ATM® 4.0 Deluxe permits importing sets created on other computers if both computers have licensed copies of *ATM® 4.0 Deluxe* and the required fonts.

Once you have created your sets, you can export a copy of these sets to a back up file. You can also export a set to the folder containing the pertinent documents. Exported sets **do not** contain copies of the fonts used. They only contain the information needed by *ATM® 4.0 Deluxe* to duplicate your document page using the same font if it is installed or with an Adobe substitute font to preserve the page layout if the original font is absent. If you have accidentally deleted a set from *ATM® 4.0 Deluxe*, the exported set can restore the deleted "rolodex" card. When the files with the exported set go to someone else with *ATM® 4.0 Deluxe* installed, the exported set lets the new user know if the correct fonts are present and if not, it will use it's substitution fonts to recreate the document "page".

Substitution font

This is an area where I have experienced a lot of confusion. Adobe first brought font substitution to everyone's attention when it released Acrobat Reader as freeware. Anybody who has any Adobe product and everyone who has Acrobat Reader will find those "mysterious and mischie-

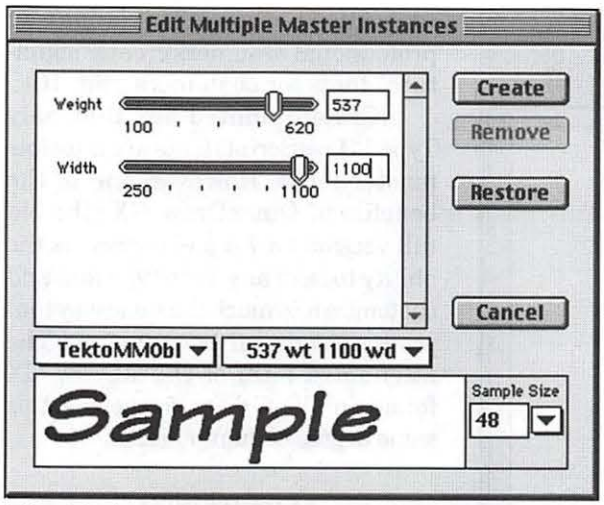

Fig. 16. An example of an individualized instance that could be used as a "logo signature" typeface

Fig. 17. In this example, the "jaggies" show up on screen and in printouts also

vous" fonts—

Adobe Sans MM
Adobe Serif MM
Adobe San MM
Adobe Ser MM

inside the system fonts folder. Dialog boxes frequently refer to them, asking permission to substitute fonts or we get the pesky box that nags us and insists we must install those fonts and then restart our computers even when the fonts are present. Up until now, all I understood about these messages was that Acrobat was irritable for some reason.

In writing this article, I found it necessary to call Adobe to verify the accuracy of some items I wanted to include. I was connected with a very informative lady named Kirsten. (Adobe doesn't permit last names to be given out.) Kirsten, a member of the "Adobe ATM Type and Drive Tech Support Group", was very helpful and informative. Finally, I understand the concept of substitution fonts—

Substitution fonts preserve the feel, the look, and the spacing of the page. They do not re-create a missing font.

When the originating font is missing on a computer attempting to read documents created on a computer with *ATM® 4.0 Deluxe* or those written in "PDF" format, *ATM® 4.0 Deluxe* or Acrobat will snag one of the four Adobe "voodoo" fonts, Adobe Sans MM, Adobe Serif MM, AdobeSanMM, or AdobeSerMM, and give it the parameters required to duplicate the "page layout" of the original document.

The intent with substitute fonts is to preserve the spacing and layout form, not to recreate the original font. Everyone who has created a document knows how much time, effort, blood, sweat and tears go into designing documents that are logical, flow easily, seduce the reader to keep reading and present an inviting appearance.

Without Acrobat substitution fonts, "foreign" documents (not created on your computer), would look like some of the "Read Me" or text-based BBS messages look—large gaps where invisible commands or carriage returns are embedded for the original formatting, strange spacing, enormous tabs, disconcerting sentence and page breaks, etc. With substitution fonts, Adobe's substitute fonts tell the computer how thick each character must be, how much space between each character, how tall and wide to space between lines and characters to take up the same amount of paper space as the original font used.

Suppose you create a document with the fonts London (a very ornate serif font) and Tekton (a clean, modern sans serif font). Adobe does not recreate the ornate look of London or the distinctive look of Tekton, rather it uses one of its two serif fonts to provide the correct size and space of the characters written in London and one of the two sans serif fonts to provide the correct size and space of Tekton. (fig. 11) The letters MM at the end of these four fonts indicates they are Multiple Master fonts. Which brings us to another murky area for many people.

Multiple Master Fonts

With most font folders and suitcases I feel very comfortable diving in and opening each item to peer into all its nooks and crannies. I tend to shy away from Multiple Master fonts. There's so much stuff in there that I have problems keeping all the subtle nuances sorted out after the first six or eight items. The names are usually "alphabet soup" which makes it harder to remember the differences (fig. 12). *ATM® 4.0 Deluxe* has disclosed some of the secrets lurking in the morass known as Multiple Master font folders or suitcases. Talking with Kirsten from Adobe filled in some more gray areas.

Basically, a multiple master font is a font skeleton. (fig. 13) Adobe designers create a basic shape, look, weight and size. Inside those folders or suitcases the alphabet soup represents suggested variations of the Multiple Master font axes placed in the suitcase by the designer for you to choose from if you don't want

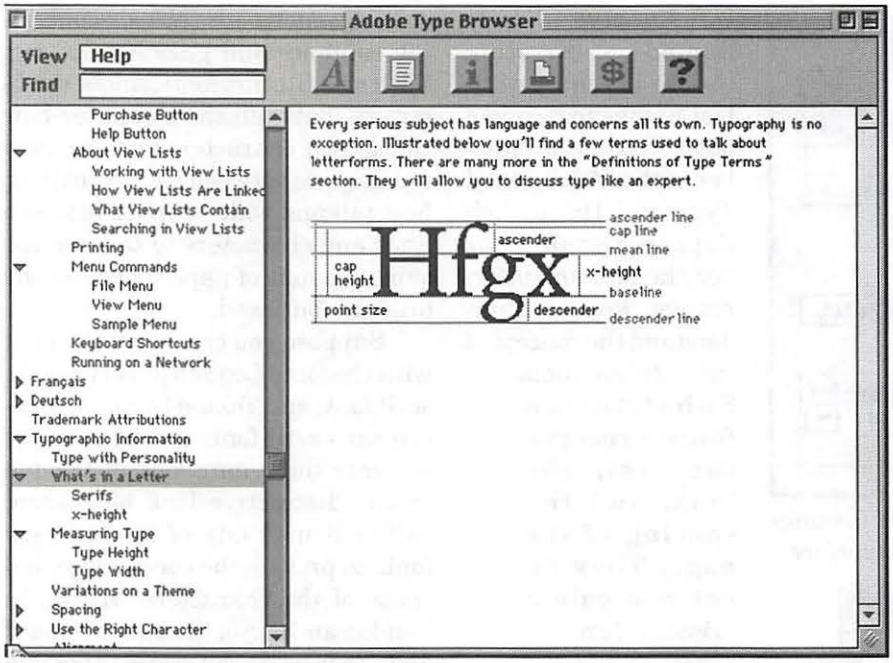

Fig. 18. "Help" window showing some of the topics covered and documenting the anatomy of a "character"

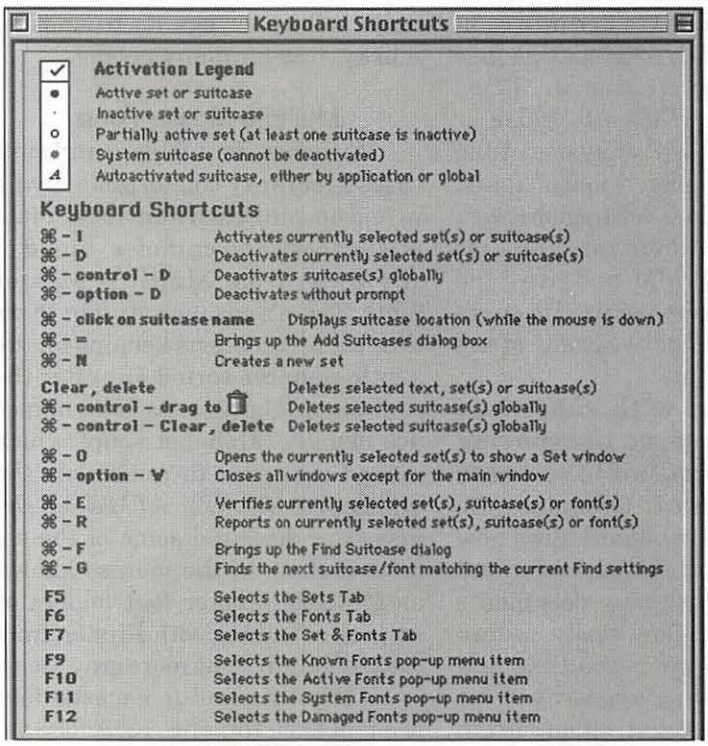

Fig. 19. Keyboard shortcuts displayed in the menu bar under "Help"

to create your own customized font. The variations are themselves variable in case you want to further customize the font. The more "creative types" or "type veterans", go straight to the skeleton and start customizing (fleshing out the skeleton). (fig. 14). Newbies or the timidly adventurous, can tweak one of the supplied "instances" until they feel ready to work on the skeleton directly (fig. 15).

Each customized variation of a multiple master font is called an "instance". The numbers and abbreviations give the user reference points for design consistency and replication purposes. This is one way professional designers create "signature" fonts for customers. (fig. 16).

Kirsten pointed out that only Type 1 (PostScript) fonts are multiple master fonts. However, one of the benefits of QuickDraw GX (the old full version on 7.6 and earlier) is the ability to take any TrueType font and customize it in much the same way that postscript fonts can be customized. The attenuated form of QuickDraw GX found in OS 8 does not permit this same degree of manipulation.

Anti-aliasing

When anti-aliasing is selected in the preference menu, *ATM® 4.0 Deluxe* will clean up the bitmap "jaggies" (fig. 17). on screen. *ATM® 4.0 Deluxe* also helps smooth out the jaggies that occur when you send PostScript fonts to a QuickDraw printer. There is a far more complete and technical explanation of aliasing and anti-aliasing available but it doesn't really change the results.

PostScript is an actual programming language that the printer uses. When you print with a PostScript printer using a PostScript font, the computer microprocessor chip in the printer converts the complex mathematical formulas into smooth curving lines to create the image you designed (that's also why PS printers need their own dedicated memory). Because seeing a mathematical formula on screen doesn't help you visualize the way your page will look, there is a bit map font for each Postscript font.

This bit map is a pixel image of what each letter will look like. It is a higher resolution form of what dot matrix printers printout. (Remember the "jagged stairsteps"?) On screen, *ATM® 4.0 Deluxe* tries to blur the hard sharp edges so the lines created by the square pixels seem to be smoother.

When anti-aliasing is turned on, *ATM® 4.0 Deluxe* mixes blurring with lighter colors to create the illusion of a much smoother, free flow-

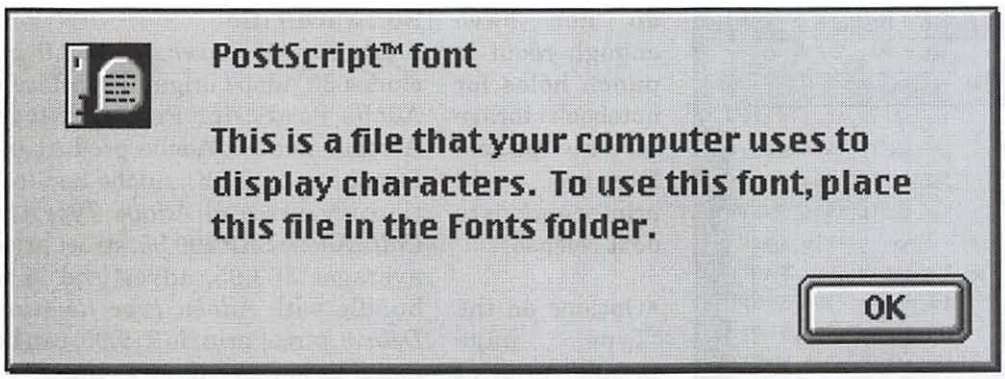

Fig. 20 PostScriprt Dialog box. Will not let you "see" the font unless you use the corresponding bitmap font or print out a sample

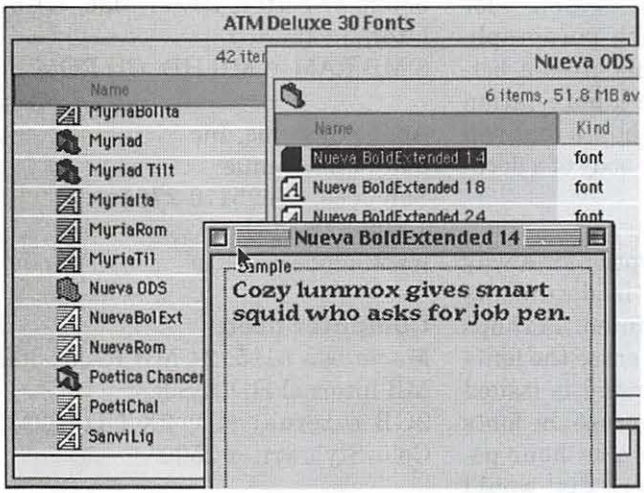

Fig. 21 TrueType icons fully opened to reveal sample of the typeface

ing line. (fig. 4) which slows down the speed at which your computer draws the screen. You have to choose between more readability and faster processing. For most situations, the speed decrease will not be that noticeable. If you have an older '020 or '030 processor, you may prefer to use larger font sizes and turn off anti-aliasing to get every bit of speed and quality possible out of your computer.

When printing to QuickDraw printers, *ATM® 4.0 Deluxe* rasterizes (turns lines and outlines into dots or pixels) the PostScript font to print in dots instead of mathematical formulas

Type On Call

Type On Call, Adobe's Type Library on CD-ROM is bundled with *ATM® 4.0 Deluxe*. This CD is packed with "goodies". The primary purpose of this CD is to give the user a convenient and fast way to purchase fonts on a moment's notice. Not good for impulsive shoppers, excellent for an over worked designer on a tight deadline with a crucial font missing.

Other items on the CD include an on screen "Type Browser" for casually strolling through your "virtual font shop" and perusing the merchandise. There is a very helpful online guide that walks you through the various tasks. (fig. 18).

The ubiquitous Acrobat Reader is on both CDs. The User's guide (which is written in PDF), Adobe's PostScript Printer Drivers, a convenient and easily accessible multilingual user interface are also included.

There is a"find suitcase" command on both CD's—ATM and TOC, to assist in finding misplaced or lost fonts.

It pays to register Adobe products

Most of these features are not accessible until after the products are registered so I couldn't verify them yet. The literature suggests that Type Reunion is included on TOC and available after registration. The Adobe sales rep. stated it was not included in TOC 4.1 but was on TOC 4.2. Since I am precluded from registering the software until after my article is accepted by Kathryn, I will verify and report on these issues later.

Type Reunion displays fonts in wysiwyg (what you see is what you get) menus that are also grouped by family. Both of these features greatly help to manage font lists. If added to the features in *ATM® 4.0 Deluxe*, your font list becomes shorter, wysiwyg, and easier to access. *ATM® 4.0 Deluxe* would also become a much more robust product.

When you register, you may choose two type packages from a preselected list of eight. The value of this feature alone can be as high as $220. *ATM® 4.0 Deluxe* also gives you 30 Adobe original typefaces.

There is another offer that lists 5 different Type 1 packages for $39 each versus the regular price which varies between $40 and $199 each. The user can get one, some or all at that price.

The online manual and documents are very readable and genuinely helpful. Demo or trial copies of all the Adobe products are included with *ATM® 4.0 Deluxe*.

TOC provides a utility that will back up, restore or uninstall fonts and otherwise preserve the access keys you are given when you purchase type packages.

Tech Support

I did not need tech support for using the software. Both the small printed manual and the online documentation were easily read and understandable. I did solicit tech help

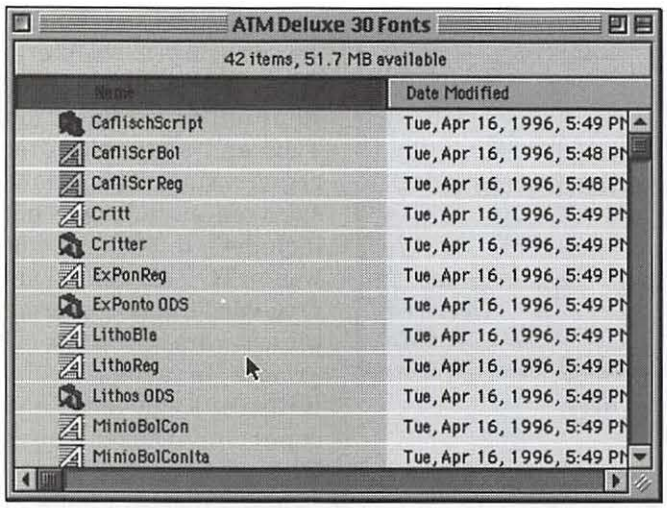

Fig. 22 Font folder showing PostScript font icons ("A's") and TrueType font suitcases

to verify the accuracy of my concept of how the software works. On my initial call, I waited a few minutes, not long enough to get impatient or wish I had timed the interval. The first lady I talked to felt my questions were somewhat beyond her expertise and asked permission to hand me to a more experienced tech person. That person turned out to be Kirsten who I mentioned previously. If she is any indication of the quality of Adobe's tech support staff, Adobe is in good hands. She was knowledgeable, concise, patient and thorough. One of my questions referred to QuickDraw printers and whether they could use the Multiple Master options. Kirsten answered all the questions I had and then told me she wanted to confer with someone else before she answered that one. She was gone briefly and returned with an unnecessary apology and the answer to my question—QuickDraw GX would provide those options to QuickDraw printers.

Actually, I played around with the Multiple Masters and successfully created an "instance" that printed accurately on my CSW 2500.

Wish list for next release

•The ability to select margins for the sample pages. The default margins do not have enough room to punch holes for notebook storage of the pages. **Please** add printer options to next release.

•Options on the "Type page sample" to print out Paragraphs in columns in variable sizes for each paragraph. This gives a better appreciation of how a font will look when used in the body of a document.

•Some form of encryption or a way to include the fonts in documents that go out to be printed. Perhaps an applet that would erase the fonts after one print command is issued or a timer that would erase the fonts if not printed within a 48 hour period. Maybe a password that would automatically send the file to print and erase the fonts afterward.

Software Title
Adobe Type Manager Deluxe 4.0 includes 30 Adobe original typefaces, Adobe PostScript Printer driver, Acrobat Reader, Adobe product information (in PDF), Adobe application tryouts and *Adobe Type On Call.*. Adobe SRP $99.95, street price averages $69.95, advertised as a bundle with *Adobe Type Reunion Deluxe*, street price is $79.95, can be found as low as $49.95 at times.

System Requirements
68020 or better; Power Mac, 7.1 or later,
8 MB RAM, 6 MB HD, CD ROM

Adobe Systems, Inc.
345 Park Avenue
San Jose, CA 95110-2704
1-800-822-4451
www.adobe.com

Computer used
Macintosh 6115, 24 MB RAM, 350 MB internal HD, OS 8,
2GB external HD, 2X CD-ROM, ColorStylewriter 2500

© 1997 Mary Keene—email address: e.mkeene@tcs.wap.org
Mary is a freelance graphic arts, craft designer and teacher

Glossary

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This is not a politically correct, alphabetized glossary. It is "technically challenged" and attempts to group the defined words by tasks or other similarities. I also exercised artistic license in this section and tried to use metaphors that were outrageous enough to become memorable or at least good for a few laughs. Hopefully, I've been somewhat accurate in the process. If not, let the controversy begin..

•**Type**—characters that leave ink shapes on surfaces.

•**Typeface**—the character design, ie, a specific collection of characters and symbols sharing a common design theme , ie, Helvetica is a font or typeface. All Helvetica fonts will look alike just bigger or smaller ("Typeface" used interchangeably with "font").

•**Font**—the character design at a particular size, ie, Helvetica 10 pt. Helvetica 18 pt (points) looks like a larger size of Helvetica 10 pt. (be-

cause it **is**.) Helvetica 18 pt. is a different font because it is a different size. ("Typeface" used interchangeably with "font", technically not the same exact definition)

•**Screen or bit mapped font**—a special "graph or map" of each character (think needlepoint or cross stitch) drawn in the one size that looks best on monitor screens (Usually 72 **dots per inch**). This makes it easier to read the characters on the monitor screen and is an attempt to accurately portray how the font will look when it is printed out. Sometimes it works, sometimes it doesn't. Look in the size menu. If you see some sizes in outline format, the selected font will look best if printed in one of the outlined sizes especially if the font is named for a city, ie, Geneva, London, Athens.

•**Printer font**—this is what causes the printer to draw on paper, the characters you typed in your document. This is all you need to know about printer fonts. For the more curious or the adventurous, Printer fonts come in two flavors—PostScript and TrueType.

•**PostScript versus TrueType fonts**—if you click on a PostScript font, you get a dialog box that tells you it is a file used by the computer that belongs in the font folder in the system folder.(fig. 20) If you click on a TrueType font, you can keep clicking on the icons until you finally see a sample of the typeface. (fig. 21)

This also gives you an easy way to remember the important differences between the two—PostScript fonts are a program language that uses complex mathematics to create the outline of each character. They have to be printed by a PostScript printer that has a cpu processor and enough RAM to decipher the program code. (Can you say "costs more?")

TrueType fonts quickly draw your message. They have no secret files, there are no surprises, they let it all hang out for everyone to see. Your printout will be as good or as bad as the document on your screen. TrueType originally could only be printed by a QuickDraw printer. Now almost all printers can print TrueType. A QuickDraw printer must have a specific software application to teach it how to draw PostScript. ATM fills these niche positions completely in most cases.See if you can tell the PostScript fonts from the TrueType fonts in fig 22.

•**ATM**—a font utility that turns lines into dots and dots into lines. If you can see ATM working, it isn't. Think of ATM as the world's best butler, always running around behind the scenes or invisibly in public view, tweaking, dusting, adjusting etc,. to be sure everything is always presented in the best possible view. Best of all, it doesn't belong to a union and rarely asks for a cost of living raise. Like a pair of cozy slippers—you take it for granted..

•**ATM® 4.0 Deluxe**—a "modern day butler" who collaborates with the employer instead of running the employer's life. The"butler and employer" identify what needs to be done, how best to do it and how to delegate the tasks to the peons.

With ATM (the bulter) in the background, the "employer" (user) doesn't need to stop and ask what fonts (s)he can use, (s)he justs uses the one (s)he likes best.

•**Multiple Master fonts**—a fully customizable character skeleton. With this font, the user, even a newbie, can design a font in seconds by pulling here, squooshing there, tweaking over yonder.

Fonts have weight, height, and width. Each of these terms is called an axis. Pull on one axis and the other compensate. The more axes, the more change is possible. Multiple Master fonts have variable numbers of maneuverable axes permitting that many possible looks.

A skillful editor or layout artist will use these variables to stretch, scrunch, shove and pull fonts to fit awkward spaces better. When you read the newspaper and see those weird empty spaces in the middle of a column or the w o r d that is stretched out of context, you see what happens when an editor tries to justify type with the wrong tools or fonts.

•**Adobe Font Folio**—the full, unlocked version of Adobe's font collection on CD-ROM, unlocked, with a hefty price tag.

•**Adobe Type Library**—Adobe's type collection on CD-ROM, locked. You can call and buy bits of it which are then unlocked by entering the "key" Adobe gives you when they get the check.

This is the least you need to remember about fonts.For many people it is also the most they need to know. Those who want to know more are encouraged to pick up any of the Robin Williams books. If you want to buy only one book that will give you a basic education in type and printing, "Jargon, an informal dictionary of computer terms" is suggested for newbies and those who want a broad picture of type and computers in general. (currently selling at Micro Center for $1.49.) For those more curious about the whole subject of type and desktop publishing, "How to Boss Your Fonts Around" or any of the other Robin Williams books are suggested..

•**WYSIWYG**—**W**hat **Y**ou **S**ee **I**s **W**hat **Y**ou **G**et. Your printout will look exactly like your screen document only more relaxed ■

Wabbit Wavings

by Mel Patrick

I'LL BET you're already wondering what I am going to write about this month.

How about this:

I know an IS manager (Information Services—data pushers for companies) who recounted an interesting story to me. Seems their office had about 25 aging Macintosh computer systems. So a decision was made to upgrade their entire office network. You're thinking they went out and bought the latest PPC's right? Wrong. They changed their entire platform from Macintosh to Windows 95. At a higher cost than the equivalent Macintosh systems, with more training budgeted and with a much more intensive support network. He told me that he worked it out and he said it cost 40% more to change to the Windows platform and this was only the immediate expense.

When asked why, it was a two fold reason. The first was that he was only recent to this position (6 months) and didn't want to make any mistakes. When pressed about what he meant by that, the simple truth came out. "No one was ever dismissed for buying Windows 95". It was not a case of what was the best tool for the task, what was the cheapest to maintain, nor were any considerations regarding the people who had to use these systems taken into account. A simple, "Don't rock the boat." was the best to ensure employment.

One wonders how many cases there are like this.

Or:

The old "bait and switch" tactics that are used by salesmen to sell Windows computers to unsuspecting Macintosh prospects. After all, if you're a salesman, don't you sell what you make the most money on and what the average person perceives as a "safe" purchase?

For example, you visit "Gas Guzzlers" car dealership and the salesman says to you, "Sir you have my word that you are buying the best car on the road today." And like a trooper, you believe 'cause well, he said what you wanted to hear.

> "There's no computer 'geek speak' to muddle through. How many times have you found yourself listening to a salesman, and nodding your head in agreement when you haven't fully understood what the heck he was talking about?"

Of course, this salesman moves on to "Gas Misers" dealership and of course the song changes, "You know its a shame that you bought a Guzzler product, when the Miser is so much better." Maybe you realize that he's right, but if you're a real man, you'll never admit it ('cause I'd write about it and the whole club would know).

And of course, the spouse will remind you of it constantly.

I deal with a lot of salespeople. Some know me, some don't. I have a little rating system for salesmen that I use. Did they answer the question that I asked them. Picture this. You walk into a computer store and ask for a golf game called "LinksLS". The salesmen replies with something like this:

1. It's on order.
2. Never heard of it.
3. What is it? (followed by
4. I heard that it's out for the PC.

And that's usually the end of the conversation. Unless you continue to press for more information. A salesman who doesn't know his products is... well... a salesman. He sells. Knows diddley squat about what he's selling since his job is to SELL, not know what he's selling.

You may think that sounds pretty far out, but it's true. When I applied to get a job selling computers at Radio Shack back in the early 80's, I almost didn't get it because, "I knew too much about computers" and they wanted a salesman. The fact that I sold more in a given time frame than their computer store just baffled them because I wasn't a salesman.

Therefore I tend to deal at stores where I know the people. I usually work with (the key words being "work with") a single salesman. No, not one of your local "Stupor Stores" where the sales staff are current about as long as today's paper, but someone who's worked in a store for a while. Stability is important.

So where do I deal? I normally don't name too many names in these columns, but to make a point here I'll do it (gee, imagine my column with a point...) Mostly at Simply Computing and solely with Stefan Oetter who has been there long enough to be a fixture (had to say that since I didn't want his head to swell too much when he sees his name in print).

Why? Oh, let's say honesty, frankness and willingness to help

"At a higher cost than the equivalent Macintosh systems, with more training budgeted and with a much more intensive support network. He told me that he worked it out and he said it cost 40% more to change to the Windows platform and this was only the immediate expense."

when he can. Never in all my dealings has he ever suggested, "If it were me, I'd buy the WhoopDeDo model". Not once. I usually end up with an arm load of brochures or whatever information he can lay his hands on and I'm responsible for my own blunders. I can peruse all the information and then ask him questions based on the information and he responds with... an answer. Most importantly, an unbiased answer.

His frankness is most refreshing today too. I don't have to listen to half an hour of theorem about why 57K modems are faster than 33.6K ones. There's no computer "geek speak" to muddle through. How many times have you found yourself listening to a salesman, and nodding your head in agreement when you haven't fully understood what the heck he was talking about? Be honest. Really? If you say so. However I've done it and I know it's dumb, but sometimes you just don't want to appear stupid. So you nod, and the salesman says to himself "got one". Might as well have put on the stupid sticker before I went out.

And lastly, Stefan exhibits that odd ability of "wanting" to help you. Yes, I know it's a possible sale and that's his job, but in that case, why don't more do it? Beats me.

If I called Stefan and asked him about LinksLS, I'm pretty sure his reply would be one of:
1. It's on order from the supplier and we expect it in "weekday" afternoon.
2. No we don't have it in stock and it's not available through our suppliers so you'll have to check around or go mail order.
3. Got one here, want me to set it aside?
4. See the review in McPlanet? They had some concerns about it.

Take a good look at #2. Imagine a salesman from the Guzzler car company telling you to go check out the Miser lot because they may have what you want. Reminds of the Christmas movie Miracle on 34th Street. Like a salesman is going to do that... right. But Stefan has done it (oh boy he's going to get heck now...). And on more than one occasion because they "Simply" don't have it (I knew I was going to work that name in there somehow...).

Now before you go rushing off to verify all this first hand and embarrass poor Stefan (it's not easy), keep in mind that I am making a point here (I'll try to keep that in mind too). Besides, I found him, he's mine, go find your own... ;—)

Have I implied that Stefan won't give you a suggestion about what might be best for you? If you give him the information you have to work with, he'll always come up with a suggestion about what might be a good solution, compromise and usually a good alternative. Ultimately it's still my call, but two heads working on a solution are twice as good as one.

No, he doesn't have all the answers to all problems either. He's darn good at the things he knows, but none of us knows it all. In spite of rumours you've heard, I can count in hexadecimal, binary, octal and do SCSI ID's in my sleep (annoys the wife) but Photoshop mystifies the heck out of me.

Do I always get quoted the lowest price in Canada from Stefan? Hardly. Competitive yes, but certainly not always the lowest. But as I pointed out earlier, he's honest. I don't have to call back and say, "Gee I can get that at SoftStuff, for 3 bucks less" and haggle. I get a final price first time. If I call around and feel like driving downtown, wasting 6 bucks worth of gas, 2 hours of my time to save 3 bucks, it doesn't seem to bother Stefan. He's always smiling... I bet he knows something...

However, since we have a good working arrangement, he's saved me a few hundred bucks over the years by helping me solve problems by coming at them with a new approach. Maybe I don't know all the latest products or what's coming. He's in a good position to be aware a lot of stuff and I tap into that knowledge when I need it. He also takes the time to be aware.

This is the era of service. I have my own personal people or team that I draw from. A personal banker (someone who's more interested in me than my money), an automotive mechanic, a doctor, a real estate agent and a personal computer person.

Corny Moral

So think of this as a baseball team. There is no way you're going to win any games unless you cover all the bases... ■

From the November 1997 *MacWest Memo*, newsletter of the MacWest Computer Society of Surrey, B.C.

The Beginning ///

by Richard and Lavona Rann
(with a bit of editing by Dave Ottalini)

Originally published in On Three Magazine, January, 1987

Getting Started

THIS IS the first in a series of articles dealing with the basics behind operating the Apple ///. Why now, when no Apple /// has been made for more than three years (editors note - now more than 13 years!)? Simply because many new people have come to the /// over the past few years. Some have experience, but most are new to microcomputing and need help to get the most out of their Apple ///'s. These articles will help the beginner while serving as a review for the more experienced user. Hopefully there will be a few new tricks for even the most proficient among you.

These articles will present topics about Apple /// operation beginning with the simplest and moving to the more difficult in a logical, step-by-step manner. We hope the newest beginner will follow each procedure, learning by doing. Some areas may be familiar, while others may be completely new to you. For your benefit, we will use CAPITALIZATION and [brackets] to set off particularly important facts, so you may find them easier when using the articles as a reference tool. In the end, we hope everyone reading this series gains knowledge of their Apple ///s and improves their efficiency.

An Apple /// Walk Around

Every experienced pilot walks around his airplane before taking off to make sure everything is working properly. Before booting your first program, let's do a quick walk around of your Apple ///. It is important to become familiar with its physical features, so let's examine the ///. Looking at the Apple /// with the keyboard facing you, you will see a standard typewriter-style keyboard and next to it a calculator- like numeric pad.

> "These articles will present topics about Apple /// operation beginning with the simplest and moving to the more difficult in a logical, step-by-step manner....follow each procedure, learning by doing. Some areas may be familiar, while others may be completely new to you."

Keyboard

The Apple /// keyboard appears and operates much the same as a standard typewriter keyboard. Like most computer keyboards, it has a few special keys. ALPHA LOCK serves the same function as the Shift Lock key on a typewriter, except it ONLY SHIFTS THE STANDARD ALPHABETIC KEYS TO UPPER CASE. ALL SPECIAL CHARACTER KEYS AND PUNCTUATION KEYS REMAIN IN LOWER CASE. TO RAISE THESE KEYS TO UPPER CASE, THE "SHIFT" KEY MUST BE HELD DOWN.

Every key is equipped with an automatic repeat. Holding down the key causes the letter or number to be repeated until the key is released. Some of the special character keys have a two speed repeat. The longer the pressure on the key, the faster the character is repeated. This is advantageous when moving the cursor and drawing lines or dots.

Special Keys

Let's digress for a moment and examine the way you "talk" to a computer through a keyboard. Most programs (what you really talk to) follow one of a few generally standard human interface protocols. Older programs may follow a protocol which requires you to key in a line and then tell the computer you are ready to send it. In that case, the special key RETURN (or sometimes ENTER) is used to send the data you have typed. Unfortunately, not all programs use the same rules, so it will take a few moments to familiarize yourself with each new program. Some programs let you communicate and make choices by entering one character, without pressing RETURN or ENTER. Many programs, like System Utilities, permit options which use ARROW KEYS (up, down, left, right) to position a highlighted area on your screen and then follow with RETURN to verify the selection.

The Escape, Control and Apple-shaped keys tell the computer that a special instruction is coming. The ESCAPE key is usually followed by another key to form a command to the computer. Some programs, like System Utilities, use the ESCAPE key to allow you to back out of a section of the program to the previous menu.

Unlike ESCAPE, the CONTROL and APPLE- SHAPED (called Open-Apple and Closed-Apple) keys are used as the shift key is: they change the value of what is sent to the computer to allow for special commands. The normal use of the CONTROL and APPLE-SHAPED keys requires that you hold them down WHILE another key is pressed. The table below indicates some of the control codes which are available in many (but not all) Apple /// programs. If they don't mean anything to you now, don't worry. Most of them are nice-to-have's rather than necessities.

Reset—This key is located on the back edge of the keyboard just in front and a little to the left of the internal disk drive. It is used along with the Control key to load and start new programs. Basically the CONTROL RESET combination does the equivalent of a power off and power on for your machine without subjecting it to the wear and tear of performing an electrical on/off. The system BOOTS from the diskette in the internal drive (.D1). The term "boot" is a shortened way of saying that the computer must pull itself up by its bootstraps. (When we first started learning about computers, each job had to be preceded with a "bootstrap card.")

Most software packages produced for the /// come with bootable disks. This means that the disk already contains the files necessary to start and run the programs as soon as it is inserted in .D1 and when a CONTROL RESET is performed. In many cases, one of the files on the bootable disk must be tailored to operate with your own printer and with other add-on devices. We will cover this in a future discussion of SOS.DRIVER files. For now, just remember that whenever you do a CONTROL-RESET, EVERYTHING the computer had in memory which was not stored, or saved, on a diskette is LOST and the /// will try to load a new program from the internal drive.

Use of the RESET key *alone* is referred to as a "warm restart." This stops the program which is being run but leaves it in the computers memory. Some programs allow for a restart (Business Basic programs often do), but it is wise to avoid the RESET key unless you are certain you want to throw away what is in the machine's memory.

Numeric Keypad - This is located on the far right-hand side of the keyboard. In most programs this offers a way of quickly entering numbers, but the keys are programmable. Many times they are used for special functions. The ENTER key usually serves the same function as the RETURN key (some programs can tell the difference).

The numeric keypad offers an easier way to enter the numeric values found on the typewriter keyboard. However, there are programs that use these keys for special purposes.

Internal Disk Drive

Above the numeric keypad, in the body of the computer, is a disk drive. The drive is opened by lifting the drive door located in the center of the disk slot. This drive is referred to as the INTERNAL DISK DRIVE or .D1 (pronounced "DOT - D - One"). With the door open it is easy to see a small red rectangle at the bottom of the recessed area of the drive. This is the DRIVE OPERATING warning light. WHEN THE DISK DRIVE IS OPERATING, THE RED LIGHT COMES ON. DO NOT OPEN THE DRIVE DOOR WHEN THE LIGHT IS ON. Opening the drive door while it is attempting to read or write may damage the diskette.

Looking at the Back of the Apple ///

Besides the ON/OFF switch, the back of the /// has all the connectors for hooking up the various input and output devices which can be added to the ///. The standard monochrome monitor and an external disk are most often the first things added to a /// system. There is a serial port which can be used with either a modem or a MODEM ELIMINATOR CABLE which is used with a serial printer. Adding any devices other than the monitor will probably require that you change the SOS.DRIVER system file on EACH of your PROGRAM disks. If you have just purchased your first ///, we

suggest you get it up and working without these additional devices before attempting to add them.

Putting Your System Together

First, no power should be on while connecting any cord. A short or power surge could damage your Apple ///. It is safest not to have the machine plugged in during setup. Many computer owners feel that a Power Conditioner (or Surge Protector) is necessary to go between your household current and the computer and its related devices. This is a personal decision but, if you are considering an extension cord to add outlets, we think a Power Conditioner with an on/off switch and multiple outlets is a better idea.

Plug one end of the monitor connector cable into the B/W Port if your monitor's screen is black and white, green or amber (all monochrome monitors and color monitors use a different port) and the other into the port on the back of the monitor. If you have an external drive, take the connector ribbon and plug it into the Floppy Disk Connector Port. NOTE THAT THERE IS A RAISED NOTCH INDICATING THE UP SIDE OF THE CONNECTOR TAPE. THIS MUST BE ALIGNED WITH THE MATCHING SLOT ON THE UPPER PART OF THE PORT. (Apple /// plus computers require an additional connector between the floppy disk connector port and the ribbon connector.)

If you serial printer you can connect it to a MODEM ELIMINATOR which you will then connect to Port C, the RS-232 port. If you have a parallel printer, it will require a special card to be installed inside the /// in an EXPANSION SLOT. We will cover parallel printers in more detail in a later article.

Connect the AC power cord first to your Apple and then to an electrical outlet. Next plug you monitor power cord into an electrical outlet. With the door on disk drive one (.D1) open and no disk inside, turn on the monitor and then reach behind the Apple /// and turn on the computer. The disk drive will spin twice looking for a program in .D1. The auto speaker in the front of your machine will beep and the word RETRY will appear in the upper-left corner of the monitor. You are now ready to run your first program.

CONTROL KEY COMMANDS OFTEN AVAILABLE IN /// PROGRAMS

Control Reset	Initiates a Boot (just like power on)
Control S	Toggles video display on and off
Control 6	Flush data from type ahead buffer
Control 7	Temporarily stops program in progress
Control 8	Makes Control codes visible on display
Reset	Initiates a Warm Boot (new program boot)
Control 9	Stops output to screen of printer
Control C	Cancels a program immediately (RESET)

Booting or Starting the ///

The Apple ///s operating system is called SOS, pronounced sauce, for Sophisticated Operating System. It is, by definition, present on every bootable disk. A bootable disk must have the following three files: SOS.KERNEL (the operating system code), SOS.DRIVER (the file which defines the input and output devices for your system) and SOS. INTERP (a special type of program which runs your system). These are the files an Apple /// must have to operate.

Anyone with an APPLE /// needs a copy of one of the versions of the SYSTEM UTILITIES program. If you did not receive one with your machine, contact (WAP - Disk 3SYS-02) to get one. In the next installment, we will use SYSTEM UTILITIES to demonstrate some of the /// 's capabilities and introduce some new topics. ■

On The Trail of the Apple ///

by Dave Ottalini
WAP /// SIG Co-Chairman

INTEREST in the Apple /// continues! Those of us who love to fan the flame for our SARA have two different projects to cheer for these days - some 10 years AFTER the /// was discontinued by Apple.

In late November, I got an email from Chris Smolinski (cps@access.digex.net) who wrote:

I am working on an Apple /// emulator for the Mac. Are there any resources online (ftp, www, etc) that contain information for the ///? I still have some of my old notes and information (and a working ///+) but not quite enough. I'll also need a way to get an image of the ROM (worst

case I can open up the ///+ and copy it, but I'd rather not. Could someone throw together some pascal code to read the rom and save to disk?)

I'll also need beta testers eventually, when I get to that stage.

Of course, I immediately offered him our help in any way possible.

Chris later explained why this was a project he's gotten interested in:

> I've been an Apple fan for quite a while, ever since I upgraded from an Atari 800 to an Apple // c. I have a mini collection, including a /// and a ///+, along with 4 or 5 Lisas in various states of repair. A Lisa emulator was my first thought, but I decided to tackle something a little easier first.
>
> I was a WAP member many years ago, and still attend the garage sales when I remember them! The last two have snuck up on me and I missed them. I have Dec 13th marked down, hopefully I won't forget this time. And hopefully it won't snow.
>
> I've written quite a few Mac freeware and shareware programs, most written for ham radio operators and shortwave listeners.
> With all the emulators out for other machines, I thought one for the /// would be very interesting. I also hope it will help to preserve what's left of the /// "universe" by encouraging people to at least make disk images of the various programs. Otherwise I can forsee a lot of software disappearing forever.

Being able to access our old Apple /// programs—AppleWriter, 3EZ Pieces—maybe even BOS3 (a hard disk menu program) would be fantastic. There exist emulators for all other Apple II machines, so it's amazing in some ways that the /// has taken this long, but as with most of these kind of projects, it took the interest of one person to get things going.

Apple Projects II

And as if this wasn't enough to get our SARAsaur blood moving faster, I also got an email from Bill Malcolm (wm32509@inetnebr.com) who wrote:

"These days, by the way, we see more and more collectors looking for older Apples—including ///s so they can 'round out' their collections. This is, actually, a good sign since it means our SARAs will be well taken care of and perhaps even kept in good working order for others to marvel at."

> I am going to start writing the "C' for the Apple /// soon:
> the Kernel to the C will be in assembler , based on the tiny C with an integrated editor. The whole thing will be an integrated development environment. I am hoping to have working alpha release done by March 1 1998.

Having little experience with languages other than Business Basic (the ///s Basic Language) I'm not entirely sure what this will do for our SARA except that C is a much more modern language for computers and this could open up a host of new programs—possibly ported over from other computers. Anyhoo—stay tuned!

Apple ///s Still In Demand

This note comes from our friend Bobby Sambolin in Puerto Rico:

> Recently, I was contacted by some kind Apple users that had an Apple //e and Apple /// that where no longer in use.
> After some refurbishing , the computers where donated to Ponce High School in Ponce , Puerto Rico.
> They where greatly accepted by Mrs. M. Ocasio at this high school. She says that currently they are in need of more computers and that this donation is going to help out more students for the following semester.
>
> Bob's Note: Even though many people consider the old Apple computers obsolete, these computers still work and have a useful life. Please donate any computer that is not in use. There are many people out there that don't have the resources to buy a computer, and many schools without computers, so please donate a computer not in use and lets help someone become computer literate.

These days, by the way, we see more and more collectors looking for older Apples—including ///s so they can "round out" their collections. This is, actually, a good sign since it means our SARAs will be well taken care of and perhaps even kept in good working order for others to marvel at.

Apple /// SIG

Those ///ers still members of WAP know that the /// SIG has NOT

"Even though many people consider the old Apple computers obsolete, these computers still work and have a useful life. Please donate any computer that is not in use."

met for some time. Frankly, lack of interest (and lack of time on my part) has made it very difficult to sustain. WAP continues to be a source of support for ///ers around the world. We actually outsell the Apple II library some months. In fact, there have been times when /// users have purchased our entire public domain library! And I routinely get e-mails from folks asking questions.

I maintain, personally, a huge Apple /// repository of information so that I can answer people's questions. And I am continuing to work on our Apple /// FAQ (Frequently Asked Questions) file for our Web Page. IF I can get my act together, the "multimedia" version may even be finished some day (with pictures and sound from many Apple /// dignitaries like Dr. Wendell Sanders, who developed the ///).

Thanks to our Webmaster, Lawrence Charters, the /// has its own area - and it gets attention. Amazingly, folks go to and read the information that we've placed there. Recently, I gave Lawrence a Filemaker Pro version of my Apple /// Bibliography for all to use.

I intend to maintain our Apple /// support (and hope you will join me!) since this brings many good people to WAP worldwide and helps to keep our name as a user group high on the marquee. But I don't think meetings, per se, are possible anymore. Your thoughts and ideas about what direction you'd like to see the SIG take would be welcome. ■

Macintosh Disketeria

by Dave Weikert

New Disks

WE FEATURE 15 disks this month including the first part of the completely revised Internet disk series and some revised Apple System Software. Single disks are available for $4.00 each and quantity purchases are priced at $3.50 for five or more.

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).

Grab-Bag Updates—30.XX

I am releasing the recent updates as a new Grab-Bag series. These programs are provided on disk with no regard to the series in which they will eventually reside. The series is temporary and will exist for only as long as the need exists; that is, until the appropriate series are revised and these programs included. If you recall, I did exactly the same thing about a year ago.

Apple System Software

This month we added five disk images with updates to Apple System Software. They include:

Apple CD-ROM 5.4 which provides the latest bug fixes for CD ROMs used in various Apple models.

Apple System Profiler 1.3.1 lets you collect information about your Mac, network, hard drives, control panels and extensions and applications on your boot disk.

Drive Setup 1.3.1 is the necessary fix for Macs that have IDE drives including most of the recent Performa models (54XX, 55XX, 64XX, 6500 and 6360). It installs a new driver to prevent loss of files or are unable to start up your computer.

PC Compatibility 1.6.4 (2 disks) updates the software used to control Macs that have DOS cards installed.

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 channel by paying them for their efforts.

Disk #30.01B Grab-Bag

Aaron 1.6 (Fat): By Greg Landweber and Edward Voas. Transforms your System 7.6.1 and earlier Mac's user experience to resemble the Copland 3D style as shown in MacWeek, MacUser, and MacWorld magazines in the summer of 1995. Caution: Aaron may conflict with other applications and extensions. ***Shareware – $10.***

Aaron Light 1.2: By Greg Landweber and Edward Voas. A

version of Aaron for those with OS 8 it includes the effects of a new appearance scheme and substitution of Espy Sans Bold for Chicago fonts for the System display font. ***Shareware – $5.***

BeHierarchic 3.1: By Fabien Octave. Automatically creates a visual hierarchy in your Apple menu for items in folders and volumes much like Apple Menu does. Adds ability to use custom icons, label color, etc. For System 8.0 and later it adds Contextual menus. ***Shareware – $10.***

CDIconKiller1.5: By Quinn & Peter N Lewis and Fabrizio Oddone. A very useful tool for speeding up mounting of CD-ROMs. It suppresses custom icons. Also allows you to temporarily show the custom icons. It works "as is" with Apple's CD-ROM drivers (both plain vanilla and PowerCD), some NEC drives, and Optima Technologies CD-R Access CD-ROMs; other drives may be added using ResEdit.

CMTools 3.0: By Éric de la Musse. A plug-in that extends the Contextual Menu of Mac OS 8. In programs that support the Contextual Menu, such as the Finder, it provides such functions as: Launch applications, files and folders; Create aliases directly in designated folders; Decompress files and Compress any items; Copy or move files and folders; Change the creator and type codes of files; Lock/Unlock files and Access the Application Menu via the Contextual Menu. How does it do all this? Can you say Apple Events?

Custom Menus 1.03: By Marc Moini. A control panel that lets you tailor the menus on your Macintosh to suit your own preferences. You can create 'tear-off' menus that 'float' on the desktop or menus that 'pop-up' at the location of your mouse cursor. You can also choose your own Font, Size and colors for the menus and the menu bar. ***Shareware – $12.***

Default Folder 2.7.6: (formerly DFaultD) By Jon Gotow. Lets you assign, for each application you run, a default folder in which to store documents. The idea is that you shouldn't have to navigate throughout your disk the first time you try to save a document after starting up an application. For System 7.0 and later. ***Shareware – $25.***

Finder View Settings 1.1: By Alessandro Levi Montalcini. Easily manage the new Mac OS 8 folder-specific view settings. You can globally override all of your folder-specific view settings, making Mac OS 8 behave more like System 7, or easily change the requested view settings for single folders or entire disks. ***Shareware – $10.***

FinderPop 1.5.1: By Turlough O'Connor. Extend the Mac OS 8 Finder's Contextual Menus. Features include: user-selectable Contextual Menu font/size/icon size, automatic CM popup by clicking and holding without having to press the control key, and a number of optional submenus — including Processes, contents of selected folder, Finder windows, FinderPop, and Desktop. It is free.

GoMac 1.4.3: By Proteron, L.L.C. GoMac rather obviously imitates the look and behavior of the task bar in Windows 95. The Program Bar allows you to switch to other open programs, launch a program, and minimize, hide or quit a program. The Start Menu works similarly to the Apple Menu folder except you can create aliases directly in the Start Menu. The Keyboard Switcher in GoMac allows you to manage open programs from your keyboard. Note that programs which have been minimized do not appear in the Keyboard Switcher window. ***Shareware – $20.***

Disk #30.02B
Grab-Bag

Neatnik 2.0.1: By Karl Bunker and Ted Van Duyn. A utility for neatening up folder windows. You might call it a "folder window wrangler"; it whips your folder windows into shape, setting their position, size and "View" options according to your preferences. Because it processes multiple folders at a time (even a whole disk's worth, if you like), it saves you the time and effort of setting up your windows one at a time. For Mac OS 7.5 and later, but it has some enhanced features when used under Mac OS 8. ***Shareware – $10.***

Pseud040 1.3: By Michael Connolly. For users of 68020 and 68030 Macs which installs a "virtual 68040" and allows them to run software which otherwise would require a 68040. All computers contain a chip called a microprocessor, or CPU, which is responsible for controlling the computer's actions. Macintoshes have used Motorola's 68000, 68020, 68030, 68040, and PowerPC microprocessors. Many programs (for example, Dark Forces) were designed for at least the top-of-the-line chip in the 68000 family (the 68040) to take advantage of the powerful new features which it provides. Unfortunately, this prevents users of '020 and '030 Macs from using the software. Requires System 7.0 or later and Mac with 68020 and 68030 CPUs without an FPU. ***Shareware – $20.***

RandoTop 1.0: By Scott Brown. An AppleScript to set the Mac OS 8 Desktop Pictures Control Panel to randomly choose images to display from a "user specified" folder. For OS 8 and later.

SimpleTime 1.0: By Catara™ Software. A small, and powerful clock application. It is designed to supplement the Menubar clock by providing the ability to switch between 30 different time zones. SimpleTime also complements Kaleidoscope and Aaron by allowing the user to change the default colors. ***Shareware – $5.***

Smart Scroll 3.0: By Marc Moini. Enhances regular scroll bars so they show how much of a document is displayed in a window. The indicator tab in scroll bars becomes proportional; If a window is displaying half of a document, the tab will be half the scrollbar size. ***Shareware – $12.***

SmoothType 1.3.1: 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.***

Snow 1.0.0 for Macintosh: By Rick Jansen. Let it snow on your desktop, on your windows and have Santa running around your screen for that extra Festive Season

Cheer. Snow for Macintosh is a desk accessory ("Apple Menu Item") that animates falling snow and Santa on your desktop.

StarDrive 3.1: By Software Perspectives. Billed as the' Interstellar Screen Saver.' Includes a sleep corner / non-sleep corner feature and provides password activation when returning from sleep. Requires System Software 7.0 or later. ***Shareware – $15.***

StuffCM 1.1.1 A Contextual Menu plugin that works with Aladdin Systems' StuffIt Engine. It can stuff, unstuff, convert, and BinHex files directly in the Finder through the Contextual Menu commands. Requires Mac OS 8 or later, PowerPC processor and Stuffit Engine. Shareware – $9.

Teflon 2.1: By Orion Bawdon. Mac OS 8 introduced a new feature called "sticky menus," where the menus would stay down after the user clicked in the menu bar or on a pop-up menu. In previous versions of the system software, on the other hand, the menus would always go away after the user let go of the mouse button. If you think the MacOS 8 sticky menus feature is an awful bit of interface design, and wish Apple had allowed the user to adjust the "stickiness" of the menus, you're not alone. Teflon is a simple little control panel that does just that. Requires OS 8 or later.

TitlePop 3.0.1: By Jouko Pakkanen and Brian Oliger. A utility that turns every window title into a pop-up windows menu! This menu lets you instantly navigate to any open window on your Mac, whatever program owns it, and drag and drop data and files directly into open applications and windows! Requires MacOS 7.0 or later and at least a 68020 or PowerPC processor. ***Shareware – $15.***

Disk #30.03B
Grab-Bag

Bernie][The Rescue 1.0.1: By F. E. Systems Emulation Technologies Horstmann, Gudat & Partner. Apple IIgs emulation software for Power Macintosh computers. Since Bernie is a software-only emulator, it requires a copy of the Apple IIgs ROM. Consequently, you have to create an image of a Apple IIgs ROM yourself or download it from an Internet site noted in the documentation. Bernie can handle both ROM 1 and ROM 3 and instructions are provided on how to capture a copy of the ROM from your IIgs. ***Shareware – $25.***

Mortgage Maker 2.0: By Nick Parlante. Estimates the various costs of a home mortgage at the time of closing. Computes the "qualifying ratios" which lenders use to evaluate a mortgage application. Its Backsolve feature answers questions like "how much house can I afford on this income?"

"We feature 15 disks this month including the first part of the completely revised Internet disk series and some revised Apple System Software. Single disks are available for $4.00 each and quantity purchases are priced at $3.50 for five or more."

For refinances, the program compares the net monthly payment situation with and without the refinance. Useful for homeowners and prospective homeowners who need a quick way to analyze a purchase or refinance, and for financial and real estate professionals who need to print analyses for clients.

Painting 1.1: By Sarwat Khan. A simple painting program that's extremely useful for creating and editing graphics such as snapshots and icons. It has a complete set of paint tools including a paint brush, shape tools, and flood fill and lasso. ***Shareware – $15.***

Disk #30.04B
Grab-Bag

Disk Copy 6.1.3: By Apple Computer, Inc. Apple's on-line software distribution will now be performed using compact and flexible NDIF disk images. This utility can mount those disk images so that you can install their software directly. In addition, it can write the images onto blank floppy disks for easy carrying and storage. A must-have from Apple. *Note: this program does not perform the same function as Disk Copy 4.2 which is used to duplicate disks.*

File Buddy 4.3 Installer: 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 – $35.***

GURU 2.5.3 Installer: By Newer Technology. Test memory and show memory and other characteristics of different Mac models.

Disk #30.05B
Grab-Bag

Font Gander Pro 1.1.2 By Hugh Johnson. Lets you view fonts without having to install them. Also prints beautiful specimen sheets. 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 – $20.***

Gramotki 1.5.4 FAT: Gramotki was the name for pieces of birch bark Russian people used to save notes and write letters. It appeared first thousand years ago in the XIIth century. Now you can use "electronic" Gramotki as a notebook, sticky notes, calendar, daily planner and applications launcher. [Great looking documentation. Ed.] Requires System 7.5 or greater. ***Shareware – $20.***

TattleTech 2.56: 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 2) or $40 (level 3).***

UnZip 5.12: By Info-Zip, portions by

H. Smith. A utility for extracting files archived by the popular PC utility PKZIP. This has a non-Mac interface.

Disk #30.06B
Grab-Bag

Klondike 6.0: By Michael A Casteel. Probably the most commonly-known version of solitaire card game. Klondike has been available for the Mac since its introduction in 1984; this version includes color and a number of other improvements over that original game. ***Shareware – $20.***

MacBrickout 3.1.1: By Carson Whitsett. This is not your father's Brickout anymore. This one has all kinds of bells and whistles along with multiple levels and special 'capsules' you have access to after registration. It even includes such esoterica as a level editor, ball editors and others. Includes version 0.0 which is the author's first effort. ***Shareware – $15.***

Solitaire Till Dawn 3.2: By Rick Holzgraffe. A superb solitaire implementation with 24 different variations of the game. Included are excellent User and Game Guides; the Game Guide includes information about difficulty of play and other names for the variants. ***Shareware – $20.***

Disk #30.07B
Grab-Bag

MT-NewsWatcher 2.3.5: By Simon Fraser based on code by John Norstad. Uses the NNTP protocol to let you browse, read and participate in group discussions on Usenet bulletin boards. Adds the capability to perform tasks simultaneously such as downloads from more than one newsgroup at a time (Multi-threaded). Requires 68020 or higher or PPC, System 7.0 with Thread Manager (7.5.5 preferred) and 2.5 MB available RAM.

"I am releasing the recent updates as a new Grab-Bag series. These programs are provided on disk with no regard to the series in which they will eventually reside. The series is temporary and will exist for only as long as the need exists; that is, until the appropriate series are revised and these programs included."

QuickNailer 1.3.2: By Stephen Baber. Combines an image thumbnailer, contact-sheet maker, and media cataloger with a flexible and complete tool for producing HTML image tables and image indexes with linked pages. Import digital media files by dragging-and-dropping files, folders, volumes, shared disks, CD-ROMs, aliases or scanning the Desktop. Preview Media as variable-size thumbnails displayed with user-selected image information, individual images, slide shows, cell animation, tiled images [optional text or image overlay], all at any magnification level. Search and rank keyword relevancy (using file name, comments, folder name). Perform File maintenance (edit file name or comments, put file in trash, launch file using any application software, move file to another folder, open file's folder). In addition, generate fully functional web sites or HTML image tables. ***Shareware – $18.***

Disk #30.08B (2 disks)
Grab-Bag

GraphicConverter 3.0 (US): By Thorsten Lemke. Converts a wide variety of images between different formats and also contains many useful features for image manipulation. Formats include those for Mac, PC, Atari, Sun and SGI. This is truly the 'Swiss Army knife' of all of the converters for graphics. ***Shareware – $35.***

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 _____.
All payments must be in U.S. funds drawn against U.S. Banking institutions. Non-members add $3.00 per disk to listed prices.

# 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 maxium $5.00		
	Total Amount Due:	_____

Name _____

Box Number, Apt., Suite _____

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City _____ **State** _____ **Zip** _____

Day tele. _____ **Evening tele.** _____

Macintosh Library Order Form

New disks in this issue!
- __ 30.01-09 Grab Bag - 9 disks; $4 ea.‡
- __ CD ROM Setup 5.4‡; $4
- __ Drive Setup 1.3.1; $4‡
- __ Apple System Profiler 1.3.1; $4‡

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
- __ Fun/Games 1, 10 disks; $25
- __ Fun/Games 2, 10 disks; $25‡
- __ Fun/Games 3, 11 disks; $25‡

Apple System Software
- __ System 6.0.8 - 4 disks; $15
- __ System 7.0 - 8 disks; $20
- __ System 7.0.1 - 6 disks; $20‡
- __ System 7/7.0.1 Tune-Up $4
- __ System 7.1 Update 3.0 - 2 disks; $8‡
- __ System 7.1 Update 3.0 (800K); $4
- __ System 7.5 Update 2.0 - 14 disks; $15‡
- __ System 7.5.5 Update - 3 disks; $12‡
- __ System 7.6.1 Update - 4 disks; $15‡
- __ 5400-6400 Disk Tools - 1 disk; $4‡
- __ PB 3400 System 7.6.1 - 5 disks; $18‡
- __ Open Transport 1.1.1 - 6 disks; $15‡
- __ Drive Setup 1.3.1; $4‡
- __ Apple System Profiler 1.3.1; $4‡
- __ QuickTime 2.5 - 2 disks; $8‡
- __ Movie Player 2.5; $4‡
- __ LaserWriter 8.4.1 - 5 disks; $15‡
- __ Apple Telecomm 2.3.3 - 2 disks; $8‡
- __ Network Software Installer 1.5.1; $4‡
- __ TrueType Fonts & Software; $8
- __ CD ROM Setup 5.4; $4‡
- __ StyleWriter II; 4 disks; $15‡
- __ PC Compatability 1.6.4‡ - 2 disks; $8‡
- __ Open Transport 1.1.2 - 4 disks; $15‡

00.XX – Pi Library†
- __ .01 Mac Disketeria Catalog
- __ .02 New Member Sampler & Catalog

1.XX – Anti-Virus Utilities†
- __ .01N

2.XX – Desk Accessories†
- __ 8 disk set; $24
- __ .01E __ .02E __ .03E __ .04E
- __ .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†
- __ .01A __ .02A __ .03A __ .04A
- __ .05A __ .06A __ .07A __ .08A
- __ .09A __ .10C __ .11C __ .12A
- __ .13‡

9.XX – INITs & cdevs†
- __ .01C __ .02C __ .03C __ .04C
- __ .05C __ .06C __ .07C __ .08C
- __ .09C __ .10C __ .11C __ .12C
- __ .13C __ .14C __ .15C __ .16C

11.XX – Paintings (MacPaint)
- __ 5 disk set; $15
- __ .01 __ .02 __ .03 __ .04
- __ .05

12.XX – Digitized Sounds†
- __ .01B __ .02B __ .03B __ .04B
- __ .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†
- __ .01C __ .02C __ .03C __ .04C
- __ .05C __ .06C __ .07C __ .08C
- __ .09C __ .10C __ .11C __ .12C
- __ .13C __ .14C __ .15C

16.XX – System Utilities†‡
- __ .01G __ .02G __ .03G __ .04G
- __ .05G __ .06G __ .07G __ .08G
- __ .09G __ .10G __ .11G __ .12G

17.XX – Word Processing Utils†
- __ .01C __ .02C __ .03C __ .04C
- __ .05C __ .06C __ .07C

18.XX – Internet Series†
- __ .01B‡ __ .02B‡ __ .03B‡ __ .04B‡
- __ .05B‡ __ .06B(2)‡ __

19.XX – QuickTime Series†
- __ .01‡ __ .02‡ __ .03‡ __ .04‡

20.XX – Mac Troubleshooting†‡
- __ .01C __ .02C

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) __ .36‡
- __ .37‡ __ .38‡

23.XX – PowerBook/Duo Series†
- __ .01C __ .02C __ .03C __ .04C

26.XX – Update Series
- __ .01/02A - Photoshop, 2 disks; $8
- __ .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
- __ .14A - Word, 1 disk; $4
- __ .15A - Word Enhancements, 1 disk; $4
- __ .16A - Excel Enhancements, 1 disk; $4
- __ .17B - Anti-Virus, 1 disk; $4
- __ .18A - After Dark Update, 1 disk; $4
- __ .18–23A - After Dark Set, 6 disks; $15
- __ .25–27B - CP MacTools, 3 disks; $12
- __ .29A - Now Utilities 4, 1 disk; $4
- __ .30D - Miscel. Utilities, 1 disk; $4
- __ .31/32A - Stuffit Deluxe, 2 disks; $8
- __ .33A - DrawPro, Impact, Frontier, 1 disk; $4
- __ .34A - Now Utilities 5, 1 disk; $4‡
- __ .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

30.XX – Grab-Bag Updates†‡
- __ .01B __ .02B __ .03B __ .04B
- __ .05B __ .06B __ .07B __ .08B
- __ .09B (2 disks)

Special Disk Sets
- __ Knee Knockers Games- 4 disks; $10‡
- __ Waist Huggers Games - 3 disks; $10‡
- __ PreTeen/Teens Games - 3 disks; $10‡
- __ the Best of the Pi - 15 disks; $25 ea.‡

† all files compressed
‡ on 1.44 Meg diskette(s)
(#) number of disks in set

Classified Advertisements

Classified advertisements can be placed by mailing copy to the business office of Washington Apple Pi, Ltd., 12022 Parklawn Drive, Rockville, MD 20852. Be sure to include your WAP membership number and indicate area codes with your phone numbers. Ads must be received by the ad copy due date listed in the calendar page for that month in order to be included in the appropriate issue. Any ads postmarked after that time will be included at the discretion of the editor. Cost is $2.00/line (40 characters per line), maximum 12 lines. Members of Washington Apple Pi, Ltd., may place ads up to three lines at no charge. The editor reserves the right to refuse any ads deemed inappropriate.

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I currently subcontract to many local Mac schools. Hire me directly and save. I teach: Excel, Word, Quark, PageMaker, Illustrator, MS Project, and more. References available. Alan Stillman: 703-370-5505.

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Apple II New Print Shop, $89. Mac System 7.5 diskette, $59. ClarisWorks 2.1, $89. s&H $5. Visa/Mastercard 619-225-8281. B&R Computer Services. Web page:http://members.aol.com/rrbp/Home.html. Note the "H" in Home is uppercase.

Educational

CD-ROM's Needed

The Institute for Academics After School Tutorial Program is seeking donation of educational Mac CD-ROM's for use with children in their afterschool program. IFA-ASTP is a Capitol Hill nonprofit organization that has been providing academic enrichment to DC children for over ten years. Contact: Corliss Grimes. oshala@aol.com (202)544-7813, or Phil Shapiro, pshapiro@his.com (202) 686-5465. ■

Join the Mailing List!!

We are beginning to compile an email list for notifying members of special events and important news. Please send your email address to: office@wap.org to be placed on this list.

Remember!!!

- *Get your nominations in for the upcoming WAP election. See notice on page 19.*
- *Take advantage of the great new update CD from WAP! More information on page 15.*
- *Special TCS classes forming—just $15. Learn how to really use the TCS at last!!*

Index to Advertisers

Washington Apple Pi, Ltd. 12022 Parklawn Drive, Rockville, MD 20852

Membership Application

Please print or type:

Name _____ Phone # (H) _____ Phone # (W) _____

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Occupation _____ _____

Please answer a few questions for us regarding your computer use. Check the computers/equipment that you use on a regular basis.

- ☐ Apple II, II+
- ☐ Apple IIe, IIc
- ☐ Apple IIc+
- ☐ Apple II GS
- ☐ Laser 128
- ☐ Franklin
- ☐ Apple III (SARA)
- ☐ Mac Plus, 512e
- ☐ Mac SE
- ☐ Mac SE30, Mac IIx
- ☐ Mac Portable
- ☐ Mac LC (series)
- ☐ Mac Classic (series)
- ☐ Other _____
- ☐ LISA
- ☐ Mac II
- ☐ Mac IIci, cx
- ☐ Mac IIsi
- ☐ Mac IIfx
- ☐ Mac VX
- ☐ Mac PowerBook
- ☐ Mac Duo
- ☐ Quadra (all)
- ☐ Centris (all)
- ☐ PowerMac
- ☐ Newton
- ☐ Performa (all)

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____
Apple II GS SIG____
Apple III SIG____
Art SIG____
CAD SIG____
Database SIG____
Disabled SIG____
Disk Library____
EdSIG (education)____
Excel SIG____
Game SIG____
Genealogy SIG ____
☐ *I can serve as a Hotline contact for* _____
HOTLINE____
HyperTalk SIG____
Mac Programmers SIG____
NOVA Educators Mac/Apple Users SIG____
QuickTime SIG____
Stock SIG____
Telecommunications SIG (TCS)____
Women's SIG____

Enclose check or money order payable to Washington Apple Pi, Ltd.

- ☐ Basic Membership—1 year $49
- ☐ Student rate* for 1 year $42

For other options please add correct amounts

- ☐ WAP Bulletin Board System (TCS)** with e-mail **$20**
- ☐ WAP Bulletin Board System (TCS)** with Internet **$171**
- ☐ 1st class mail (U.S.) **$17**
- ☐ Airmail to Canada, Mexico, West Indies or Cental America **$20**
- ☐ Airmail to Europe & South America **$38**
- ☐ Airmail to Asia & elsewhere **$48**
- ☐ Surface to Europe, Asia & elsewhere **$18**

Total enclosed $_____

*Please enclose photocopy of current student ID.
** Access to the TCS is contingent on WAP having a current home telephone number for the member.

Indicate desired New Member kit (1 only)

- ☐ Apple II
- ☐ Apple II GS
- ☐ Apple III
- ☐ Mac 400k
- ☐ Mac 800 k
- ☐ Mac 1.44 k

Please circle Yes or No for the 2 items below.

1. My name, address & phone number may be published in the membership director.
   Yes No.
2. Please leave my name on the Pi mailing list. (The list never leaves the office and all mailings are supervised by the Pi staff.)
   Yes No

_____

Applicant signature and date

Performance • Consistency • Speed

(Whoosh!)

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Rockville, MD 20852

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