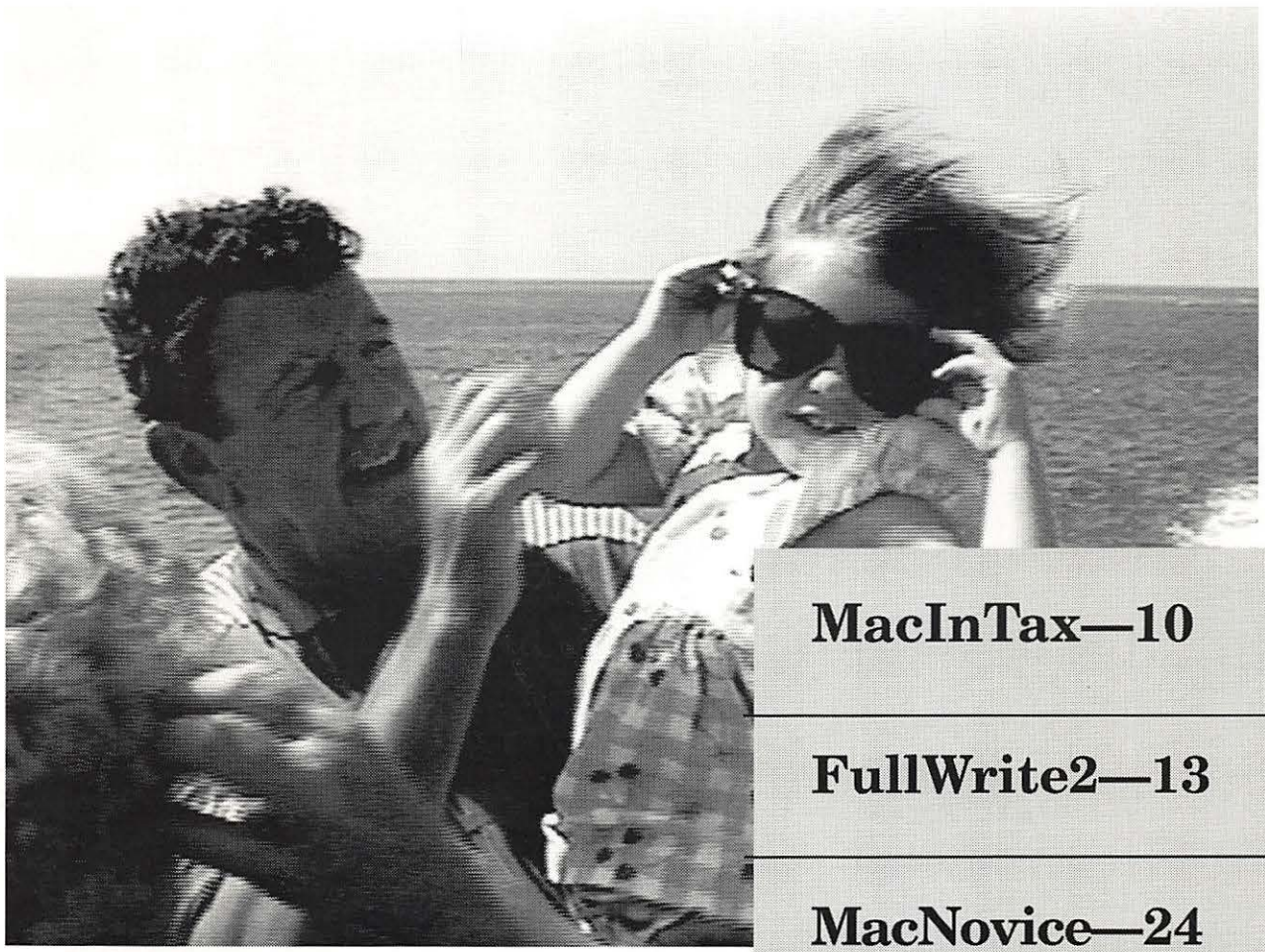
March/April 1995

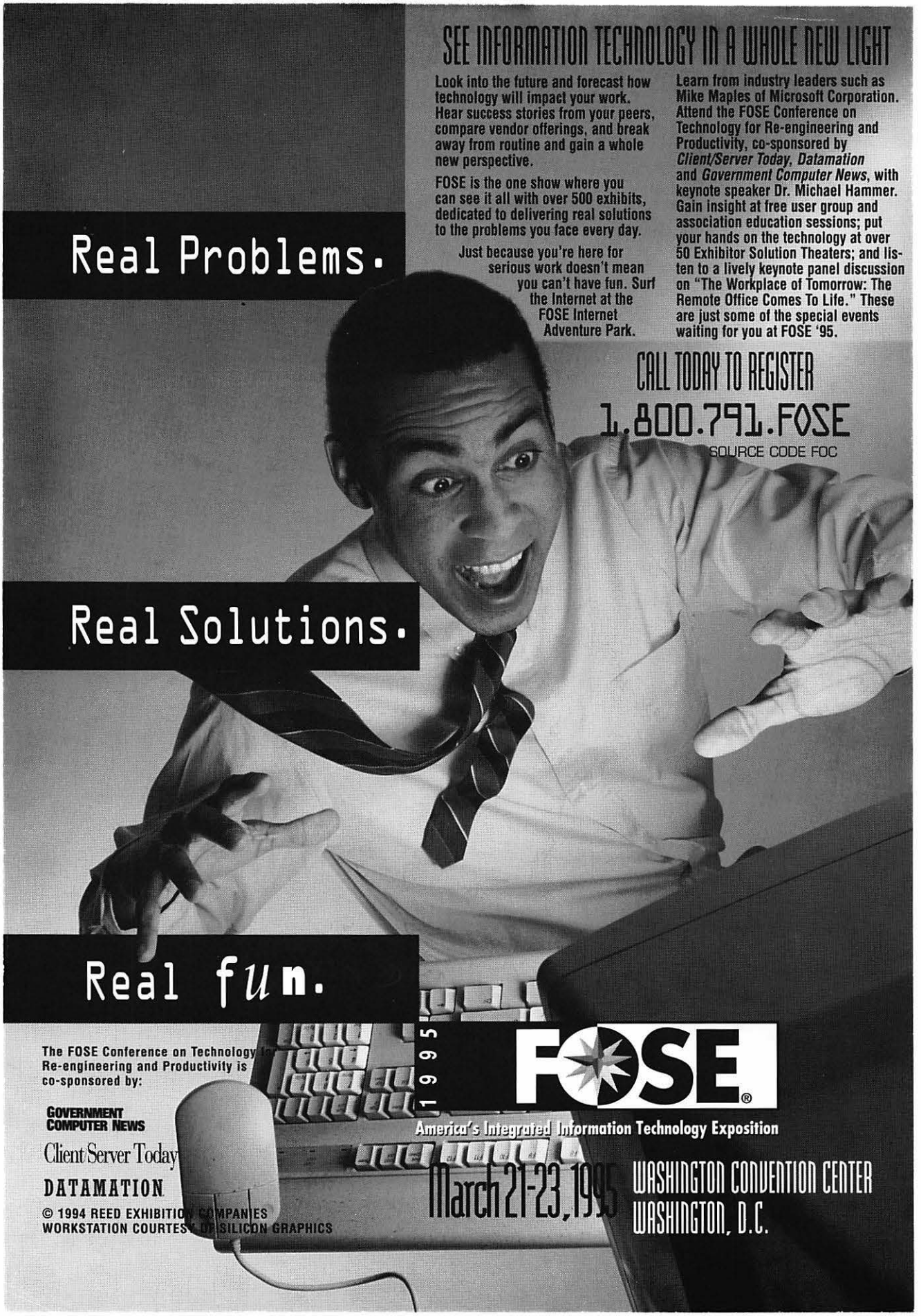
$2.95

The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 17, Number 2

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Global Village

The Pi's TCS & the Internet

April 22, 1995
Now Software

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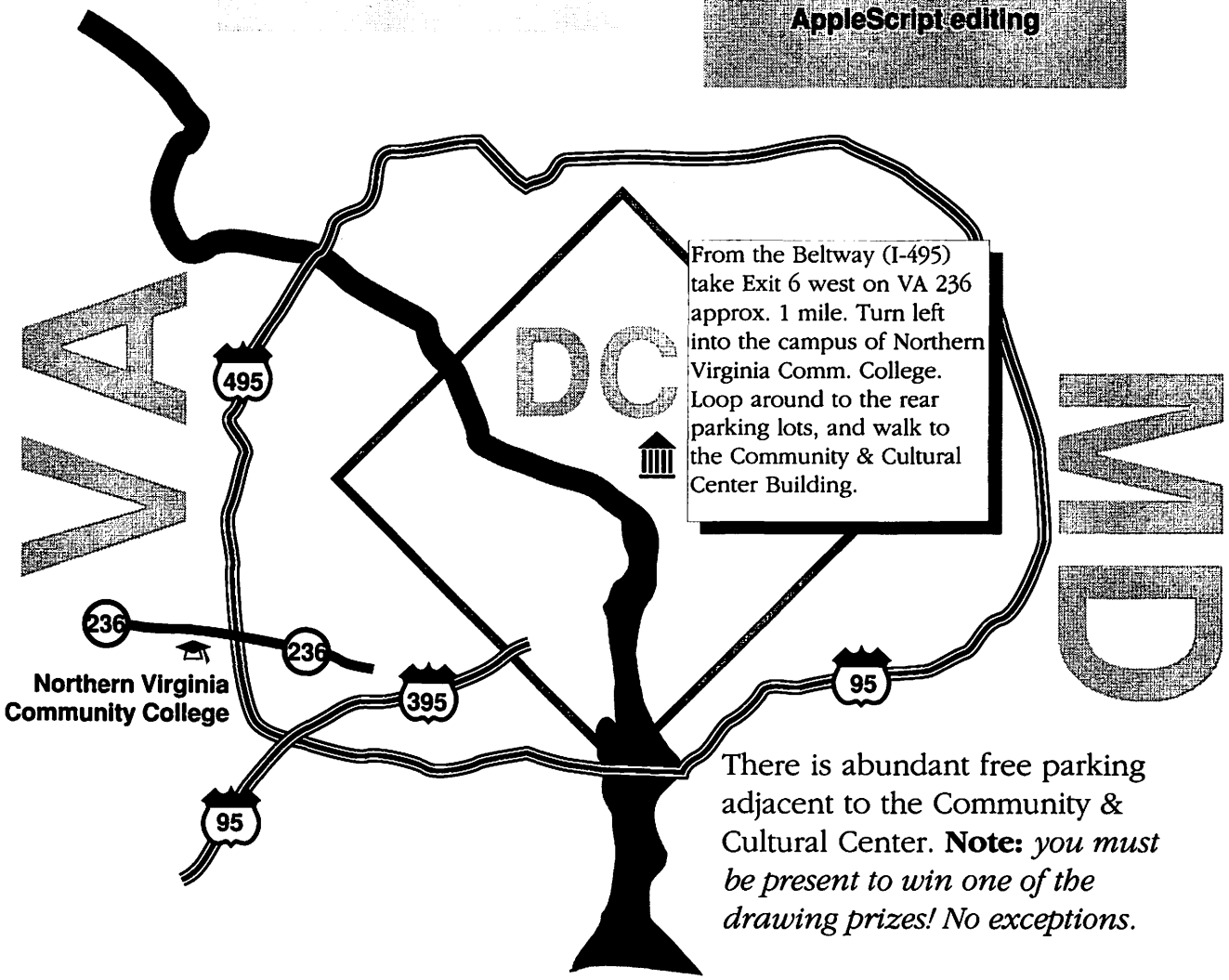
AppleScript editing



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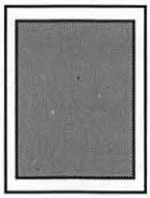

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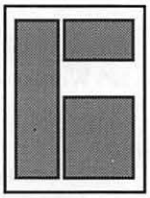

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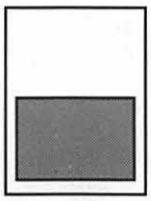

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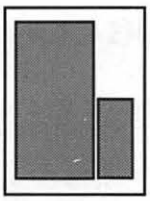

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Copy may be received as traditional mechanicals, rc-paper, velox prints, or film negatives. Negatives will incur an additional $15.00 strip-in charge.

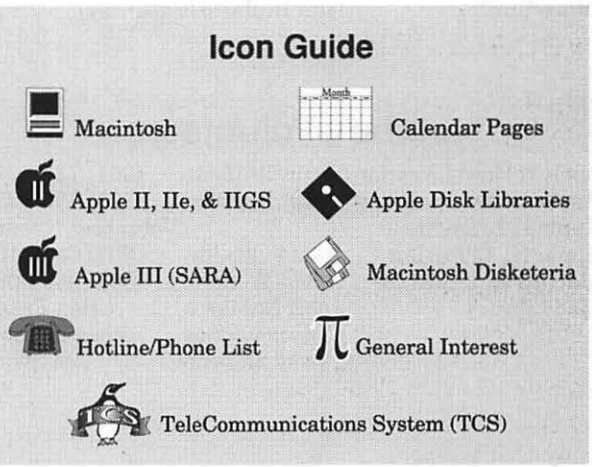
Washington Apple Pi

This issue of the Washington Apple Pi Journal was created on a Mac SE/30, proofed on an LaserWriter IINT, and produced by electronic typesetting at The Publishers Service Bureau.

The page layout program used was PageMaker 4.2a, the word processing program was Microsoft Word 5.1; the principal typeface is New Century Schoolbook (10/12) for the articles; and Helvetica for headlines, subheads, and emphasis.

Cover Design: New WAP Journal cover design was created by Ann Aiken in collaboration with Nancy Seferian. The Capital artwork was illustrated by Carol O'Connor for One Mile Up, which donated it for use on our cover.

Icon Guide



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Deadlines

Writers' submissions
May/June ..... March 26
July/August ..... May 26
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Change of Address should reach us 60 days in advance of the move to ensure that your Journals continue uninterrupted.

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January General Meeting

by Lawrence I. Charters

Missed by a Week

THE FIRST "significant" snowfall of the year fell Jan. 28, the day of the Pi's General Meeting. Most of the 4,000-odd members proved to be weather wimps, refusing to brave the icy gusts, the blowing drifts, the arctic conditions. But 146 people, according to those who like to count people, fought through the horrendous weather (by nightfall, the ground was *covered* with snow, almost) to see two very different vendor presentations. It was a study in dramatic contrasts; as one wag put it, the best and worst presentations of the year. Yet one of them was also among the best user group demonstrations I've *ever* seen, and I've been involved in user groups for 18 years.

Another highlight of the meeting, though we didn't know it at the time: the first blizzard of the year hit seven days later. Timing isn't everything, but it certainly doesn't hurt.

The Best

Elaine Bailey, President of Applied Medical Informatics (AMI, 2681 Parley's Way, Suite 101, Salt Lake City, UT 84109-1630, 801-464-6210), seemed at first glance to be the less impressive prospect. Her software package, *Medical House Call*, is not that well known, and computerized home health packages aren't a major software category. There was also some concern about her even showing up; I'd told AMI's public relations firm that the meeting was on the fourth Saturday of the month, but then misread the date from an old calendar, bringing understandable confusion to those on the other side of the continent.

Before her presentation, Elaine was quite nervous. She claimed to be not that experienced at doing live demos, and also wasn't familiar with her computer. This (ominous understatement) alarmed me. She explained that at work she had a Quadra 840 AV, but that "they" had taken it away from her a couple days before and given her a PowerBook 540c. She'd spent the previous night getting familiar with the new machine in her hotel room, but wasn't that comfortable with its unique software, and had doubts about the trackpad.

Hah!

Once she took the stage, Elaine was in complete control. She was the most serious presenter we've had in a long, long time, and also one of the most personal and familiar. There were no canned jokes, no contrived situations, but there was a great sense of caring and warmth. Her command of the

subject was total: she knew every feature of her software package, every detail behind its development, and — something we've never seen before — even offered keen insights into the medical, social and legal implications of such software packages, and how these "large" concerns affect the individual user.

She also had no trouble with her computer. Her PowerBook 540c did exactly as she asked, quickly. I was disappointed, hoping she'd trade it for the Pi's IIci.

Medical House Call, to some extent, is a home health reference. It allows you to keep detailed health records on everyone in the family, from the obvious (age, gender) to the legal (shot histories) to the dynamic (records of clinic visits and appointments, drugs and treatments prescribed, etc.). It contains an extensive database of over 1,000 diseases, indexed and referenced in a number of ways. Most intriguing to me, it also has an extensive pharmacologic database, and can not only provide detailed information about a particular drug, but also be used to check for drug interactions.

The heart of the package, however, is an extensive computer-managed health interview, backed up by a sophisticated expert system. If you aren't feeling well, sit down, respond to the prompts regarding your symptoms, and at the end *Medical House Call* will list the diseases that match your symptoms, and display the suspects in decreasing order of likelihood. Since the interview, and the results, can be printed, a user can then present these to a physician when they are seen, making the most of the physician's time as well as the user's time.

Elaine mentioned several times that, on average, a physician sees a patient for only an average of eleven minutes. All the rest of the time spent on a "doctor's appointment" is spent filling out forms, waiting in the waiting room and such. Making the most of those eleven minutes is in the patient's best interest, from both an economic and a health care perspective. She illustrated this with a personal example: she has a rare disease of the intestine with a simple treatment: avoid eating certain grains. Unfortunately, it took time to discover these facts: two years of clinic visits and medical tests. *Medical House Call*, in contrast, quickly made an informed guess as to the condition, indicated the most conclusive medical test, and the projected cost of the test: $31. While the software package is not a replacement for a physician, it does "empower" the user to be better informed about their health, and has the potential to save much time and treasure.

The audience response to her presentation was amazing: people were *impressed*. The usual cynical crowd that likes to torment vendors either didn't show up, or failed to rattle Elaine as she deftly, carefully, and fully answered any and all questions. It was a struggle to stop the questions and begin the next presentation. Questions, and comments, continued well after the meeting on the TCS (the Pi's bulletin board). The most memorable comment was a bulletin board message from a user who took advantage of the half-price offer at the meeting ($45, instead of the usual $89.95) and received the package via Federal Express just a few days later. A great presentation, a great software package, *and* great service.

My one criticism: Elaine did not provide me with an E-mail address. A telephone number is fine, but an E-mail address is divine.

Not the Best

Richard Katz, a software evangelist for Intuit, did provide an E-mail address: rkatz@aol.com. He also provided a quick wit. What he did not provide was a demonstration of *Quicken 5.0* or *MacInTax 1994*.

I strongly suggest to all vendors that they either pre-install their software on a computer, and bring the computer, or pre-install the software on a hard drive that can be booted on the Pi's Macintosh IIci. Richard did neither, stating that he didn't have a Mac and Intuit didn't provide a drive.

Not having a Mac should have set off alarms, but I didn't give it any thought until Richard attempted to install *MacInTax* and *Quicken* before the meeting. He confessed he wasn't that familiar with the Macintosh, a fact made obvious after demonstrating that he didn't know how to install the

programs (double-click on the Installer and do what you are told).

At the start of his presentation, Richard offered an oversized Intuit beach towel to anyone who would come up on the stage and help him with his presentation. Everyone laughed, thinking he was joking. He wasn't joking.

After launching *Quicken*, he appeared stumped, not knowing to what to do next. He quickly got so far off track that he never managed to clearly explain what *Quicken* was: the most popular personal finance package ever created. He claimed to be intimately familiar with *Quicken* on "the other platform," but didn't know how the menu commands were arranged in the Mac version, didn't know the keyboard shortcuts, and was baffled by how the Mac arranges windows.

A technical aside: in the Mac world, you make a window active by clicking on it. You can have as many windows open as you want at one time, and as many programs running as you want at one time, subject only to memory constraints. Click on any part of any window in any program, and that window — and program — comes to the front.

In the Windows 3.1 world, things are quite different. Users rarely have more than one program running at once, not all windows are equal, and you must click on a specific portion of a window to make it active.

Richard, familiar with Windows 3.1, the pretender, and not Finder 7.5, the champion, kept accidentally clicking outside the active window, bringing the Finder to the front. When this happened, all the *Quicken* menu commands seemed to disappear, the keyboard appeared to stop working, and he was lost in what he described as "Finder hell."

Guided by several *Quicken* users in the audience, he usually found his way back, but the presentation lost direction or focus. A Great Irony unfolded: there were a number of *Quicken* users in the audience. They were generally familiar, and happy, with the program. They were undoubtedly more familiar with it than Intuit's own evangelist. The result? Pi members guiding someone who wasn't quite up to Mac Novice status in the use of a program that the Mac Novice was supposed to be pitching to those very same members.

Pi members often provide help to new users — that's why user groups were formed — but this was unique.

The demonstration of *MacInTax* was even less informative. Because of the way *MacInTax* works, a *good* demonstration would involve an almost completed Form 1040. Using this as a baseline, the presenter would then try a few "what if" possibilities ("what if we use the standard deduction instead of itemized deductions?") and fill in a couple empty boxes ("oh, yeah, I forgot I had another son, so let's add another deduction") and watch the package automatically crank out new numbers.

> "The audience response to her presentation was amazing: people were *impressed*. The usual cynical crowd that likes to torment vendors either didn't show up, or failed to rattle Elaine as she deftly, carefully, and fully answered any and all questions. It was a struggle to stop the questions and begin the next presentation."

Lacking a completed form, lacking time, and lacking familiarity with the Mac version of *MacInTax* (a paramount irony), audience members were left with little more than reassurances from other audience members that the package did, in fact, work, and was, in fact, fairly easy to use. Several people mentioned problems with last year's package, including a glitch in the form for Maryland income tax; none of these issues were addressed.

Amazingly enough, a number of people were impressed with both *Quicken* and *MacInTax*. After the meeting, I stopped at Micro Center, in Fairfax, to get a lithium battery for my daughter's Mac LC, and found one couple there buying a Macintosh, *Quicken* and *MacInTax* on the strength of the presentation. When I left, they were busy asking a Micro Center employee if they had a copy of *Medical House Call*.

1995 Meeting Dates

—***General Meetings for 1995 are scheduled for the following dates*** (all the fourth Saturday of the month). Mark your electric calendars.

—**Feb. 25, 1995:** First Annual Washington Apple Pi QuickTime Festival and Show and Tell.

—Praxisoft will demonstrate *Color Compass*, a unique color palette utility.

—**Mar. 25, 1995:** Global Village will demonstrate their telecommunications hardware and software.

—In keeping with the theme, Washington Apple Pi will have a quick overview of the TCS, the Pi's computer bulletin board, and a preview of the planned Internet version of the TCS.

—**Apr. 22, 1995:** Now Software will present *Now Up-To-Date*, *Now Contacts*, and *Now Utilities*.
—Main Event will show their AppleScript editor.
—**May 27, 1995**: vendor to be named later, plus three first-round draft picks (barring a strike, of course).

Drawing winners

Special Libraries Association T-shirt: Alan Day
Software.net T-shirt: Walter Forlini
Quicken 5.0 (Intuit): Ralph Lingeman, Jerome Williams, Bob Klothe
MacInTax 1994 (Intuit): Pat Garvey, Michael Finn, John Christensen
Medical House Call (AMI): Steve Pope, Dennis Kruse, Glenn Paterson, Grady Houseknecht
QuickBooks (Intuit): Ed Houser

Credits

Apple Macintosh IIci computer: courtesy Falcon Microsystems (RIP)
Apple Macintosh 540c: courtesy Applied Medical Informatics
PowerPoint 3.0 (RIP): courtesy Microsoft Corporation
Proxima Ovation LCD projector: courtesy Proxima Corporation
Bernoulli 150 drive: courtesy Iomega Corp.
Lounging TCS Penguin: drawing by Nancy Seferian
Silver Spring Metro Penguins: photo by Dennis Dimick
Newt's giraffe: photo by Daniel E. Slaven
Dilbert cartoon: Scott Adams, via the Internet
Setup and worrying: Bill Wydro, Beth Medlin
Question & Answer Help: Tom Witte

Send meeting comments to: lcharters@tcs.wap.org. ■

StockSIG for March

by Morris Pelham

JANUARY IS when we review how well we did, so let's get to it.

First, a little background. Most mutual funds lost money in 1994. Stock funds, bond funds, foreign funds, almost all lost money in 1994. Some lost 5% or so and some lost 15% or so. There are 6,000 or more funds available now and of course a few of them made money last year, but did yours?

We did. My long term version of our beating the Dow portfolio gained 5.5% for the 1994 period. I have included both commissions and dividends in my calculations.

> *Barron's* has again written a story about our beating the Dow strategy. This one is in the issue of December 26, 1994 and I'm sure your library has it. It says " Dogs of Dow climb 4% in 1994, beating 90% of stock mutual funds."

At our January meeting, I passed out copies of my Quicken report on last year's results. I also passed out copies of my Excel report on which stocks we picked for both 1994 and 1995, and why, and a report and graph of what the Dow stocks have done since 1921. Whew! That's more copies than I usually take to our meetings, but January is special.

Other people brought stuff too. Mark Pankin brought reports on his 1994 (up 3.3% plus the dividends) and 1995 beating the Dow portfolios and on his use of the Fidelity Select mutual funds (up 26.17% for the best and down 5.67% for the worst, not including the load). Peter Hui brought his Fidelity Select results—near breakeven. And Bob Pallaron brought a printout of something new called Time Trend Software, that he plans to invest real money with in 1995.

Barron's has again written a story about our beating the Dow strategy. This one is in the issue of December 26, 1994 and I'm sure your library has it. It says " Dogs of Dow climb 4% in 1994, beating 90% of stock mutual funds."

For 1995 our beating the Dow portfolio is Woolworth, Chevron, Sears, Eastman Kodak, and MMM. We plan to follow them at each meeting, so if you want something more timely than reading about our January meeting in your March/April Journal come and join us.

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

StockSIG for April

by Morris Pelham

OUR NEW OFFICE continues to improve. This time I drove up to find a big light already on, apparently permanently, in the parking lot and right over our door. Very nice. Bright, too.

Our Journal continues to change, too. Now that what I write takes longer than ever to get to you, I am spending more time on the TCS on the Investor board. You are welcome there too, to post a question or an answer or a comment. Feel free to join right in.

At our February meeting, Mark Pankin announced a small

correction to his calculation of the results of his beating the Dow portfolio last year. He had something called a "DAverage" problem in his Excel 5.0 running on his Power PC. Not as major as the Pentium problem Intel had last year, but it did cause the results I reported last month to be incorrect. Mark now calculates his return to be 5.0%, not including dividends, for 1994 instead of 3.3%, also not including dividends.

For 1995 our beating the Dow portfolios are ahead a small amount after one month.

Bob Pallaron and Mark both brought updates on their use of the Fidelity Select mutual funds, and passed them around for all to see. These several portfolios have some small gains and some small losses so far this year. No miracles yet.

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

Women's SIG

THE PLANNING Committee for the Women's SIG met on Thursday, February 16th to discuss upcoming elections for the Women's SIG Chairperson position and topics for this year's meetings. We met at Nancy Seferian's house and discussed these issues at length as usual over appetizers and dinner.

The topics suggested for future meetings include "Scanning, " "Exploring the Internet," "QuickTime," "Technical Q & A," "Computer Repairs We Can Do," "Small Business Ideas," "Portfolios," and exploration of some requested applications such as WordPerfect, and Adobe Illustrator. If you have additional suggestions please bring them to the April meeting for inclusion in the plans.

Our meetings will continue to be every other month on the fourth Thursday of the month, beginning with our next meeting on Thursday, April 27, at 6:00 PM to 8:30 PM at the new Pi Office. The topic will be "Scanning" and we'll learn how to scan, formats for saving your scan, how to import the scan into various applications, and options for printing. Bring any pictures you would like to scan for you own use, and bring a disk so you can save your scans to them. The Pi office has a great color scanner that is available for use by members, so if you don't have your own, you'll have access to a scanner to use after learning how to do it at our meeting. We will eat dinner first to give us a chance to catch up with each other on recent computer experiences and everything else.

Meeting dates for the rest of the year on the fourth Thursday every other month are as follows: June 22; August 24, and October 26.

Elections will be held at the April 27th meeting for Chairperson. Nominations are open to everyone, and if you have any ideas for ways to help out, bring them with you to this meeting. Hope to see you there.

R.S.V.P. Grace Gallager (703) 222-4570 (Metro) if you plan to attend so we can plan for dinner. Call Chairperson Ann Aiken (301) 530-1990 if you would like to be on the mailing list. ■

Index to Advertisers

Software Review

MacInTax—Easy Stepping Through the 1040?

by Joe Cohoon

TAX SEASON IS HERE again. I considered going back to the old manual technique of tax preparation which served me so well in the days prior to the advent of the home computer. But, once again, the promise of new technology caused me to shift from pencilware to software.

I bought MacInTax 94 at Office Depot for $29.95 plus tax; a mail-in rebate coupon for $5.00 was included in this price. This is cheap compared to the direct mail order price from Intuit ($29.95 plus $6.50 s & h). Intuit offers a money-back satisfaction guarantee. The package included a Quicken 4 Updater, but would not update my copy of Quicken 4, release 1; it only works for release 2 to 5, updating them to release 6.

System Requirements (according to the documentation): Mac Plus or better, system 6.0.7 or greater, and 15 MB free space on your hard drive. *Caution:* read further; my actual experience indicates these requirements are incorrect.

The MacInTax software comes on four 1.4 MB disks, and I did not see an option to replace these disks with 800K, for those who have older Macs. The package had a skinny manual, which I did not read. Technical support (voice and modem) is available for the price of a long distance phone call. Technical support is also available on several commercial online services (Compuserve, GEnie, America Online, Prodigy, or eWorld). Installation was no problem on my Centris 610, and took less than 5 minutes. When expanded, the files occupy 16.3 MB of disk space. This could be an important consideration for those who have a cramped hard disk. According to the documentation, data can be imported from Quicken, but I did not try to do this.

This is the third year I have used MacInTax. The interface has been enhanced this year, and, for the first time, I decided to use the Easy Step 'interview' option for entering information. This took about two hours and involved wading through a lot of irrelevant questions, but this is the price to pay for thoroughness. I encountered two minor, but annoying, features of the Easy Step process. I elected to enter the optional address information for payers of interest and dividends on Schedule B. To enter the name of the state in the address, it was necessary to wade through a scrollable menu of the 50 state abbreviations, and

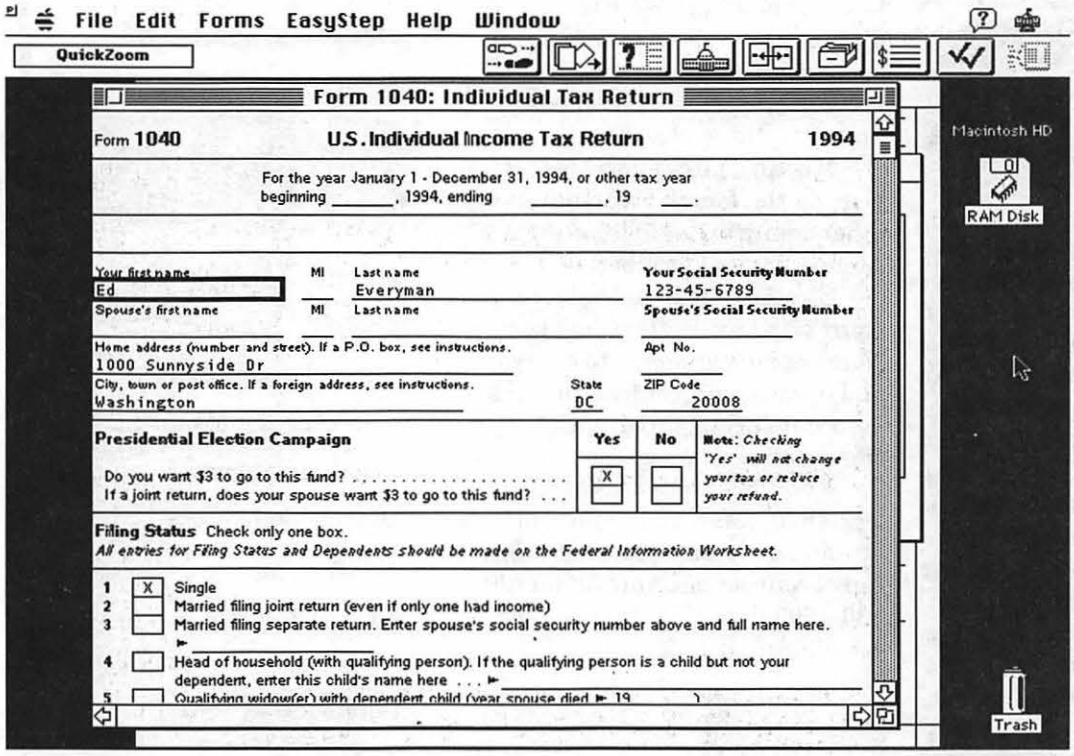


Figure 1.—front of 1040

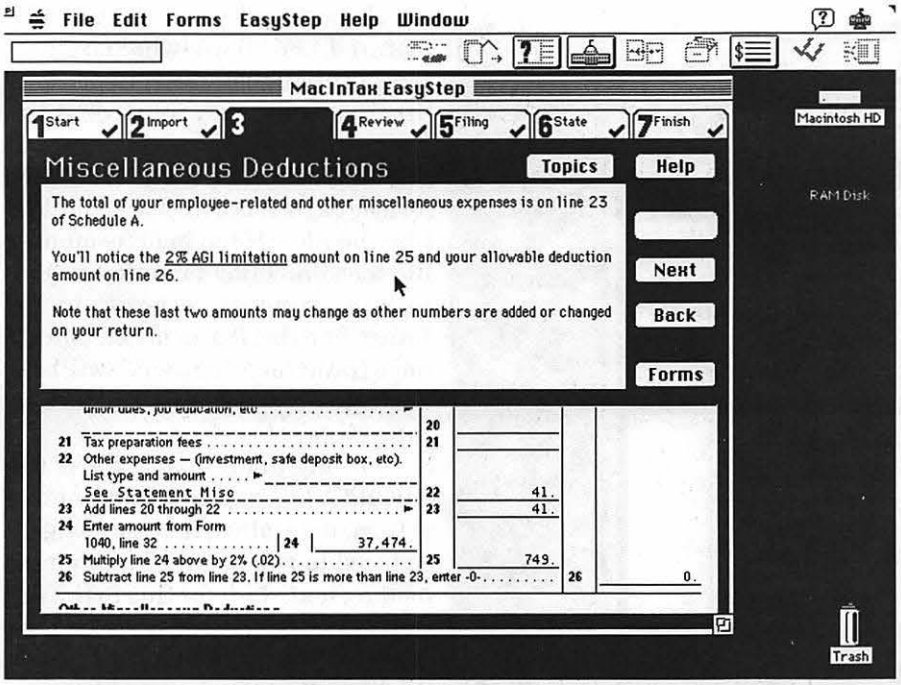


Figure 2.—Miscellaneous Deductions

select the two-character abbreviation of the state name. Entry from the keyboard was not supported. A really slick implementation should have been able to supply the state abbreviation, based on the zip code entered by the user. Maybe next year!

A larger problem with Easy Step arose when the Easy Step interface asked me to enter the amount of interest/dividend income from foreign sources. I entered a numeric 'zero', then pressed 'Enter' to go to the next step in the Easy Step process. Wrong! As I found out later, during the Error Correction phase, this produced an error condition (as far as MacInTax was concerned), and I had to go back into Easy Step, and change each of the 'zeroes' to 'blanks'. Good software testing should have detected this problem, though I realize that Intuit is 'under the gun' to get their product out in a timely fashion to meet the tax filing season.

Printing of the tax return was slow on my StyleWriter I. In previous years, the printed tax forms really looked like they had been done on a home computer. But, this year, the forms have a truly professional appearance, which may explain why the 'Forms Folder' occupies 12.8 MB of disk space.

Also included with MacInTax 94 is a small print program named '1040PC'. This reduces the Form 1040 to its bare essentials: names of the tax forms, line numbers of the forms, and entries. This option is available only for computer preparation using IRS approved software; pen and ink fans must file the old-fashioned return. The '1040PC' format is preferred by the IRS, since it reduces their tax return processing costs.

Electronic filing is also supported via modem or mailed-in diskette, for an additional fee of $14.95. This technique of filing seems rather tenuous; I prefer to take my chances sending paper via the U.S. Post Office.

MacInTax 94 takes a common 'computer industry' approach to handling entries on the tax return: they put lots of information onto attached statements. For example, in the Easy Step process, I entered

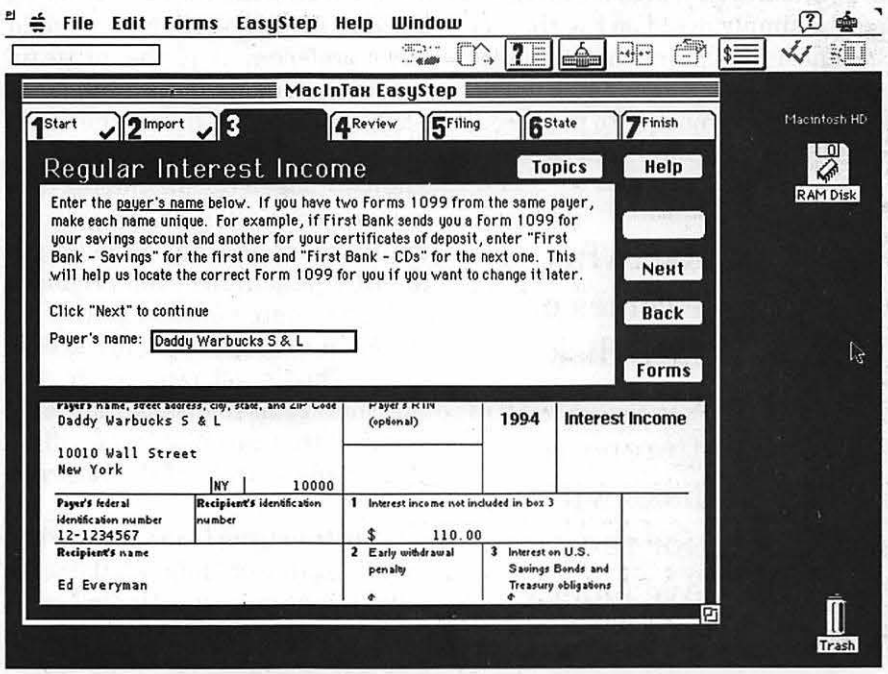


Figure 3.—Interest Income Name

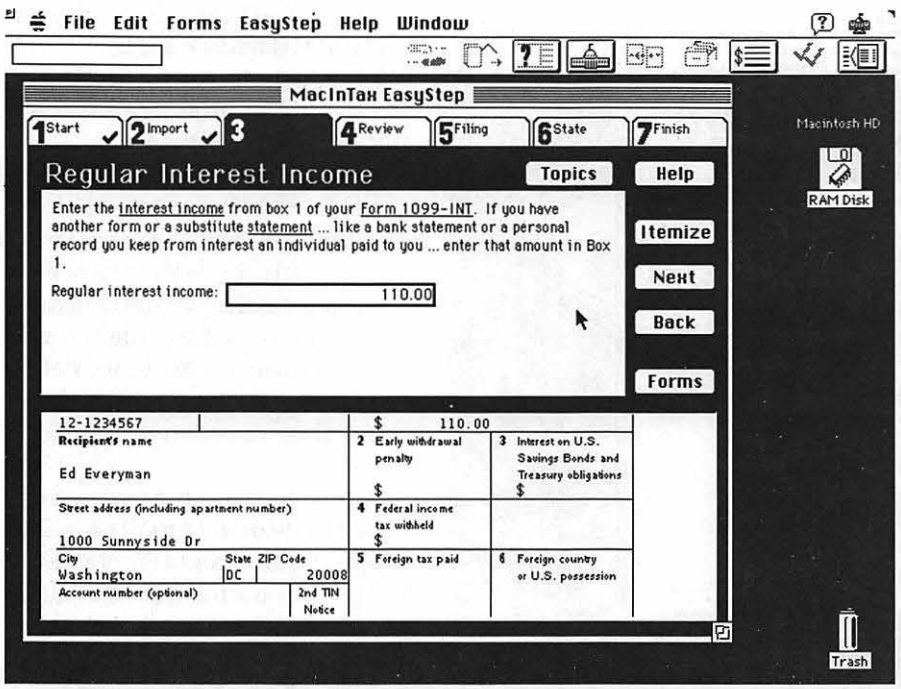


Figure 4—Interest Income Amt

a single interest income item of $110. MacInTax put this on Schedule B, with the description 'See attached Interest Income Statement'. According to IRS instructions, this item may be simply listed on the front of the Form 1040, since my interest income is less than $400. The MacInTax approach is to produce a Schedule B, and an unneccessary statement to attach to the return.

I am required to file Schedule B, because I have dividend income over $400. MacInTax also produced an attached statement for the dividend income. Ideally, in my case, I would have preferred that the program put the dividend information directly on Schedule B, and the interest income on line 8a of the 1040. The two pages of 'statements' are unwanted, and serve to complicate the information I am providing to the IRS. MacInTax even produced a 'Wage Statement' with the instruction to attach it to my tax return. This is not required by the IRS, and seems really pointless considering that my W-2 form will be stapled to the front of the return.

Bottom line: I know my review sounds rather grumpy, but truthfully, I enjoyed using MacInTax. I could have done my return just as fast the old-fashioned way (actually, I did do it both ways, providing a check on my work). MacInTax has an elegant interface, and is full-featured. For those who have customarily had their tax returns done professionally, they might find the Easy Step interview technique an effective replacement for their former experience at H & R Block. I like the idea of having a computer file containing my tax information, in case I need to retrieve it in the future (maybe, for an audit, ugh). I hope Intuit (or, Microsoft?) will continue to improve this product in future years.

For my tax return, I chose the '1040PC' filing option. My entire return, normally five pages long, is reduced to two pages of very plain-looking text. I prefer this to the ten or more pages, which the standard MacInTax print option would have created. ■

> "The MacInTax software comes on four 1.4 MB disks, and I did not see an option to replace these disks with 800K, for those who have older Macs."

Save your Giant and Safeway Receipts!!

Through March 1995 the Washington Apple Pi is collecting Giant and Safeway receipts. These receipts will be used to help schools in the area that we are sponsoring. Please save your receipts and either bring them or send them to the office.
Our thanks for your help in this valuable program.

Software Review

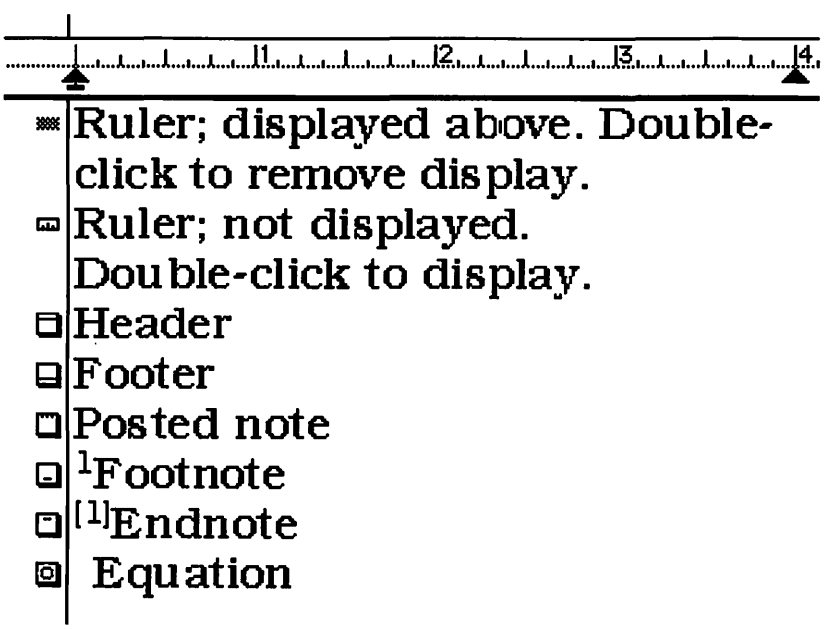
FullWrite, the Elusive Word Processor: Upgraded at Last

by Bernadette McMahon

USING *FullWrite* (FW) as a word processor is not unlike using the Macintosh itself—you're confident that you're using a superior product, but there are recurring frustrations with the extra effort required for compatibility with the rest of the computing community. Since its introduction, FW lived up to its claim of being the "intuitive word processor with desktop publishing power," a truly fine application, full of useful features. But its perceived slowness (mostly caused by the low power of the Macs then in use) and minimal file conversion capabilities kept users away in droves. In my seven years using FW, I never met another person outside of our work unit who used it.

Now FW's rebirth as *FullWrite 2* (FW2) offers new hope that a large and enthusiastic user base will develop from among those fed up with current feature-bloated enormous applications. Its compact size (800K application file, 3 MB full installation), open architecture design for user customization of features, and incorporation of the Claris XTND system for ease of translation should encourage Mac owners to take a new look at a long-neglected application. Improved promotion by the publishers is needed to reach that goal.

Figure 1: FW2 Icons



A Little History

The original FW was developed by Ann Arbor Software and made available in 1988. By 1990, it had been acquired by Ashton-Tate, who upgraded it to FullWrite Professional. Borland inherited it with their purchase of Ashton-Tate but never improved it beyond a few bug fixes. Brothers Bruce and Roy Leban, who helped develop FW at Ann Arbor, are now President and Chief Technologist, respectively, at Akimbo Systems, which acquired the product from Borland in June, 1993. FW2 shipped at the end of October, 1994.

Favorite Features

Because most Mac users aren't familiar with FW, it's worth describing a few of the features that have kept its loyal users loyal. Anyone who has used one product almost exclusively is not in a good position to compare it to competing products, so such comparisons are minimal in this review; features I like in FW may also be available elsewhere. Some statements comparing FW with other products are taken from comments made by other FW users in an America Online (AOL) forum established by Akimbo in 1993 (more on that later).

Iconography. What I miss most in my occasional use of other word processors is FW's use of icons in the left margin to identify embedded items such as rulers, page breaks, headers, footers, etc. Figure 1 displays a few of these. The icons are unobtrusive but readily visible, and support the user's ultimate control over the document layout—and who better to be in control? Clicking on any icon selects the associated item for deletion,

copying, or cutting. Double clicking brings up a window for editing items such as table of contents entries. Double clicking the ruler icon toggles its visibility—the user can choose to view the rulers on the screen or not; if not, the icon in the margin marks its position for quick viewing.

Change bars. The "icon bar view" is only one of four ways to view the screen. In the "change bar view," a vertical bar appears in the left margin of any line of text in which a change has been made since the previous version. The bars can be printed on the document. I took this capability for granted until a thread on the WAP TCS Conference 3, Board 6 (Mac Word Processors/ DPub) in early January made me realize what a treasure it is. In response to a question, several messages offered suggestions on how to force *Word* to print change bars; if I interpreted the messages correctly, all of them required the user, rather than the application, to remember which lines were changed and to add a character that could serve as a change bar! FW2 has improved upon this feature even more by permitting each word that is changed to be highlighted by a change in color or style. Figure 2 displays a FW2 document with both change bars and underlined new text. The user can temporarily disable the change bar feature by "locking" it, very useful when, for example, the only change being made is the style. The user also decides whether or not to show spelling corrections as changed items.

Copying Styles. I had been using FW for a while before stumbling upon this feature and got hooked immediately. Once the font, size, style, justification, and line spacing have been established for any heading, subheading, or paragraph, other similar text can be given the same style by selecting it and then clicking anywhere in the already-styled text while holding down the command key. Nifty!

Walk-down menus. All applications should have this feature. Any menu item without its own keyboard equivalent can be activated by the key sequence: Command-(menu bar number)-(item number). It sounds complicated, but it's not. Think of menu bar items as numbered left to right (File is 1, Edit 2, etc.). Command-(menu bar number) drops down the menu. Without letting go of the Command key, press the number associated with the command you want (it's on the screen). Most users will memorize only those few key sequences they use frequently. For example, in FW2, Command-1-3 will bring up the Doc[ument] Setup dialog box.

Outliner. FW contains a full outline capability that was cited as the best among word processors in messages posted on AOL. I often use the outliner to organize disparate material into a coherent document (e.g., for this article). An outline element and its associated text can be moved anywhere in the outline merely by dragging it with the mouse. The user can view the outline (Command-3-4 in the FW2 walk-down menu), select one element, and click the "Go to Item" button for quick navigation through the document—very important in a long document.

Sidebars and Pictures. The desktop publishing abilities of FW rely upon these features. Sidebars can be placed anywhere in the document, resized and moved with the mouse, outlined with boxes in a variety of styles, and shaded to any percentage gray scale. FW2 permits the background to be in color. Once created, sidebars can be filled with text, other sidebars, and pictures. Sidebars are frequently used to combine text with different numbers of columns on the same page.

Pictures can either be created directly within FW, though the tool set is hardly full-featured, or copied from another application and pasted into FW. Users should take seriously the warning that FW provides when a pasted picture is opened for editing—formatting is often affected.

Figure 2. FW2 Change Bar View

FullWrite has everything you need to produce persuasive documents with tremendous visual impact. This is a change that's been inserted into the document to display how changed text is handled. The change bar on the left shows all lines that contain a change. At the heart of FullWrite is the most powerful set of text, page and document management tools ever assembled in a Macintosh word processor. Regardless of your writing requirements, from single page memos to brochures, complex technical reports to books, FullWrite is the right tool for the job.

More Features. Variables, glossaries, and the ability to print a document on two sides of paper are other features that have won fans through FW's history. FW offers both footnotes *and* endnotes and, for those who stick little yellow pieces of paper on everything, posted notes. Of course, FW has spell-checking and a thesaurus, and a flexible and thus powerful, search and replace capability.

New Features in FW2

Modular architecture. Akimbo claims that, in revising FW to create FW2, they attempted to find the simplest, easiest ways that would still provide the most functionality. Primary among the changes is a new modular architecture that permits the user to customize FW2 by simply dragging an extension's icon into the appropriate folder. FW2 comes with over 100 extensions, some already installed and the others ready to be added to accommodate each user's particular way of using the application. Most important, Akimbo has made their code available to encourage the development of additional extensions by third party developers. They also see the extension architecture as a way to distribute bug fixes between editions. Some future extensions will probably be distributed free or as shareware on electronic forums such as AOL; others can be expected to be sold as commercial packages.

What features are added by extensions? Many merely make menu items of desirable commands that are otherwise buried in a dialog box; each of these is named for the menu in which the command will appear. The first extension I added was "Format•6 Lines per Inch." With the extension activated, "6 lines per inch" appears right on the Format menu for greatly improved access. On the other hand, I removed the "Style•Small Caps" extension because I never use small caps. The capability is not removed, merely its appearance on a menu.

Other extensions provide major capabilities rather than just menu changes. Both sidebars and pictures now rely upon extensions; without the extension, a sidebar or picture can be viewed but not edited. Users who don't need the picture editor can save 144K of disk space by removing the extension. An equation editor and print merge capability are both provided by extensions. Third party database extensions are reportedly being developed by several publishers; these would allow databases to provide FW2 with fully-formatted text for mail-merge purposes. And since FW2 was purposefully designed without toolbars (because many users asked that they not be included), the user who does want toolbars may be able to add the feature from a third party extension.

Improved Translation via Claris XTND. Akimbo adopted the XTND system as a way of improving the translation of files to and from other applications. Claris XTND was designed by Claris and licensed to other developers for just this purpose—to facilitate conversion of files from one application to another, so that users with different software can still share files. With "Claris XTND System" in the System folder, the application can call up a wide variety of translators (also known as filters) with the "Save as..." command and translate the document. In the same way, the "Open..." command permits one application to open a file created by another. Both Claris translators, which come with FW2, and MacLink translators from the DataViz *MacLinksPlus* can be used with this system. Translators are available

for both Macintosh and PC applications. So far, my experiences with this feature have been good. I've made successful conversions from FW2 to *ClarisWorks* and *WordPerfect Mac v. 3*. I have not tried conversion to *Word*, but several translators are available; a message posted on the AOL forum praised the *MacLinksPlus* Word to FW2 translator but found two others to be useless.

Translators for FW2 do not yet exist for all popular applications; notable among those missing are *PageMaker* and *Quark*, although FW2 files can be converted to other formats that can be imported by these page layout programs. The Claris XTND system, however, provides the structure for adding other translators as they become available, and Akimbo provides source code for FW2 to facilitate the writing of import filters.

Akimbo is also touting these other new features in FW2; I have not yet had the chance to try them:

- a greatly improved tables capability
- an equation editor, from Design Science, creators of *Math Type*
- print merge
- an enhanced glossary that allows any item to be designated a "glossary macro" (whenever the glossary name is typed into the document, the full glossary entry appears)
- four different flavors of carriage return to implement different formatting needs

Obviously, there is plenty left to explore in FW2.

Favorite New Features

So far, my favorite thing in FW2 is its support of Apple's Drag and Drop feature (FW2 calls it Drag *or* Drop). The user selects text, positions the cursor over it, and moves it to a new location by dragging. Holding the Option key down during the drag causes the selected text to be copied rather than cut from its original location.

Other nice changes: Command-P now causes the document to print (previous versions did not follow this common Mac interface rule); the space preceding a word is automatically deleted, cut, or copied with the word; and "place holders" can be used where pictures will appear to speed the screen display And FW2 still supports walk-down menus, even in those cases where the desired command appears in a submenu; e.g., clearing change bars for a fresh start can be affected by Command-2-3-3.

The Negatives

Nothing in life is perfect. Some things in FW2 are worse than before. In particular, the on-screen display of invisible characters is unpleasantly intrusive (read "Ugly"). My personal preference is always to be able to see the spaces, tabs, and carriage returns in a document, but FW2's use of fat dots, thick right arrows, and thick left turn arrows to display these items is hard to look at and sometimes obscures the text. I cannot fathom why Akimbo thought this would be preferable to FW 1.5's dots, chevrons, and paragraph marks. (See Figure 3 for comparison of the screen views in FW 1.5 and FW 2.)

Many of the changes in keyboard equivalents, such as Command-P for printing, were apparently made to conform to the Mac standard interface, which justifies forcing users to relearn what

we used to know. In some cases, however, the changes are puzzling. For example, the soft hyphenation command changed from the very logical "Command-space bar" to the convoluted "Command-Shift-\".

Another example: previous FW versions placed the spell-checker, logically called "Check Spelling," in the Edit menu; a walk-down command accessed it from the keyboard. FW2, however, hides it in a submenu of the Tools menu item "Words"; the submenu item is called "Check Document...". The word "spell[ing]" is not part of the menu item at all. Worse, both the manual and the on-line help incorrectly state that the spell-check commands are in the Edit menu.

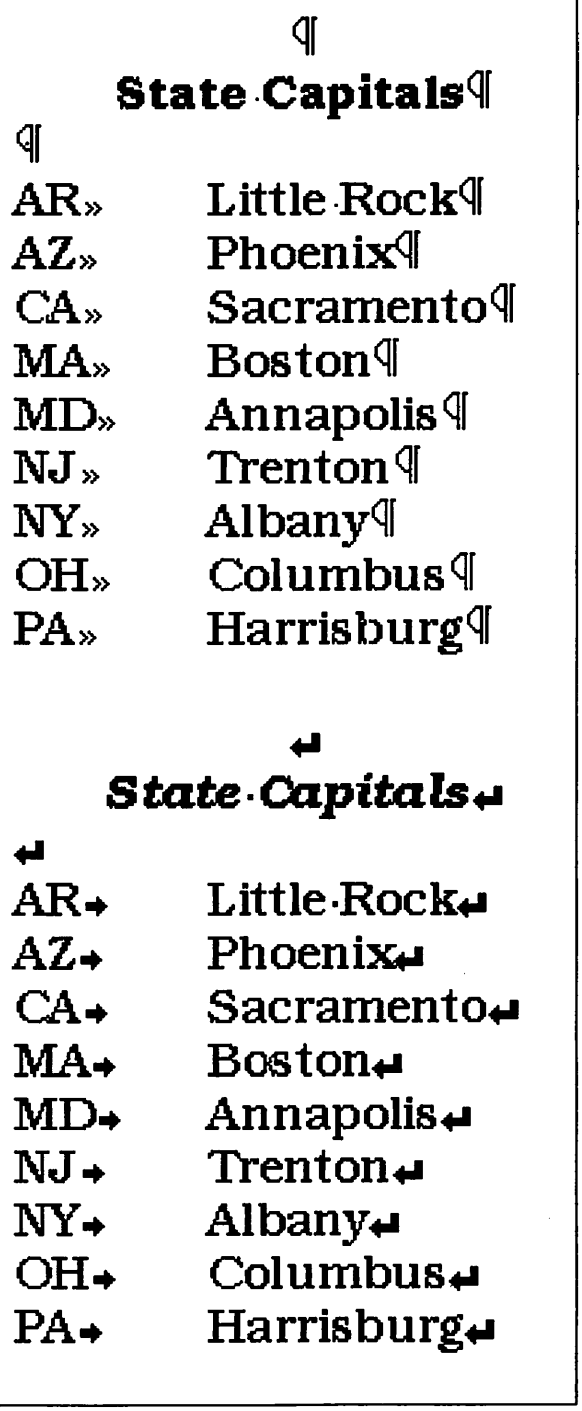
Developer Support and Marketing—The Contradiction

Akimbo's public availability for receiving such reports may be the most encouraging thing about FW2 and a major recommendation for the software. As soon as they acquired FW, Akimbo established an AOL forum (Keyword: FullWrite) to post updates to the previous version and to solicit suggestions for the upgrade they were preparing. Over 300 comments and suggestions were posted during the upgrade development period.

When FW2 shipped, Akimbo opened another AOL area for posting questions and comments on the new product. Numerous bugs were reported during the first several months, and two updates have been issued to fix them. Version 2.0.1 was made available in November for users with System 7.5; 2.0.2 was issued January 22 for all users. Owners of 86040 AV Macintoshes have reported crashes using FW 2.0.2; as of this writing in early February, Akimbo is working to correct this. Throughout this shakedown period, Akimbo has responded quickly to messages, usually within two days. They sometimes offered solutions to the reported problems; more often, they promised to add an item to the bug list or to pass on suggestions for future improvements to their developers. Users also report that Akimbo's response to Email messages sent to FullWrite@aol.com or info@akimbo.com has been prompt. Addresses for written and faxed comments are of course available.

Akimbo seems truly committed to supporting this product and giving it something it has not had in several years—a future. Thus, their failure to market and advertise FW2 is puzzling and disconcerting. As of February, no announcement of product availability has yet been mailed to registered users (was Akimbo unable to acquire the list along with rights to the product?), nor has it been advertised in the usual commercial publications. Our work unit, which has eight registered copies of FW, obtained FW2 upgrades in November, but only because our resident guru stays aware of such information on-line. A review in the December 5 MacWeek gave it high marks—four of a possible five diamonds, and

Figure 3: Screen Views:
FW 1.5 (top)
FW2 (bottom)



it was mentioned briefly in the March issue of MacWorld, but that is precious little publicity for a resurrected product in which the owners appear to have such a vested interest.

Many users have serious reservations about the most popular Mac word processing products, especially as size becomes a barrier in the newer versions. So FW2 might well find a decent niche in the market, but not without some aggressive sales effort on the part of the developer. High volume sales are the best support for additional development, which in turn encourages more sales. It's a basic concept that Akimbo needs to incorporate into its strategy.

Product Details

FullWrite 2, Akimbo Systems, 11 Rose St., Somerville MA 02143; 1-800-375-6515. List Price: $395; upgrades: $99; educational/non-profit package: $99; competitive upgrades: $120 (any other Mac word processor qualifies). Multi-pack discounts are available. FW2 runs on all Mac models from the Plus to Power Macs and is compatible with both System 6 and 7; it requires 2 MB RAM and 3 MB hard disk space.

All users of FW2 are advised to update to 2.0.2, using the updater available in several locations including the WAP TCS file area 31, the AOL forum, and the Internet site ftp.std.com/vendors/Akimbo (as the file FullWrite-202-updater.sit.hqx). System 7.5 users who previously updated to 2.0.1 should also update to 2.0.2—the same updater works on both 2.0 and 2.0.1. A demonstration version of FW2 is also available in these areas. ■

Clues that FullWrite 2 was Produced by Old-time Mac Programmers

- They named their company Akimbo.
- The product logo is a yellow lead pencil (the commoner's WordPerfect?).
- To reinforce the logo, a pencil labeled FullWrite 2 comes with the product.
- The box and manual are produced from recycled paper.
- This warning is printed on the box: "FullWrite may be habit-forming. After using FullWrite, you may be unwilling to use any other word processor."
- The following entry appears in the manual index: "Stewart, Jimmy, see invisible characters."
- Somebody, somewhere, is writing an extension that will convert words into Pig Latin as they're typed; it'll be posted on the AOL forum when ready.
- This definition of hackers appears in a table used to demonstrate the table feature: "Hypertext Automatic Context KnowledgE Retrieval System."

Bernadette McMahon is a chemist for the U.S. Food and Drug Administration whose primary responsibility for editing an analytical manual is made possible by her Macintosh and products such as FullWrite.

Hardware review

Brainstorm Accelerators for Macintosh Plus and Macintosh SE

by Sandy Kowalczuk

WE HAVE A variety of Macs from Mac Plus to LC 575 in the Middle School computer lab at Key School. All the SEs, Pluses and Classics have been upgraded to 4 MB of RAM, because many of our projects involve HyperCard or PageMaker, and all use System 7.1.

This fall, I saw an ad from Brainstorm Products for an accelerator for the SE which could be evaluated by educational institutions free for 30 days, and I thought, "Why not!"

I phoned the company, and they were very friendly and sent one promptly, along with a handy toolkit for doing the installation. We have been using it for several months now and have had absolutely no conflicts with any of the software we use at school.

I placed an SE without the accelerator and an SE/30 alongside the SE with the Brainstorm Accelerator and did a very unscientific comparison (I didn't have a stop watch). With the same PageMaker 4.0 document on each of the computers, I watched to see how quickly the screens would be redrawn when changes were made. While the SE with the accelerator was not quite as fast as the SE/30, it saved several seconds each time the screen was redrawn compared to the SE without the accelerator.

"I placed an SE without the accelerator and an SE/30 alongside the SE with the Brainstorm Accelerator and did a very unscientific comparison (I didn't have a stop watch)."

I was convinced that this was something we had to have for our remaining SEs and Mac Pluses, and have made a request for them in next year's budget. The increase in productivity will make our older machines viable for a few more years until they gradually get replaced by newer models and get moved to teachers desks to be used for word processing.

The accelerators for the SE normally list for $199, but for educational institutions, they are $129 for 1-24, and $99 for 25 or more. The Mac Plus accelerators list for $149 with an educational discount to $129 for 1-24 or $99 for 25 or more. This does not include the cost of the nifty tool kit—$12 for SE and $30 for the Mac Plus, or shipping and handling —$12. Brainstorm will provide factory installation for the Mac Plus as it involves some soldering and using a voltmeter, which they provide as part of the toolkit along with a video on how to do the installation. This is normally $199, but the educational discount price is $149.

The accelerator has two parts, an accelerator card which fits into the SEs PDS slot and a 16 MHz 68000 proprietary chip which replaces the standard 8 MHz SE processor. The combination of the two "allows the existing memory and input/output chips to operate at two to three times their original speed." It also "more than doubles the speed of the SCSI interface on the Macintosh motherboard." These are quotes from documentation provided by the company.

The Brainstorm Accelerator for the Macintosh Plus has received an excellent review in the May 4, 1992 issue of *MacWeek*.. The one for the SE gets 4 stars in the March 1995 issue of *MacWorld,* and 4 $^1/_2$ apples from *MacHome Journal,* September 1994. BMUG chose the SE accelerator for a Choice Product award in '92, '93, '94 and '95.

I spoke with Andy Seligman at Brainstorm, and they are willing to extend special User Group rates to members of Washington Apple Pi if we can make a group purchase of 5 or more accelerators, mix-and-match, for SE or Plus. The club could purchase one toolkit of each type, and our price would be $129 per accelerator. We will need to coordinate a group purchase if the interest arises.

If you wish to speak to the nice people at Brainstorm for more technical details, or to order individually at regular prices, you can contact them at:

Voice: 415-988-2900
Fax: 415-988-2906
BRAINTECH@AOL.COM
AppleLink D6800 ■

File Inventory Programs—Review of 7 Shareware Programs on the TCS

by Dennis Helsel

MANY OF US have lots of floppy disks sitting in boxes, plastic organizer trays, or just scattered here and there. The disks are our backup protection against failing hard drives, originals of valued software, or just necessary off-line storage. Yet when we need them, searching for the right disk can be chaotic. On which disk should I back up that new game? Where is that valuable utility I stored last year, on the "Programs" disk, or on "New Programs?" Which CD has that "honk" sound? After feeding 20 disks into the slot, and clicking through the contents of each one to find the right file, you know there's a better way. There is—disk inventory software.

The purpose of disk inventory software is to keep a record of the files stored off-line, on diskettes, removable drives, or CDs. When a file is needed, the software finds it in its records on your hard drive, quickly determining which disk or CD to insert. It may even automatically copy the file once the disk is inserted. Your computer is organized, so you don't have to be! As more CDs with hundreds of software, fonts, sounds and pictures clutter our lives, a good inventory will become increasingly valuable.

Seven inexpensive disk inventory programs are available on the TCS (see Table 1). Five are shareware ($30 or less), and two are absolutely free. Any of them will ease the job of finding files you've stored off-line somewhere. Each of them will inventory floppies or CDs. Five of the programs are applications, one is a control panel, and one is a Hypercard stack. One of the applications also relies on an extension (init) for its automatic features.

General Impressions

The general characteristics I look for in a program are: 1) a good value (okay, so I'm cheap), 2) ease of use, 3) minimum file space for what's in them, and 4) pleasant and well-organized on-screen information. The top part of Table 2 evaluates these subjective characteristics for

"Ten Disk Catlg" 260 Files •

File:'Ten Disk Catlg' (NOT saved) Files:260 Mem Used:21K/174K (no match data)
Selected:1 Total Bytes:24K Groups:1 0

FIND Volume: Equals Includes Begins Ends
Find Next | Find First | Find Prev | Find All | Type: | Creator:

FILE NAME	VERSION	TYPE	CREA	BYTES	CREATED	MODIFIED
ReadMe STORM		TEXT	ttxt	1934	08/02/91 20:47:10	08/27/91 02:
ARASHI 1.0a		APPL	AR|F	267963	12/15/92 08:58:08	12/15/92 14:
new to ARASHI 1.00		TEXT	MSWD	2533	12/13/92 17:36:45	12/15/92 01:
Hot Air Balloon v2.1		APPL	HABC	29704	11/17/92 15:14:16	11/17/92 15:
BlackBox		APPL	BBox	12534	05/27/86 22:13:20	07/13/86 12:
Daleks		APPL	DALK	19499	09/03/84 13:10:27	11/23/91 01:
MacChase 2.17		APPL	KLG1	162828	01/20/90 14:35:42	01/18/92 20:
MacChase 2.17 docs		nX^d	nX^n	39994	04/08/92 22:13:05	04/08/92 22:
MC_Original		MCFL	MC17	14765	08/12/88 23:35:36	12/31/91 16:
Shareware Update		TEXT	ttxt	3540	01/05/92 18:32:30	01/18/92 21:
Stratego 0.91		APPL	TEGO	114241	11/15/87 06:10:32	07/25/88 10:
Bug Report Form		WDBN	MSWD	5120	01/22/92 00:22:13	01/22/92 00:
Galaxis 1.1		APPL	Glxs	247346	10/21/92 02:23:38	10/21/92 02:
Galaxis Sounds		snd	Glxs	220931	12/03/91 22:44:37	10/16/92 00:
Galaxis Theme		STrk	Glxs	113574	03/25/92 19:00:47	03/25/92 19:
Galaxis.DOC.int		WDBN	MSWD	55296	12/08/91 18:47:44	10/21/92 02:
Tutorial Game		GAME	Glxs	1460	11/26/91 20:31:44	11/26/91 20:
Hexmines 1.2		APPL	»Hex	81543	12/21/92 01:35:54	12/21/92 01:
Hexmines 1.2 docs		TEXT	ttxt	5845	12/20/92 22:19:37	12/21/92 01:
Desk Invaders		dfil	movr	109923	02/06/88 18:02:55	04/09/92 23:
Desk Invaders docs		TEXT	ttxt	6816	09/14/91 20:15:30	09/14/91 20:
Dropper		APPL	RWm7	109102	06/24/90 02:12:26	01/21/92 21:
Pentominoes 1.4		APPL	PNT5	264615	11/10/93 14:15:12	11/10/93 14:
Slime Invaders 2.0.1		APPL	Arkð	370756	10/08/93 18:33:54	10/08/93 20:
Slime Invaders docs		TEXT	ttxt	7700	12/30/91 16:45:37	10/08/93 18:
Backgammon 2.0		APPL	MPDY	37660	11/30/84 18:29:20	11/04/89 19:
Bombs 2.2		APPL	BMBS	142828	06/08/91 16:40:00	08/07/92 13:
Precision Cribbage™		APPL	CRIB	193081	01/05/89 15:07:25	02/06/89 00:

Figure 1. File list from FileList+, a full-featured but complicated program.

the seven programs (I have no connection with any of the authors of these programs, so my opinions are totally my own). Use this review as a guide to choose two or three, and them try them out yourself. After all, that's the beauty of shareware.

The most expensive programs aren't necessarily the leaders in any of these criteria. The file lists for MacLibrarian, for example, seemed crowded and difficult to read. Disk Wizard and CatFinder were exceptionally clear, while the free Disk Trivia was one of the cleanest and easiest to understand Hypercard stacks I've seen. The most powerful sorting and cataloging options were contained in the other free program, FileList+. Selection of the right program for you will depend on the features you want.

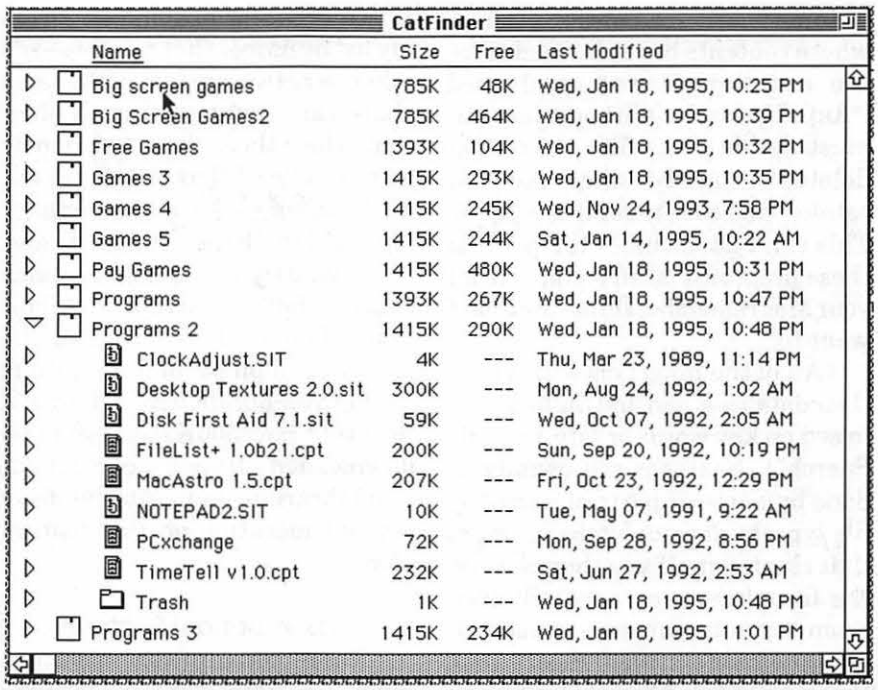


Figure 2. CatFinder's finder-like interface.

I began by cataloging the contents of 10 of my floppy disks, containing a motley collection of compressed files, using each program. The storage space taken on my hard disk varied considerably (Table 2). Most programs stored this information in binary format, or in simple text files. AutoCat, however, represented each file as an alias in a separate folder named for each disk. In doing so, it at least doubled the disk space required by the other programs, even though it did not read the contents within compressed archives. That's a heavy price to pay, ruling out its serious consideration for use on my hard drive. The smallest file, created by ListFiles, also did not catalog the contents of compressed (Stuffit and Compact Pro) archives. As most files on floppies will likely be compressed to save space, I consider that a serious limitation.

Important Features

Table 2 lists the features found in each of the programs. The most important features (in my opinion) are found towards the top. Five of the programs read and catalogued files in Stuffit and Compact Pro archives ("Read .cpt .sit"). It is a feature I found invaluable for finding exactly the file I wanted. The programs allow this to be turned off, but the savings in space for a smaller file list would be a poor place to scrimp.

A second useful feature is the ability to quickly scan and catalog a series of disks without having to point and click one or more times in between ("Quick Scan"). All but the simplest of the programs, Disk Trivia, performed this task. Four of them also

Table 1. Locations of Disk Inventory Software on the TCS

Name	Area	File No.	File Name	Size
MacLibrarian	23	217	MACLIBRARIA.CPT	145536
CatFinder	23	497	CAT.FINDER.141	106880
AutoCat	24	591	AUTOCAT.1.0.2	33792
Disk Wizard	23	478	DISK.WIZARD.103	64768
ListFiles	22	268	LIST.FILES.2.4	84000
FileList+	22	114	FILELIST1.0.SIT	247040
Disk Trivia	22	277	DISKTRIVIA.CPT	29056

automatically re-catalog a disk whose contents have changed since the last time it was catalogued ("Auto Update"). Without this, you must decide that files have been deleted or added since the last catalog, and click to catalog it again. This can be tedious — the point of these programs is, after all, is to let your Mac remember things you don't want to!

All of the programs will search their database, and find file locations based on key words or letters ("File Search"). Searches can usually be done by name or parts of name, by file type, by date, or by the program that created it. If you then click on the file, three programs will even prompt you to put the correct disk into the Mac's drive ("Insert Disk Prompt"). Disk Wizard also has an accelerated copy mechanism that is much faster than the Finder's. The primary feature of FileList+ is its flexible sort option. In using it for this review, for example, I sorted my list by name. Right next to each other were two versions of the same shareware game, one much older than the other, that I obviously stored on two different disks at two different times. I would never have found this with the other programs.

Five of the seven tell how much space is left on each disk ("Show Space Left"). This is one of the most useful pieces of information, letting you decide which disk will hold that new 500K game you just downloaded. Its absence rules out MacLibrarian and AutoCat from my consideration on this feature alone.

Less Important Features

The remaining features seemed much less important in deciding which program to choose. In addition to printing the file list from within the program, three will export it as a separate text file for later printing or editing (and two store their lists as text files, so do not need "exporting"). The two most expensive programs allow the creation and printing of disk labels. This appears to be one of the primary features of MacLibrarian, which also has a simple editor for drawing label pictures. However, it is easy to import an image from a more functional drawing program, so the drawing feature didn't seem of great value to me. If creating labels is important to you (perhaps you're copying and distributing disks for a user group), then CatFinder or MacLibrarian may become your all-purpose disk management program.

Recommendations

I liked three of these programs very much. One is free (told you I was cheap), and the others inexpensive. All three have a simple look and are easy to use, making a very positive impression. Getting

Table 2. Comparison of Seven Disk Inventory Programs

	MacLib	CatFind	AutoCat	Disk Wzrd	ListFiles	FileList+	DskTrv
Version	1.6.3	1.51	1.5	1.0.3	2.4.1	1.0b21	1.0
Shareware $$	30	25	10	10	5	0	0
Type of Program	App	App	CP	Ext+App	App	App	Stack
10-disk List Size	42K	42K	84K	42K	5K	23K	31K
Ease of Use	2	1	1	1	2	3	2
Nice to look at	3	1	2	1	3	2	1
Functionality	2	2	2	1	3	1	3
1 = high 2 = medium 3 = low							
Read .cpt .sit			–		–		
Quick Scan							–
Auto Update		–			–		–
File Search			*				
Show Space Left	–		–				
Insert Disk Prompt	–		*		–	–	–
Export File Lists			–	–	†	†	
Prints Labels			–	–	–	–	–
the feature is present – it is not							
* uses the Finder † stored as text files							

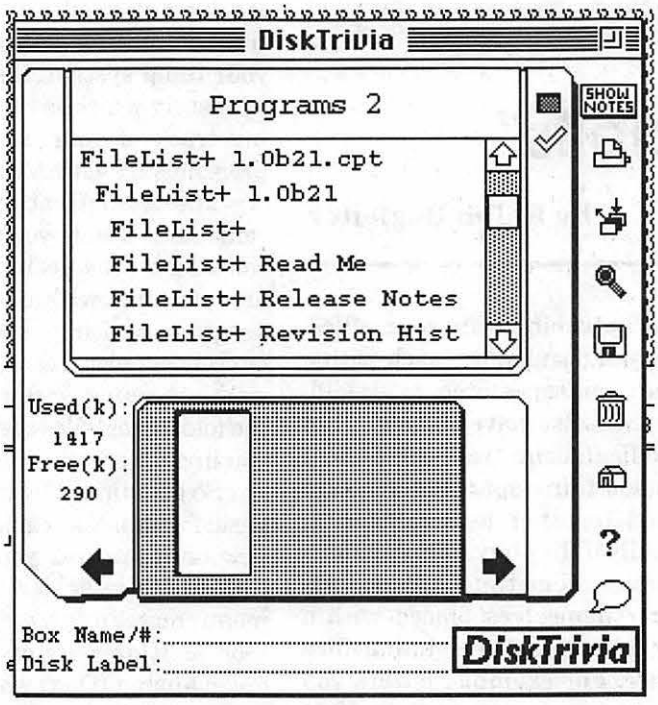


Figure 3. DiskTrivia's catalog scrolls across the disk's "label".

Home disks - Disks

Num	Volume Name	Create Date	Modified Date	Size	Files	Dir's	Lock	Stamped	Type
0	Free Games	Wed, Jan 8, 1...	Tue, Nov 23, 1...	1386K	42	4			
1	Games 3	Thu, May 28...	Thu, Nov 25, 1...	1370K	49	8			
2	Pay Games	Fri, Jan 24, 1...	Tue, Nov 23, 1...	1068K	35	6			
3	Programs	Sun, Jan 12, 1...	Thu, Nov 25, 1...	1044K	105	26			
4	Programs 2	Thu, Aug 6, 1...	Wed, Mar 31, 1...	1401K	59	7			
5	Programs 3	Thu, Oct 22...	Wed, Nov 17, 1...	1133K	56	11			
6	Stacks	Fri, Jan 10, 1...	Sat, Oct 16, 1...	1413K	29	1			
7	Res Edit disk	Thu, Mar 26...	Thu, Sep 17, 1...	935K	72	15			
8	Quick Time Disk	Fri, Mar 13, 1...	Sat, Mar 13, 1...	1047K	32	5			
9	GIF programs	Sat, Dec 5, 1...	Wed, Mar 31, 1...	421K	16	3			
10	GIF	Sat, May 2, 1...	Fri, Mar 26, 1993	1085K	11	3			
11	Midi music	Sat, Oct 24, 1...	Tue, Aug 31, 1...	1362K	174	17			
12	MUSIC	Fri, Jun 26, 1...	Thu, Apr 1, 1993	490K	23	3			
13	Manipulate Sounds	Wed, Aug 5, 1...	Tue, Nov 23, 1...	906K	60	9			
14	extra sounds	Sat, Oct 31, 1...	Tue, Nov 23, 1...	976K	82	1			
15	Big screen games	Tue, Nov 17...	Sun, Mar 14, 1...	615K	9	2			
16	Dennis	Tue, Jan 5, 1...	Thu, Nov 25, 1...	577K	82	8			
17	Screen Saver	Tue, Mar 10...	Thu, Nov 26, 1...	764K	51	2			

Find Disk:

Figure 4. MacLibrarian's list of disks, showing # of directories but not free space.

one will benefit every Mac user who has more than 10 floppy disks to keep track of.

First, for those with few floppies, want an easy-to-use program, and who don't change files on disk very often, DiskTrivia may be sufficient. It has several of the important features above, and its interface is easily understandable. One unique feature is that it has a hidden note field in the stack to record comments about each disk, if desired. The interface does look like a floppy disk (Figure 3), which may be confusing for cataloging CDs. DiskTrivia's primary drawback is its need to click on buttons to input or update an inventory. It is a good starting program, but most users will probably want to move on to one of the others as their number of disks increases.

Second, for those who need to generate disk labels with their inventory program, CatFinder is a much better choice than MacLibrarian. Its interface is intuitive and uncluttered, making it very easy to use (Figure 2). It will search for a file, prompt you to insert the correct disk, and automatically launch the program. It will store more than one catalog, allowing you to keep floppies separate from CDs, or work disks separate from those at home. It lacks only an automatic update mechanism.

However, the winner IMHO among these seven is Disk Wizard. It does not print file lists on paper—if you need that, you'd be better off with CatFinder. One "bug", of not reading the internal files compressed with an older version of Stuffit (1.5.1), is listed to be fixed for the next release (or just re-stuff your files with a newer version). Also slated for addition is the ability to store records in seperate catalogs. But Disk Wizard's interface is well done and pleasant to use. It has all the features most users will need. And the quick and easy cataloging and updating features will encourage you to actually use it.

If you are not yet using a disk inventory program, download a few and pick the one that's best for you. Then pay the shareware fee and register. After all, even I will pay $10 for good software. ■

MacNovice

"Nesting Habits"

by Ralph Begleiter

ONE OF THE MOST perplexing problems MacNovices seem to face is figuring out how to use the Macintosh filing system to store and find documents they create. The advent of floppy disks which can store up to 1.4 megabytes of data and hard disk drives with enormous capacities often create a filing nightmare.

I've seen Mac users who simply store all their documents and programs right on the desktop, or in the open disk window. They never use file folders. That's not a big deal when all you've got is a dozen or so documents and programs on your disk. But imagine trying to wade through it all to find a certain piece of correspondence—if there are several hundred documents on the disk? What clutter!

Your Mac's Hierarchical Filing System was created to solve that problem. Learning to use it efficiently can help you find your work faster, and can help you avoid costly mistakes such as losing important files. You may be asking right now, "Who cares whether I file things away neatly? Stop being so compulsive! What difference does it make?" On your Macintosh, it makes a big difference in the ease of locating documents later. The Macintosh system is set up to work fastest when the computer is required only to keep track of a few items at one time, rather than keeping track of everything all the time.

To take best advantage of the filing system built right into your Macintosh, always keep in mind that your computer disks are similar to file cabinets in your office. Individual documents (each with a unique name) are stored inside folders (which also have names). In a large office (such as your computer's enormous filing space) folders are grouped together into categories, especially if they have similar characteristics. Sometimes, these folders are themselves placed within larger folders, to keep similar files together. For example, letters you wrote to your accountant in 1994

> "It's the concept of nesting which is the key to keeping track of your documents and programs on your Macintosh."

might be filed in folders labeled for each month of the year. These "monthly" folders might be grouped into "quarterly" folders, which in turn are probably stored inside a large folder labeled "Correspondence." The Correspondence folder itself might be nested with other items within one huge folder (or file drawer) marked "1994."

The important concept here is not the labels or even the number of folders. The key concept is the idea that letters you write can be found quickly and easily by following the trail of nesting within folders in your filing system. It's the concept of nesting which is the key to keeping track of your documents and programs on your Macintosh.

The nesting feature is crucial to remember when you're no longer working on the desktop level—but are working within a Macintosh program, writing, spreadsheeting or creating pictures. Because when you're working within a program, the folders and files are presented to you in a different visual manner.

So get started by creating a few basic folders. You can always make new ones later as you need them. Choosing "New Folder" from the FILE menu creates a new empty folder. As soon as it appears on the desktop, give it a name. (Don't wait until you've got a collection of unidentifiable "Empty Folders" on your desktop!)

Now, take some time to create a system of nested folders within the ones you just created.

And within each of those folders, create a nest of still more. You might imagine this as the nesting of kitchen bowls of different sizes. Each bowl holds a smaller one. Each folder contains smaller ones. The smallest folders contain only a few documents, usually related very closely to one another.

Another example: Within the "Files" folder, create a "Family" folder. Within the "Family" folder, you could create folders for each family member, and for important categories within the family, such as "House," "Cars," "Insurance," etc.

Also within the "Files" folder, you might have a "Taxes" folder. Within that "Taxes" folder, you might have a folders for "1993," "1994," and "1995." Within each of those folders, you could create folders for letters to your accountant, for tax forms, for a database of contributions, etc.

The importance of this is that when you're later actually preparing

your tax return, your Macintosh will have all of the documents it needs within a very short distance of one another in terms of the filing system. It won't have to search among everything in your "Files" folder just to locate the items related to "Taxes." It will only have to keep track of the relatively few items nested in the "Taxes" folder.

The same thing will be true, of course, when you're working with documents grouped together in another category. The Mac won't be forced to keep track of your tax information when you're not working with it.

Another advantage of creating all these folders is that it'll keep your desktop uncluttered. Your eyes won't have to search through hundreds of icons or names on the screen to pick out the one document you want to work on.

After you've reorganized your desktop, you'll discover how this effort makes it easier to find what you want when you're working within a program (application). When you use the most difficult part of the Macintosh filing system, the dialog box you see when you choose OPEN from the FILE menu within an application, you'll see all the files on your disk, categorized by your folders.

That's when all the nesting you're doing with your folders will pay off. ■

QuickView

by Paul Gerstenbluth

WEKA PUBLISHING means business. Its Clip Art Collection has 800 images ranging from pen and ink drawings to complex 3-Dimensional graphics. Each image is ready for printing at a cost of about 14 cents. After you purchase the Clip Art Collection, you can *legally* use these professionally drawn images for your newsletters, brochures and advertisements. In addition, you receive quarterly supplements of over 120 images accompanied by design ideas and ready-to-use templates.

Who uses this program? Typically, non-artists and busy designers benefit from using quality clip art. Users receive high quality images, step-by-step instructions, a broad variety of styles and design ideas.

What does the Quality Clip Art Collection include? It contains a large three-ringed binder of illustrations and Encapsulated Postscript (EPS) image disks. The design elements consist of backgrounds, type and signs plus symbols. They are further subdivided into borders, cards and frames. The sign images contain arrows, general purpose signs, stars and zodiac signs. The symbol images include traffic, weather symbols plus tables and index grids.

EPS images work well within ClarisWorks 2.1 and PageMaker 4.2 programs. Using Adobe Type Manager (ATM), I am able to print clear and precise images on quality inkjet paper with my StyleWriter. For best results—use a Postscript printer.

According to WEKA Publishing, their Quality Clip Art Collection works with: Adobe Illustrator 5.0, Canvas 3.0, ClarisWorks, Freehand, IntellDraw, MS Word and Excel, PageMaker, QuarkXPress, Ready, Set, Go and SuperPaint 3.5 program.

Pro Comments. Well written and illustrated manual of Clip Art Collection. There is a hard copy of each image which is numbered and put in ten separate categories. The images are detailed illustrations drawn by competent artists that are superior to the standard fuzzy clip art images. The EPS images are in color and can also be printed in shades of gray.

Con comments. The EPS images do not work with all software applications. You need a printer that prints EPS images such as the StyleWriter Printer with ATM.

Conclusion: I highly recommend the Quality Clip Art Collection. The cost is about than 14 cents per image. ■

Company:	WEKA Publishing, Inc. Huntington Point 1077 Bridgeport Ave. Shelton, CT 06484
Phone:	800-966-4300
Price:	$99 plus shipping

Software Review

Rae Assist: A Personal Information Manger & More

by Glenn Paterson

WITH THE popularity of notebook computers, it was only a matter of time until people would begin to use the computer to replace their day-timers. The first programs that appeared were specialized programs that would act as your calendar or to-do list or contact manager. Today's personal information managers (PIMs) try to handle all aspects in one program. Rae Assist (version 1.0.2) from Rae Technologies Inc., goes one step further by adding much of the functionality of the Newton to your Mac.

Rae Assist uses an electronic notebook interface, called a binder, to manage your business and personal contacts, schedule, to-dos, projects, notes, and pictures. What makes Rae Assist stand out from other PIMs is a built-in intelligent assistant that simplifies data entry and retrieval and helps users create links between objects.

The Binder

The screens in Rae Assist look like pages from a binder, complete with spiral rings on one side and tabs on the other. From the screens, you click on buttons and tabs to move through the programs sections (see *Figure 1*). The binder's six sections are People, Companies, Planner, To-Dos, Projects, and Items.

The People and Companies sections work together as the contact manager. People manages business and personal contacts. It includes

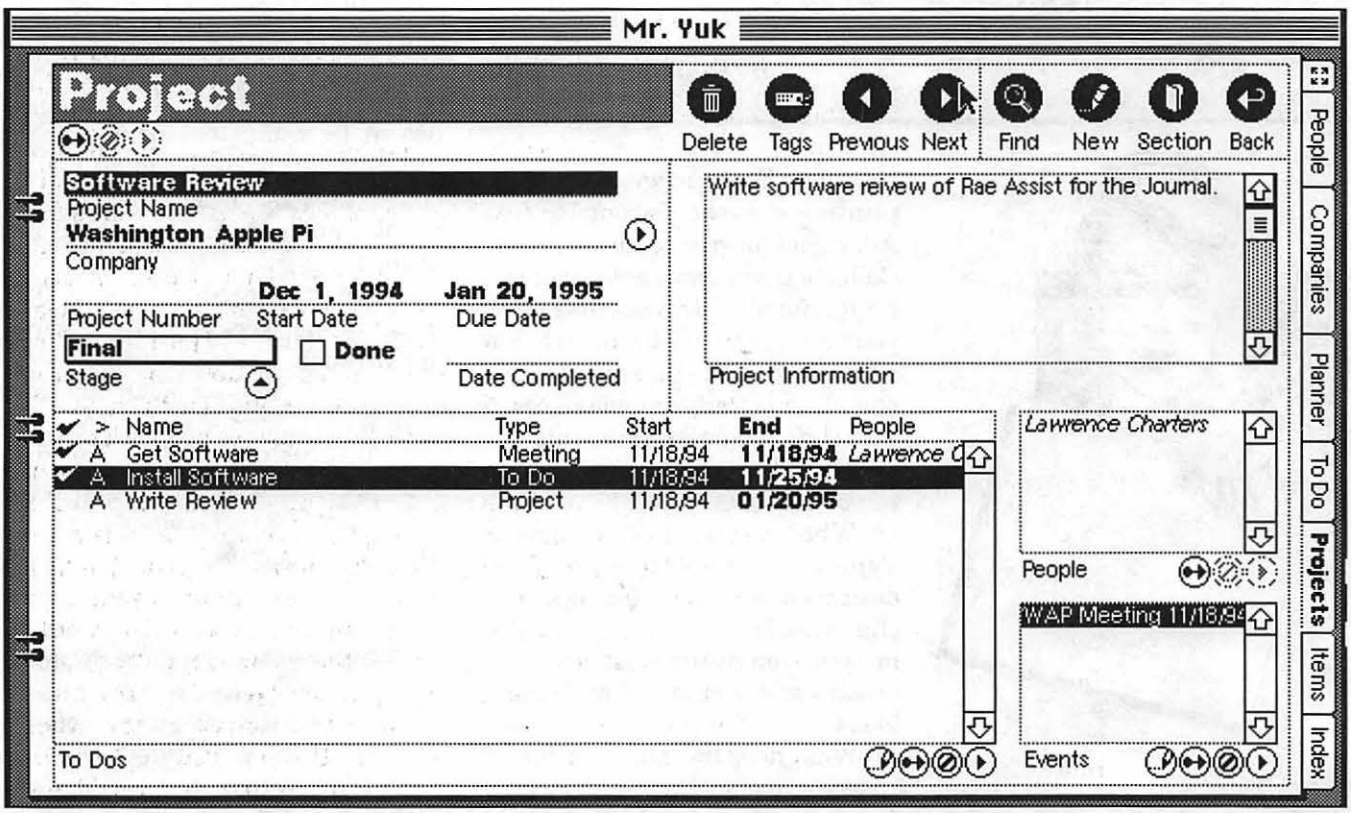


Figure 1.—Clicking on the tabs on the right or the buttons will move you around the program. The Project section shown here lets you keep track of projects and their associated To Dos, Events, and People. Clicking on any of these items will bring that object up in more detail.

all the standard fields and five custom fields that can be labeled whatever you choose (see *Figure 2*). The Companies section stores information on organizations. It has its own records separate from the People section and its own custom fields. Entering company information for a person automatically associates the person with the company. Assist stores company information in the Companies section so you can have more than one person associated with a single company and you don't have to enter the company information more than once. Or you can use the company section to keep a list of businesses you frequent such as restaurants or hotels.

Planner manages your schedule. The planner can keep track of scheduled events (such as appointments, meetings, and lunches), day events (holidays and birthdays), and your tasks. The planner has day, week, and monthly views.

To-Do manages tasks and reminders. There is a detail view to see the tasks information, start/end dates, status, and comments and a list view to view tasks by priority, dates, or whatever you specify.

The Projects section groups To-Dos, Events, and People into larger activities under one heading. Users can set start and due dates, monitor the project's progress, and store extensive notes. This section also has a detail and list view enabling you to view and organize projects.

Items stores both Notes and Pictures that may or may not be associated with the other sections. Notes can be meeting notes, e-mail, or other miscellaneous text. The Pictures items are graphic images, created in other programs, such as maps or organization charts.

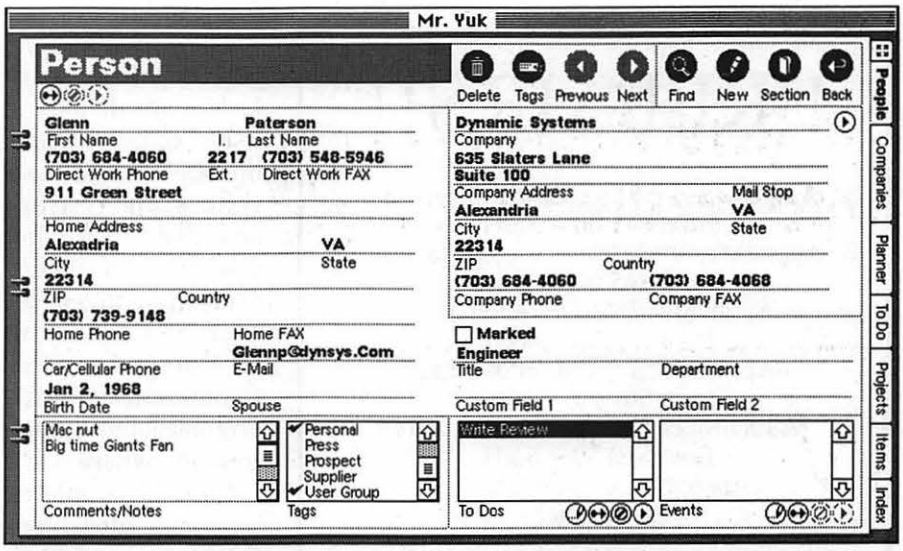


Figure 2. —The People section lets you enter all the standard information for a contact, associate the person with a company, make notes, apply tags, and see linked events and to-dos. The five custom fields (shown here as car phone, email, spouse, and custom field 1 &2) may be labeled whatever you like and automatically formated as phone numbers, proper names, or left as entered.

Integration and Linking

The power of Rae Assist becomes evident as you begin to enter data into the sections. When creating a new entry in the People section, users can enter both the first and last name in the first-name field and the program will automatically parse the information into its proper field (it does not handle middle initials correctly though, it incorrectly places them in the first-name field). The phone number will automatically be formatted into the traditional (703) 555-1234 and after entering a phone number, users can add a fax number by entering the different digits and the program will automatically enter the area code and exchange.

When adding the name of a company, Rae Assist will create a company profile to be added in the Company section. The next time a person that works in the same company is entered, all the user has to enter is the first few letters in the company field and all the pertinent information for that company is automatically entered into the corresponding fields. If more than one company matches the entry, a list pops up giving the user a choice of companies the person works for.

The integration extends to all the other sections as well. A user entering an event such as "Meet Kevin for lunch at Hard Times" in the Planner section can link the event to Kevin and Hard Times Cafe in other modules or just click on the Assist button and the program will automatically create the links (giving you a choice if there is more than one Kevin in your binder), select the appropriate event type (lunch in the description would classify the event as type "food", for example, see *Figure 3*). The links are also transferred to the other sections. If you pulled up Kevin in the People section, you would see the lunch listed in the events area on that screen.

In addition to be able to link People, Companies, Events, and To-Dos to each other, Rae Assist also has the ability to create free-form links for any object. Using this feature, the user can link, for example, a map of directions to the monthly WAP meeting.

Like other PIMs, Rae Assist lets users assign tags to objects in the binder to group related items which can be used as filters in any of the list views. Unlike some other PIMs however, Rae Assist can assign multiple tags per item. It also allows you to create tags that appear in just one section or throughout the program.

The program also remembers to capitalize the first letter of the names, addresses, and companies if you forget, and it automatically formats dates.

Another feature called Smart Index can display a list of all objects in a binder or only those that satisfy user-specified filters. For example, you can list everything tagged as "personal" or "billable." The Find command can locate any object in a binder from anywhere.

Assist is able to import TouchBase, DayMaker, and other text files for use in your binder. As far as output is concerned, Assist comes with several styles already defined and lets you create your own. It also supports Avery label templates.

The Downward Spiral

Even with all the great strengths of Rae Assist, there are a few shortcomings that some may not be able to overlook.

First of all, the program display is in gray-scale only. Not a major gripe, but color does make it easier to mark certain types of events to stand out on the calendar display. Which brings up the second point—the display is formatted for a 640x400 screen and cannot be resized. The screen size and the lack of color would make one think that this was designed with PowerBooks in mind, but the size of the program (over 4.5 MB with a few things in your binder) and its constant disk access do not make it favorable for space-cramped PowerBooks running on battery power. It also requires at least 2 MB of RAM to run, which might be too much to leave it running in the background for some users.

The monthly view in the Planner section uses icons to represent events. While this is a nice feature to easily distinguish a lunch date from a meeting, there is no text in the monthly view to describe the event as there is in other PIMs such as DateBook Pro or Now Up-To-Date. The user cannot see what is coming up this month and has to switch views to see any text description of the event. Given the other great features of Rae Assist, switching views might not be that big a deal except for the speed of the program.

When switching views or

"Rae Assist uses an electronic notebook interface, called a binder, to manage your business and personal contacts, schedule, to-dos, projects, notes, and pictures. What makes Rae Assist stand out from other PIMs is a built-in intelligent assistant that simplifies data entry and retrieval and helps users create links between objects."

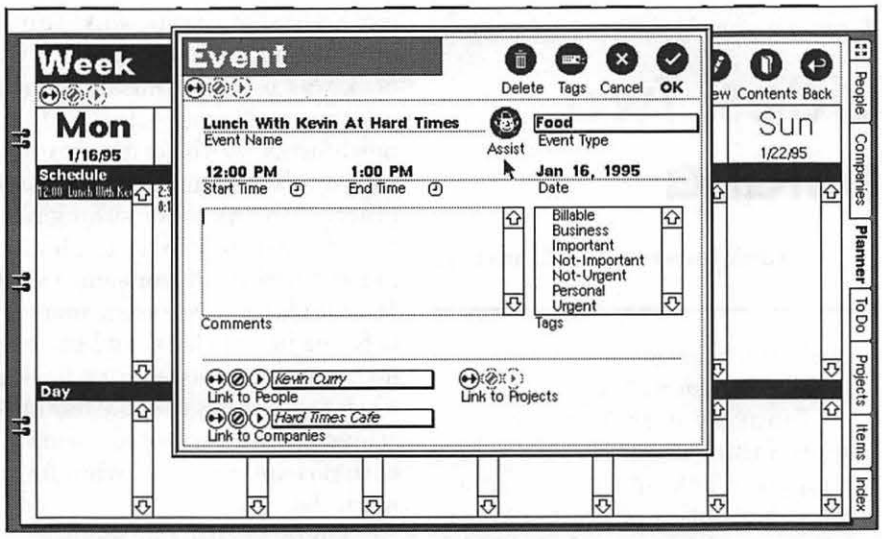


Figure 3.—Clicking the Assist button makes the program automatically search through the program for links to people, companies, and projects as well as classify the type of event. You may also create a link to any item (note or picture) you choose.

sections, there is a noticeable pause. Although noticeable, the delay was acceptable when running on a PowerBook 100—after all, it's no speed demon. However, switching to a PowerBook 520c did not speed the program up and the delay became irritating.

Other things that bear mentioning are the inability to change the date of an event by dragging it to another day and the program's lack of handling repetitive events.

The biggest oversight, in this reviewer's opinion, is the omission of a reminder function to alert you about upcoming events or to-dos. Without a reminder function, any PIM is about as valuable to me as the scrap of paper I just found telling me about the meeting I forgot to go to last week.

New and Improved

Apparently, Rae Technologies felt similarly about some of these points because they have released an update (version 1.5) that addresses shortcomings in the Planner and the performance of the program.

According to the press releases, the Planner now supports recurring events, and users can reschedule all the linked events, a single event, or just future recurring events. The Planner also features drag-and-drop rescheduling of events. The week view was also revamped. The enhanced week view represents events within a traditional grid format (similar to Now Up-To-Date and Claris Organizer) instead of a list and displays a time-of-day meter down the right margin.

The upgrade also boosts the performance by offering miniviews. Miniviews pull up contact and company information, to-dos, events, phone numbers and notes two to five times faster than the Find command. The company also said Rae Assist 1.5 navigates between week and month views up to 300 percent faster than the original version (1.0.2).

Other new features include autodialing, customizable list views, the option of starting the weekly view on Sunday or Monday, and the ability to assign tags from the list view.

Overall, I really liked the contact manager and project management features along with the integration and linking abilities of Rae Assist 1.0.2, with a special nod to the separate People and Companies sections. To me, the features and strengths of the integration outweigh the shortcomings, with the exception of the lack of a reminder function. Given the upgrade's revamped planner section and speed enhancements, Rae Assist will be a solid choice for handling your organizational needs if you can live without the reminder function. ■

Rae Assist
Rae Technology, Inc.
19672 Stevens Creek Blvd.
Suite 195
Cupertino, CA 95014
Phone: (408) 725-2850
Fax: (408) 725-2855

System Requirements:
Any Mac/PowerBook with a screen size of 640x400 pixels
System 6.0.7 and above
2 MB RAM required, 2.5 recommended
5 MB on hard disk

Price:
Current Version: 1.5
$99.00 (list price)
$29.00 (upgrade from 1.0)

Mosaic Guides: Two from Ventana

In the Beginning

SUBTITLED *Accessing & Navigating the Internet's World Wide Web*, Gareth Branwyn's *Mosaic Quick Tour for Mac* is a gentle introduction to the most organized portion of the Internet. It doesn't delve into any of the technical details, nor does it tell you how to get connected to the Internet. Instead, it starts with the assumption that you have a connection, and from there tells you how to get the most from the World Wide Web (WWW).

Created in 1991 by CERN, the Geneva-based European Particle Physics Laboratory, the World Wide Web is more of a diplomatic protocol than a physical entity; computers are part of the Web if their operators have accepted a standardized method of sharing files — nothing else is required. The creators of the standard were interested in making documents on widely separated computers available to researchers who had expertise in something other than computer science. Through Hyper Text Markup Language (HTML), graphics, text, and links to other computers can all be included within documents. From the user's point of view, nothing more is required than to open up a document through a Web client (referred to usually as either a Web browser or a Mosaic browser), and click on pictures and text of interest, which take them to other pictures or text, which would take them to other pictures or text — an intricate web of interconnected documents, located on different computers, often in different countries.

Since the user doesn't have to know a thing about HTML, or how computers link up to one another, the complexities of cross-platform internetworking vanish behind a pretty, and reasonably quick, interface. Mosaic, the first decent Web browser, became known as the "killer application" of the Internet, the software package capable of

> "It is an ideal introductory book, with a nice glossary, helpful "hot tips," lots of suggested places to visit on the World Wide Web, good illustrations, and a quick overview of the necessary 'helper applications' for viewing specialized files on the Web."

bringing the power and promise of the Information Superhighway down to the level of the average user. Available in different flavors for UNIX, Windows and Mac computers, Mosaic's success was due to its egalitarian democracy as much as technological finesse; on the Web, all computers are created equal. Some are just faster than others.

Mosaic Quick Tour for Mac (and its Windows counterpart) was the first book written on Mosaic, and like all first attempts, some things are missing. About the time the book was printed, Mosaic 2.0 was released, and it supports something new: forms. With forms, not only can you click on highlighted text or graphics to link to something new, you can also now fill in the blanks in a text box to trigger some event. *Mosaic Quick Tour* has no mention of forms in the index, and the only mention in the body of the book is a brief statement that 2.0 has been released and supports forms — with no explanation of what forms might be.

There is also no mention of MacWeb, a shareware "competitor" to the public domain Mosaic, or of Netscape, the controversial commercial Web browser created by the same programmers that wrote the first versions of Mosaic. These are not flaws, however; all the programs perform basically the same functions, and *Mosaic Quick Tour* can serve as a guide to any of them.

It is an ideal introductory book, with a nice glossary, helpful "hot tips," lots of suggested places to visit on the World Wide Web, good illustrations, and a quick overview of the necessary "helper applications" for viewing specialized files on the Web. It rigorously avoids falling into anything beyond what a beginner needs to know; you'll never be ambushed by leaping from Beginning Internet to Advanced UNIX programming.

It is also cheap, at $12.00, with a decent discount schedule on purchases made direct through Ventana. Those wishing more depth should try Dale Dougherty's *The Mosaic Handbook for the Macintosh*, from O'Reilly & Associates, or the book reviewed below. [Note: a second edition of this book may be in print about the time this review is published. The

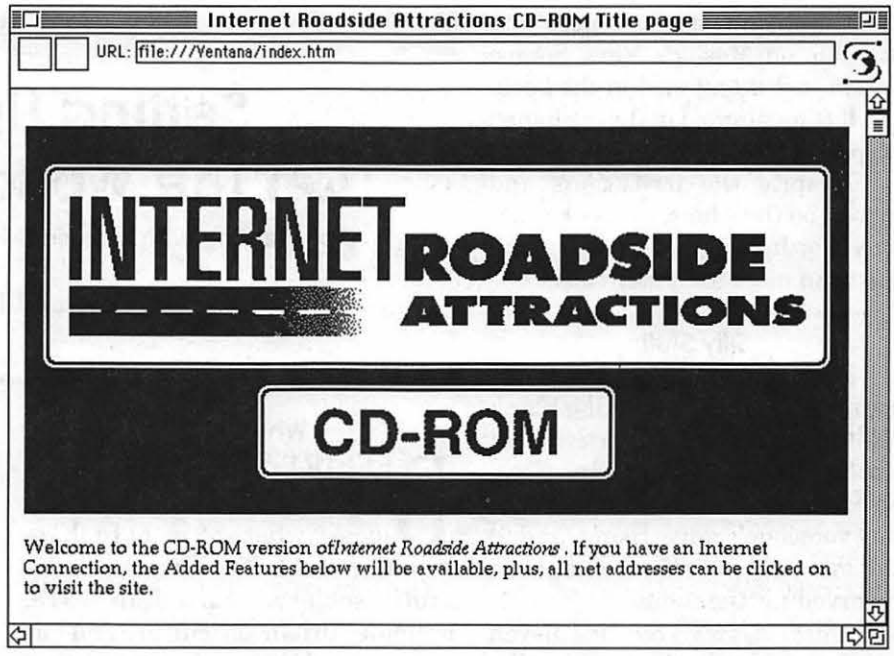
price is going up, to $19.95, but the new edition will include a customized version of Spyglass' Enhanced Mosaic on diskette.]

Many Begats Later

Internet Roadside Attractions, also by Gareth Branwyn (and six co-authors) is more expensive, far less focused (by designed) and an interesting experiment in interactive publishing. The entire book, with a few minor exceptions, is contained on a CD-ROM packaged with the book. Using Spyglass' Enhanced Mosaic (also included), you can "read" the book interactively on your computer and, if you have a live Internet connection, branch directly from material stored on the CD-ROM to material pulled in from the World Wide Web.

In fact, once you accept the conceit that the entire Web is an "extension" of the book, the package makes good sense. Errata and additions to the book are kept on Ventana's Web server (http://www.vmedia.com/ira.html), which can be linked directly from the opening page stored on the CD-ROM (assuming you have Internet access). If you don't, yet, have an Internet link, but do have a CD-ROM drive, you can "explore the Internet" for hours at a time just by calling up information stored on the CD-ROM.

Exploring the Internet, as the book's title states, is the sole purpose of the book. Using the index, re-created on the CD-ROM in HTML, you can skip from topic to topic faster than you can with the paper-based book, and get the same information. For those with color monitors, it can be argued that you actually get more, since you can see color icons and pictures rather than the black and white reproductions shown in the book. If you have a live Internet connection, the links placed in the text will take you to computers near and far. The metaphor of a travel atlas tends to fall apart at this point; if I point to Seattle on a road map, I'm not immediately transported to Seattle. Point on a link to an interactive tour of Jerusalem, however, and—you're there. Electronically, at least.



Obviously, this volume is of most use to those with a CD-ROM drive and an Internet connection. For those with just a CD-ROM drive, it is still a decent value; you can practice surfing the Net without any unusual cost or equipment. If you don't have a CD-ROM drive — get one. No Mac owner should be so handicapped.

While the CD-ROM is a great idea, it also is a minor irritation: there is a *lot* of empty space on the CD-ROM. If you toss in the 3.2 megabyte multimedia commercial for Ventana's other offerings, the 662K occupied by the Mosaic software, a few megabytes of GIF (Graphic Interchange Format) pictures and the HTML versions of the book's text, you account for roughly 2.5% of the potential capacity of the CD-ROM. It would have been both nice, and logical, to use the extra space to include some "helper" applications (movie viewers, sound utilities, JPEG graphics viewers) for the type of files commonly found on the World Wide Web.

It also would have been nice to include some sounds, movies, and pictures. The subtitle of the book is *Sites, Sounds & Scenes Along the Information Superhighway*. Would it be too much to ask to include a few of each, especially for those not yet connected, and not sure if they really want to be?

Too little attention is spent on configuring Mosaic. There are help files included on the CD-ROM, but I could find links to only one of these; the rest were orphans and had to be loaded directly. This is an easy task for Web veterans, but they probably don't need the help. Those that do need help are out of luck.

Having a few megabytes of HTML documents also presents wonderful opportunities for learning HTML scripting, but there is no mention of this in the book. If you click on a couple HTML links in the index, you are offered a hot-link to computers in Illinois or Switzerland — if you have an active Internet connection. If you

don't, you are stuck, unless you stumble on Mosaic's View Source option (not mentioned in the book, but it *is* mentioned in the orphaned help text).

Despite the irritations and lapses, on the whole, the book is not only worth the price, but far more fun than most computer books.

Silly Stuff

Both books engage in the now-common practice of sticking blank "Note" pages and advertising at the back of the volume. I have two objections to this: 1) I don't *want* to buy someone's advertising, and 2) the last pages of a book should be reserved for the index.

Mosaic Quick Tour has eleven unnecessary pages separating the back cover from the index. I can accept a few pages of junk at the back of a Tom Clancy novel; novels don't need indices. But I don't appreciate playing "hide and seek" with an index in a non-fiction work.

Internet Roadside Attractions has more than twice the fluff — 23 pages of advertising and blank "Notes" pages. In this case, however, I don't care; since the index is included on the CD-ROM, I just tossed the book and used the index on the CD-ROM.

Technology triumphs over a publishing industry scourge.

Gareth Branwyn, *Mosaic Quick Tour for Mac*. Ventana: 1994. xvi, 184 pp. $12.00. ISBN 1-56604-195-3

Gareth Branwyn et. al., *Internet Roadside Attractions*. Ventana: 1995. xxxiv, 320 pp. $29.95 (includes Macintosh and Windows-compatible CD-ROM). ISBN 1-56604-193-7.

Ventana Press has an aggressive user group discount program for orders placed direct. For information call Ventana at 1-800-743-5369 ■

Setting Up Pages On The World Wide Web

(For Viewing with Mosaic, Mac Web or Netscape etc.)

Michael Levenston • Executive Director
City Farmer• © January•1995

Why Do It?

BEFORE YOU BEGIN this adventure you must have an idea of what you want to share with the world. City Farmer, a non-profit society, started in 1978, promotes urban agriculture and has collected valuable information that is difficult to find in libraries, bookstores or at other information outlets.

For us to be able to post information about our resources in a place that is quickly accessible to people **everywhere in the world** is appealing. On the Web we can update our material as often as we like so that the latest information is always available. We can put up colour photos, pictures, sounds, and short movie clips to make our "publication" a multimedia event .

Links can be made from our pages to pages of other groups

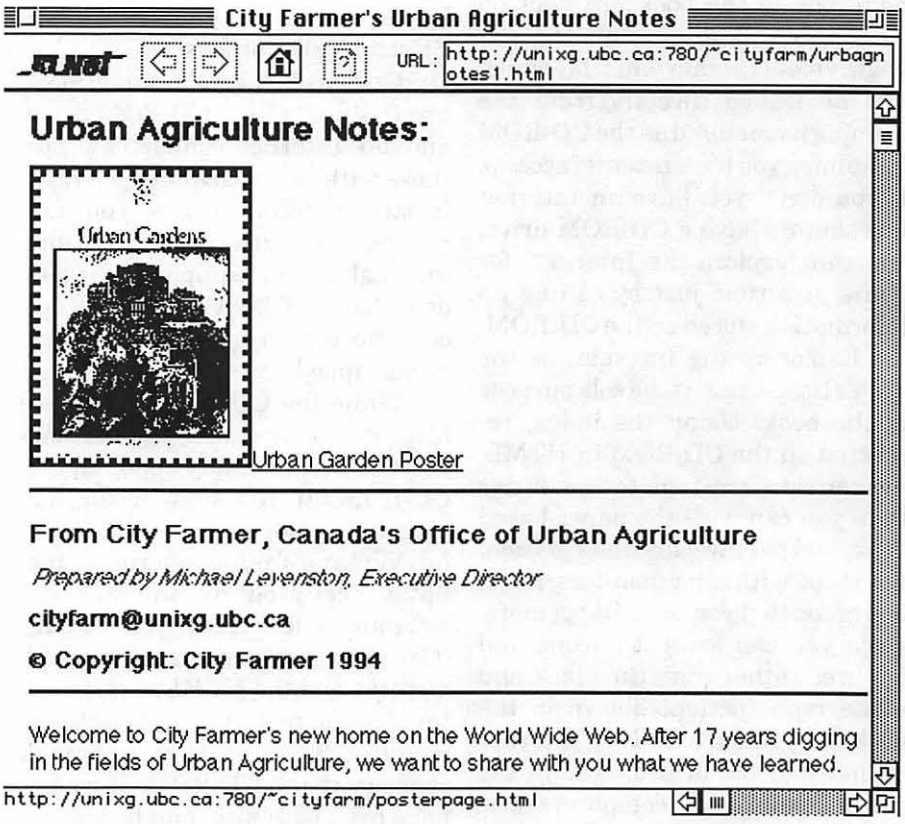


Figure 1. As Seen on MacWeb

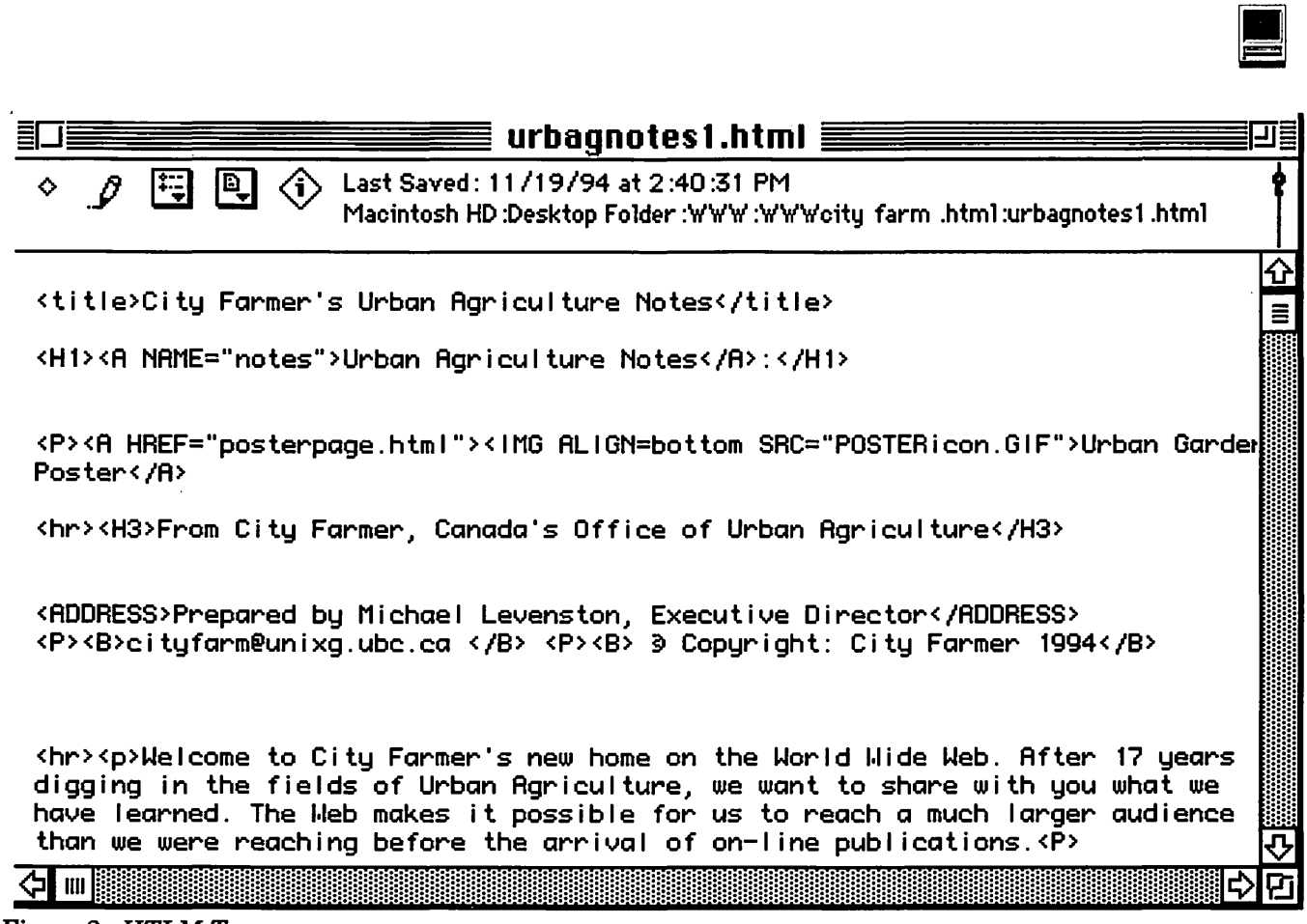


Figure 2. HTLM Tags

anywhere in the world so that readers get a broader picture of urban agriculture than just ours. And these links are accessed by simply clicking the computer mouse.

City Farmer doesn't need a mailing list, a layout artist, a printer or publisher, a distributor, tons of paper or postage to produce this new publication. Readers can respond to our work effortlessly on the Internet using E-mail. And we can question our audience using "Forms", a special feature, that will allow us to gather statistics and views on various subjects.

Unlike Usenet where postings are removed each week, World Wide Web pages remain up as long as the bills are paid.

All the above can be accomplished by just ***one individual*** working from home using a computer, colour scanner, modem and WWW account at a Web server. This author used a Mac IIsi (1990), Microtek ScanMaker IIxe and US Robotics mac&fax 14.4 modem.

The Web Server

Once you know you have something to say you must get down to the technical nuts and bolts of getting your documents on-line.

Finding an **Internet Provider** who is also a **Web Server** is first on the list. There's no point in preparing all your material if you can't find somewhere to put it where it can be accessed from all over the world. The University of British Columbia was our choice because they had already served us well for some months as a connection to the Internet. Also an article in their fine publication, *Campus Computing & Communications*, about writing Web documents pulled us in.

However they had never before allowed an outside community group to use their Web site. Letters of support from four professors in different faculties who liked our work got us the green light.

To place our documents on the Web we would need a special account that allowed us to go into our directories whenever we put in documents. UBC's name for this account is **"Legacy"** and with it came our new account name which appropriately identifies us as **cityfarm@unixg.ubc.ca**

HTML

Once you have your account, it's time to learn how to write up your pages.

For the Mac I used a program called **BBEdit Lite 3.0** with either **BBEdit HTML Extensions** or an alternative **BBEdit HTML Tools**. They can be found on the Internet.

There are a number of editing program out there but this program was most often recommended for use on the Mac. Lots of discussion about these programs can be found on three very active **Usenet newsgroups...**
"comp.infosystems.www.misc"
"comp.infosystems.www.providers"
"comp.infosystems.www.users"

HTML are tags that are attached to your text to make it do special things when put up on the Internet. For example, when I put **<h1>** and **</h1>** around some text that is a heading, it will show up in a certain font at a specific point size on the Internet. Other tags make photos appear on your page and still others, provide instant **links** to other people's pages around the world.

How do you learn HTML? There are many documents on the WWW that approach the subject from a variety of angles. **Read as many of these as you can.** Also at least three new books on HTML have just arrived in local bookstores.

Also, try copying other people's work by downloading their pages from the WWW. You will be able to see the HTML tags they used. Easiest of all, find someone who will sit with you and show you the secrets. This will save you hours and hours of "what do I do next?" There are also a few courses available locally.

All of the 'pages' (files) you write in BBedit must be named and kept in one folder. For instance we have:
urbagnotes1.html
demogarden2.html
seinfeld3.html
in a folder titled:
WWWcityfarm.html
(Leave no spaces when you create these names.)

In that same folder can be put all sorts of pictures brought in with a scanner. I took a colour photo of our new garden sign, scanned it into

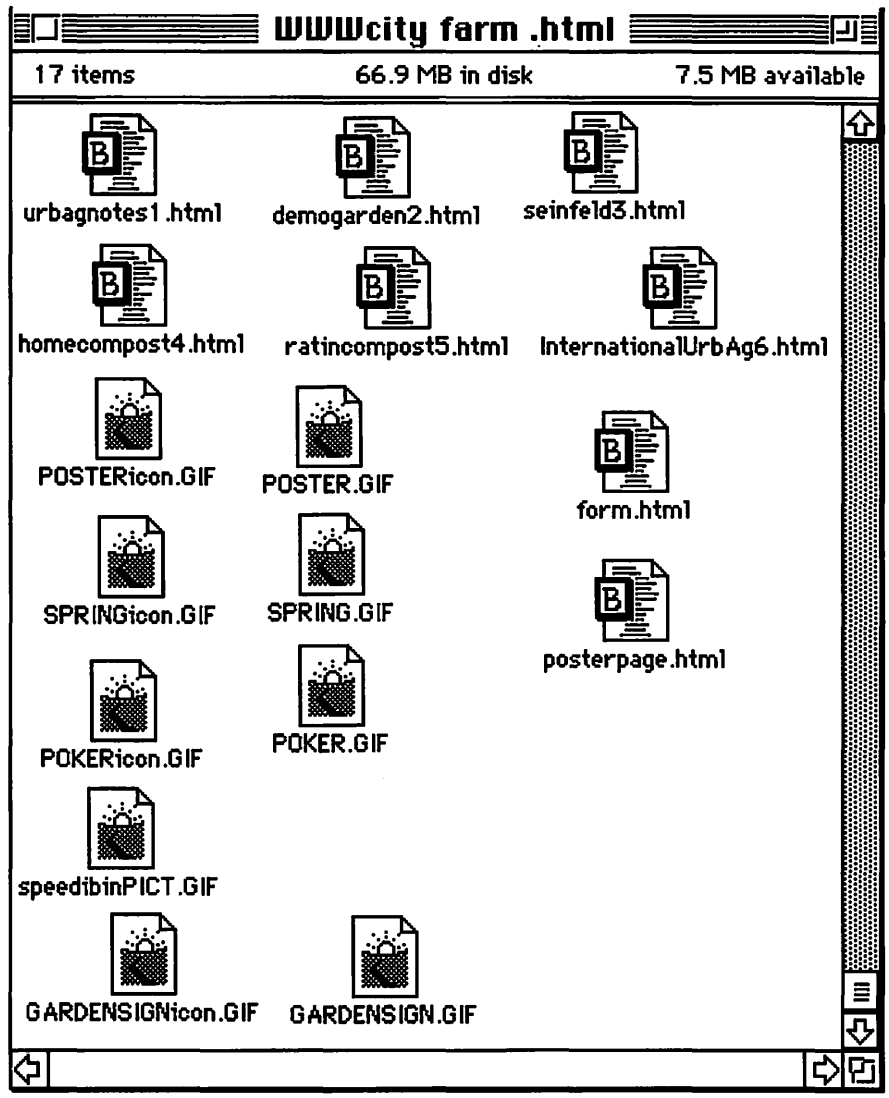


Figure 3. WWW files on the Mac

Photoshop in my computer, cropped it, saved it as a Pict, then opened it in a shareware program called **GIFConverter.** Here I produced a smaller sized image and named it **GARDENSIGN.GIF**

Now for the real fun and under-documented part of the adventure.

Putting Your Stuff in Your Directory

From your desktop you have to get your material into your Web server's machine and give 'permission' so viewers can read it. For me that meant from my home computer into UBC's machine. You can do this on the Mac by connecting to the Internet and using a program named **Fetch.**

But before uploading your files you must first get into your directory (a "folder" in Mac terminology) to set up a special directory where you can put your material.

Telnet is the software of choice for this. It allowed me to go into our **cityfarm** account and work with my directory as if I were at home on my own machine. However you must learn a peculiar language called **UNIX.** to do the job. (Get the

book *UNIX for Dummies.*)

Here are some of the commands you need.
ls "list"
mkdir "make directory"
chdir "change directory"
chmod a+r " change mode so others can read"

You'll go back and forth using both Fetch and Telnet.

Don't ignore these tips in Fetch when you upload your files.

- None of your file names can have spaces in them.
- As you are about to upload files, delete either **.bin** or **.txt** from the name.
- For GIFs send them as **Raw** files from the Mac.

The Final Link

Finally your Web administrator will mysteriously link you to the rest of the world so that everyone will see the files in your directory. You will be presented with a special address, your URL, so that others can find you.

Ours is **http://unixg.ubc.ca:780/~cityfarm/urbagnotes1.html**

Now you can be seen, by those on the Internet who know about your site, from any place in the world.

Michael Levenston has worked at City Farmer for seventeen years, is married to wonderful Joan, is the happy father of two daughters Jenny and Rachel, studies martial arts and troubleshoots a couple of Macs. ■

French Pronunciation Tutor™ 3.0
Spanish Pronunciation Tutor™ 3.0
published by HyperGlot Software Co.

by Stuart Bonwit

Broad Brush

FRENCH Pronunciation Tutor and Spanish Pronunciation Tutor are nearly identical applications for two separate languages. Each application comes on a CD-ROM for both Windows and Macintosh. They are only, as the titles say, pronunciation tutors. The primary audience includes those with some knowledge of the language who want to brush up on pronunciation. However, since everything appears in both the tutor language and English, the beginner can pick up some vocabulary and phrases, but no grammer.

The applications are extremely easy to use. I plunged into the French unit, loaded the CD-ROM, skipped the installation, and started right in going through the various button options, without cracking the manual!

The program worked without installation because my Macintosh Quadra 660AV already had QuickTime™ and Sound Manager installed. The manual showed that installation included QuickTime, Sound Manager, and Recording Resource. Since the installation wanted to give me QuickTime version 1.6.1 and I had version 2.0, I saved QuickTime 2.0 on the side, just in case. When I called for the installation, I was happy to see that the software was smart enough to know not to install QuickTime or Sound Manager. I then tried to install the Recording Resource, and it would not accept it. Apparently, it is not required on my 660AV. In any event, it worked without it.

I had only one problem, but it was not with the program. Highlighting some words resulted in very poor contrast, making reading very difficult. A call to HyperGlot Technical Help solved the problem. See details below.

Details

The French program opens with a Paris scene and a French folk melody, dissolving into the main Topics screen. The Spanish program opens with a large courtyard scene and a Spanish guitar melody, dissolving into the main Topics screen.

The two programs have almost identical main Topics screens. The first topic is rather like a pop quiz, called Pronunciation Check. The user is instructed to click on the phrases to highlight them, pronounce them, record the attempts, and compare them with an expert's. However, the black "highlighter" against the dark red letters makes the words almost completely invisible. The user is expected to read and pronounce this! A discouraging way to start.

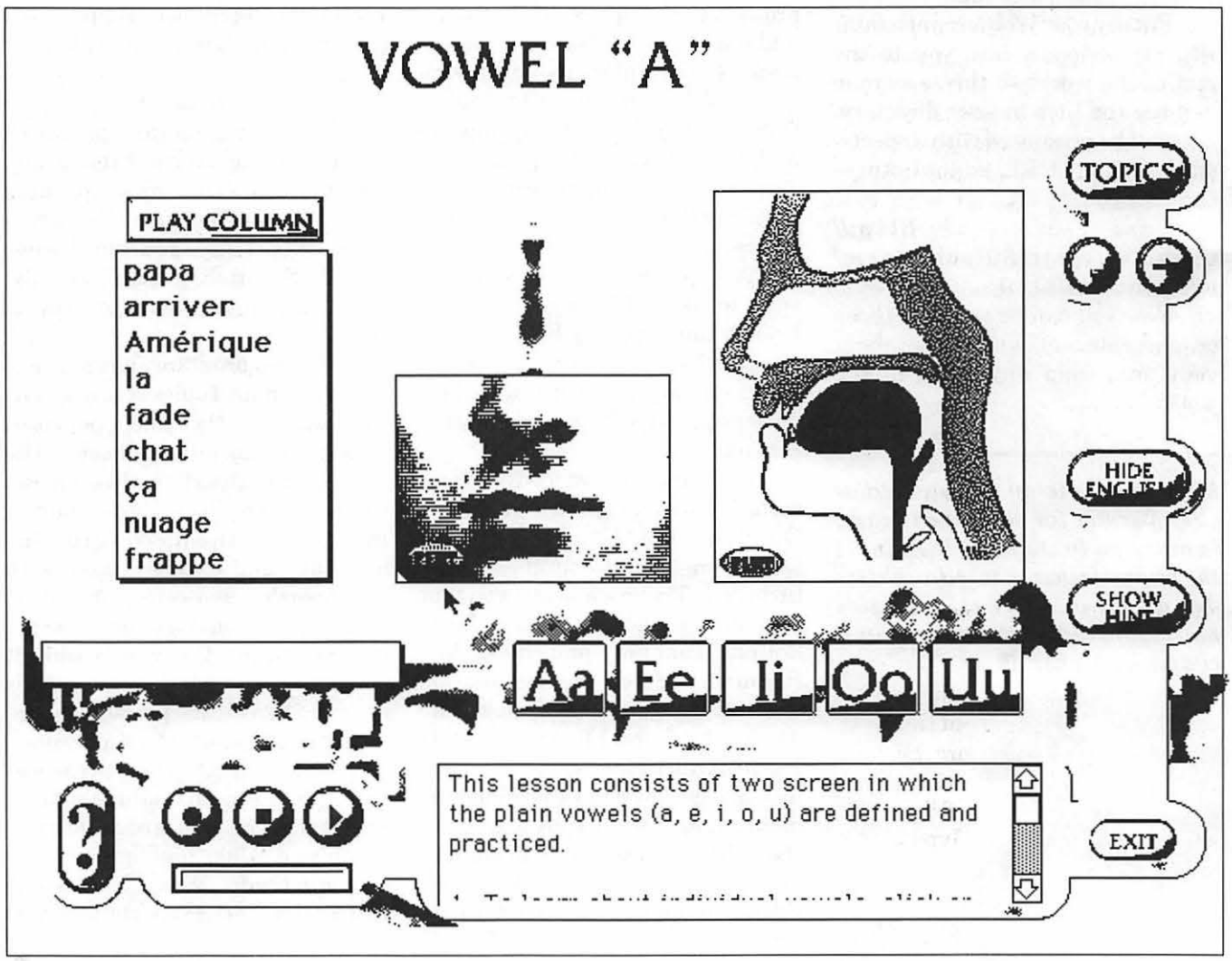
About half of the practice words in the program had this highlighting problem. The rest are printed in green and when highlighted were easy to read. When I spoke to HyperGlot Technical Help, I was

told that the highlighting shows up on his Macintosh as a very light gray, not black. The problem turned out to be the Highlight Color in the Color Control Panel. The default is Black and White. Changing it to Gray and restarting the machine cured the problem for the Pronunciation Tutors. However, for highlighting text in a word processor, I prefer black, which reverses the letters to white against the black "highlight."

The rest of the topics on the main Topics screen include: alphabet, vowels, consonents, stress and accents, word linking, numbers, telling time, and phrase practice with pictures. Most of the topics are almost identical in the two programs, however, the emphasis on vowels, stress, and linkage is quite different. A volume control is provided. One interesting sidelight: The volume set during the session is maintained after quitting the program.

Foreign language pronunciation has fascinated me for a long time. I get a big kick out of trying to imitate the natives. My formal training consists of one year of high school French (a LONG time ago!) and one semester of adult ed. Spanish. For a tour of French Canada a number of years ago, I boned up on French pronunciation with some language records from the library. At a restaurant in Montreal I ordered in my best French voice. The waitress rattled back a response completely beyond my meager vocabulary. My wife, with many years of French classes, translated, and I completed the orders in English! The waitress really thought I was a native. I was flattered!

Back to the software—Every Topic section provides opportunities to practice pronunciation. The computer, of course, has infinite patience, allowing you to repeat excercises *ad infinitum*. The experts' examples are divided between male and female voices. However, comparing your own pronunciation with one from an opposite gender is no problem. The ability to record your voice and compare it with the expert's over and over is infinitely easier here



than doing it on tape, considering rewinding and re-queing the tape.

One of the neat features, the closest these programs come to multimedia, is in the Vowels Topic. As seen in the Screen Shot, there are pictures of a speaker's mouth and a cross section of the vocal apparatus. Clicking one of the vowel sound buttons at the bottom and one of the play buttons animates the picture clicked speaking the vowel in sync with the vowel sound. This gives the user an insight into pronunciation that is not available from language records or, in the case of the cross section, from a live teacher.

Pronunciation of the names of the letters of the alphabet is different in both French and Spanish from that in English. Drilling to perfect this skill includes straight practice with saying the letters and understanding spoken letter names. For the latter, countries on a world map are randomly selected and the name is vocally spelled out. The user must then type what was spoken. The program tells the user which letters were wrong or gives a "Correct" response. Both programs allow the user to type in letters with accents and diacritical marks such as *accent aigu* (acute "´") and *accent circonflex* (circumflex "^") in French and *tilde* (tilde "~") in Spanish. There are no on-screen instructions to make these marks. One must read the manual!

The manual is straight-forward, but virtually unnecessary (except for the diactrical marks). Installation is explained for both the PC and Mac. All the screen buttons are explained, but their use is obvious once they are clicked. There is a trouble shooting guide and a questionaire to fill out to prepare you for a call to HyperGlot's technical help.

Conclusion

For the person with some experience with either French or Spanish, these packages offer an excellent way to brush up and improve his or her pronunciation. For the beginner this is an interesting introduction to the languages, but it is not a substitute for a language program that teaches grammer and vocabulary. One must also consider the difference in price between these programs and programs that come on tape or records. Are the extra features such as very easy interaction and the animated displays worth the price difference?

Hardware requirements for the Mac are:

- 68030 or higher processor: 25 MHz or greater
- 4 MB or more RAM
- Monitor capable of 256 colors

The programs put you into 256 colors if you are in something else.

- CD-ROM drive
- Microphone and audio digitizer.

French Pronunciation Tutor 3.0 and Spanish Pronunciation Tutor 3.0 are products of:

HyperGlot Software Co.
314 Erin Drive
Knoxville TN 37919
1-800-760-4568
List price $59.95

HyperGlot makes many other language learning products. ■

Are the Gloves a Solution?

by K. A. Murray

IN DECEMBER I worked with a group that split wood and loaded firewood onto a pickup truck. The results of that day really made me think about my hands. I found that I experienced regular numbness whenever I worked with my computer—not a good feeling for one who makes her livelihood from desktop publishing.

At the recommendation of a friend I purchased a pair of gloves, "Handeze®," through a mailorder company, APS Technology. These gloves are made of Lycra, and the literature which comes with them claims they provide warmth, support and massage to hands and wrists. I agree —they do just that, but they can't take the place of caring for your hands.

I use the gloves quite regularly. Occasionally I take them off because my hands are swelling, but I don't believe that that is due to the gloves. All in all, they help to keep my hands flexible and warm when I am working long days. (And they are also recommended for athletes —I sometimes use the gloves on my frisbee walks. One very demanding Labrador retriever is the secondary stressor on my hands.)

When I ordered the gloves I had a catalog and was able to use the APS chart to determine what size gloves to order. When I spoke with APS about ordering, they said they would have to fax this information or send a catalog in order to be sure of sizing.

APS Technology
6131 Deramus
Kansas City, MO 64120
1-800-233-7550
"Handeze®" $19.95 plus s/h ■

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.

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:** $25.00 per class for members and $35 per class for non-members. Pre-registration and payment must be made to hold a seat.

■ **Class Size:** Class size is limited to 6 students per class.

■ **Bring my computer?** All classes are taught seminar-style with the instructor using a computer and an overhead display. We encourage students who wish hands-on training to bring their computers.

■ **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.

Macintosh Tutorials

The Macintosh introductory tutorials are a three-part introductory series 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 three parts; this is the most beneficial arrangement.

—Introduction to Macintosh, Part 1
(Course #M031395 for Mar.)
(Course #M041095 for Apr.)
You should go through the Guided Tour disk that comes with your computer or system upgrade kit before you come to class. You'll learn: how to safely turn your Macintosh on and off; what the basic dos and don'ts are; how to understand common Macintosh terminology found in manuals and other documentation; and how the basic components of your Macintosh system, hardware and software work. You'll also learn why the

March or April Tutorials are the 4 basic ones. (Also offered are Excel and MSWorks Tutorials. See pages 39 and 40 for specifics.) If taking more than one or the whole series, try to take them in the same month.

—Intro to Mac 1 3/13/95 or 4/10/95
(M031395) or (M041095)
—Intro to Mac 2 3/20/95 or 4/17/95
(M032095) or (M041795)
—Intro to Mac 3 3/27/95 or 4/24/95
(M032795) or (M042495)
—Maintaining the Mac
3/22/95 or 4/24/95
(M032295) or (M042695)

Macintosh user interface is consistent across all applications and how this makes learning and using software easier.

Materials required: Your Macintosh, HD drive, start-up disk, and an unformatted DSDD 800k disk.
Date: March 13, 1995 7-10 pm. or April 10, 7-10 pom.

Introduction to the Macintosh, Part II (Course #M032095 for March) (Course #M041795 for April)

Part II will continue the exploration of the basic components of your Macintosh system, hardware and software. You'll learn more of the dos and don'ts; the finer points of the Menu Bar, Error Messages, Dialog Boxes, Icons, Folders, Keyboard Shortcuts, Scrapbook and Clipboard will be discussed. You'll learn the basics of installing software, as well as about the Chooser, peripheral devices, and how they are connected to the Macintosh.

Materials required: Your Macintosh, hard disk drive, start-up disk, and an unformatted DSDD 800k disk.
Date: March 20, 1995 7-10 pm. or April 17 7-10 p.m.

Introduction to the Macintosh, Part III (Course #M032795 for March) (Course #M042495 for April)

Part III will follow up the concepts in Parts I and II. You will learn more advanced Macintosh skills and terminology about the system software and using, installing, and updating system files; about managing memory, hard disk space, fonts, sounds and other resources, the Apple menu, aliases, launching applications, inter-application communications (Publish and Subscribe), and Balloon Help. You'll also learn about how to buy hardware and software, how to upgrade, and what kinds of software are available for your Macintosh.

Materials required: Your Macintosh, hard disk drive, start-up disk, and an unformatted DSDD 800k disk.
Date: March 27, 1995 7-10 pm. or April 24, 7-10 p.m.

Maintaining Your Macintosh (Course M032295 for March) (Course #M042695 for April)

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

Date: March 22, 7-10 pm. or April 26, 7-10 p.m.

MS WORKS Tutorial

Introduction to Microsoft Works, a popular integrated software package offering word processing, spreadsheet, database, graphics and telecommunications applications. An overview of the program and review of each of the applications and its versatility for integrating the capabilities of the various modules.

The course consists of three three hour sessions. Bring your computer, program, questions and particular areas of interest for learning Microsoft Works.

Course requirements: Familiarity with basic Macintosh operations and participation in performing various operations.

Equipment requirements: Your Macintosh, hard disk, and a blank diskette.

Class dates: April 11, 18, and 25, 7PM - 10PM at the Pi Office.
—Intro to MSWorks1, 4/11/95 (MSW041195)
—Intro to MSWorks2, 4/18/95 (MSW041895)
—Intro to MSWorks3, 4/25/95 (MSW042595)

Other Educational Opportunities

—Essential Computer Services—Trainng—301-577-8896

—Desktop Publishing & Graphics tutorials are given by Clockface & Creole Communications Inc. Please contact Manolo Almagro at 301-718-0612 for details.

—Prince George's Community College Center for Business Training, 301 Largo Rd., Largo, MD 20772-2199. Call 301-322-0726.

—Greentalt Systems Inc., 610 Herndon Parkway, Suite 900, Herndon, VA 22070. Call 703-471-6842.

—Berkeley Computer Training, 1800 Diagonal Rd., Ste. 240, Alexandria, VA 22314. Call 703-548-9471.

—Micro Center Training, 3089 Nutley Street, Fairfax, VA 22031. Call 703-204-8409.

Tutorial on Excel

For the begining Excel user, or those wishing to brush up on fundamentals. Topics covered are: the many uses and applications of Excel, Excel windows and tools, menus and menu commands, keyboard shortcuts, advanced features and other subjects.

Materials required: Your Macintosh, external drive or hard drive, start-up disk, and a copy of Microsoft Excel.

—Intro to Excel, 3/23/95 (EX032395)

Please note—this course will be offered again in May.

Weekly Telecom Tutorials

THE RECENTLY started weekly telecom tutorials will be continuing on Fridays evenings, 7 PM to 10 PM—call for location. These introductory telecom classes are intended to help people learn basic telecom skills.

The first two Fridays of each month are for people who have had little or no prior experience using modems. The latter two (or three) Fridays of the month will be for people who already have some telecom experience.

The classes themselves will be taught on the club's Mac IIci or Performa computers. To sign up for one of these classes, send $25 to the club's office. (The fee for non-members is $35.) Class size is limited to six persons.

The instructor for these classes is Phil Shapiro. For questions about the classes, please call Phil at: (202) 686-5465 (home/office), or contact him via Internet electronic mail at: pshapiro@aol.com

Incidentally, supplementary telecom information and programs will be provided on Macintosh disks. Students interested in obtaining these supplementary materials are urged to bring a five formatted Macintosh disks (either high-density or double-density) to the classes.

Important note: These classes are purposely set up to be unstructured. During any given class, the instructor will try to answer specific questions that students bring to the class. The aim is not to teach any one particular communications program, bulletin board, or information service—but rather, to help WAP members develop general tele-communications skills that can then be applied in using any communications program, bulletin board, or information service.

Apple II telecom questions will be entertained as well, time permitting. ■

Washington Apple Pi Tutorial Registration Form

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

Name _____

Address _____

City/State/Zip _____

Phone (day) _____ (evening) _____

Member Number _____ Non-member _____

Number of Classes____ x Class Fee $_____ = Total Fee $_____

☐ Check/Money Order ☐ Credit Card

Card Number _____

Card Expiration Signature

Can you bring your own computer to the class? ☐ Yes ☐ No

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

Class #1 _____

Class #2 _____

Class #3 _____

Class #4 _____

Class #5 _____

Class #6 _____

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

Restrictive Export Policy Lags Far Behind Reality of Electronic Commerce

by Deborah Weil

WHILE THE global reach of the Internet appears to be a golden egg for electronic commerce, a start-up software distribution firm has encountered a frustrating barrier in US export policy. Software.net, a service of CyberSource Corp., bills itself as the first software company to distribute its products electronically. A sleek-looking Web page advertises the company's wares (URL: http://www.software.net), offering customers the option of choosing from an online catalogue of close to 8,000 software products.

All orders can be fulfilled the old-fashioned way, in shrink-wrap, but so far only eight of the software packages can be delivered electronically. This is due, in part, to Software.net's on-going negotiations with software publishers willing to license their products for electronic transmission. So far Symantec, FTP Software and ON Technology have signed agreements with the new company.

But another obstacle is that the US. government continues to restrict the export of certain encryption systems based on complex, hard-to-unlock algorithms. Thus Software.net cannot legally distribute over the Internet a program such as Symantec's Norton Utilities. A popular data protection and recovery package, Norton Utilities uses the DES (Data Encryption Standard) algorithm, one of the two most powerful encryption technologies on the market. For national security reasons, the government has classified DES, along with another powerful algorithm, RSA (after inventors Rivest, Shamir and Adelman), as "munitions." Both are barred from overseas export.

"The biggest problem we encountered initially was understanding what the restrictions are," CyberSource president Bill McKiernan said, adding that he didn't want to "inadvertently violate export restrictions" and risk the shut-down of his fledgling venture. McKiernan quickly realized that the stringent export policies pertaining to encrypted software are sorely out of step with the reality of the electronic marketplace. "The reality is that the genie is out of the bottle," he said.

It is common knowledge that encryption software incorporating the restricted DES technology can be found on the Internet using anonymous FTP. And both software and hardware products embedded with DES and RSA algorithms are readily available abroad. (Encryption systems using the weaker RC2 and RC4 algorithms are legal for export, under an agreement reached in 1992 between the Software Publishers Association and the National Security Agency.)

Software.net decided to sidestep the problem by selling Symantec's localized versions of Norton Utilities to the overseas market. As yet, however, the local versions are not available electronically.

"We feel we can live with the restrictions in the near future," McKiernan said, noting that sales from electronic shipments are 10 percent of Software.net's current revenues. "It's not an enormous encumbrance to the business right now."

Still, McKiernan shares a frustration with the current export policy felt by many in the high tech and software publishing industries—and by their advocates in Washington.

"The argument from the National Security Agency that this is protecting our national security is horribly outdated," said Rebecca Gould, policy director of the Washington DC-based Business Software Alliance (BSA). Based on a survey of Fortune 500 companies the BSA estimates that American companies are forfeiting annual revenues of $6 to 9 billion because of government export controls on encrypted software.

"Our problem is that we have an export policy suitable for dirt roads in an era of superhighways (pun intended)," said Lance Hoffman, a professor at George Washington University and an expert on cryptographic policy.

"What has happened is that the proliferation of software all over the world is going to cause governments and businesses and individuals to rethink what their social contract should be," Hoffman said. "Geographical borders do not exist in cyberspace."

McKiernan remains highly optimistic about the growth of Software.net as an electronic software distributor. "The biggest story is that we're actually selling the stuff through the Net," said Software.net vice president John Pettitt. "It's a new paradigm and we have to bend it to fit the existing rules, which were written for shipping boxes of things."

In addition to being highly profitable, electronic distribution is "a feel-good thing," Pettitt said. "Why not transfer information from computer to computer rather than chopping down trees and burning fossil fuels?"

With permission of The Internet Letter —e:mail: info@netweek.com

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Putting Donated Mac Pluses and SEs to Good Use in Schools, Libraries, and Community Computing Centers

Version 1.0

by Phil Shapiro (and others)

[Editor's note: The following article is a work in progress. The author informs me that anyone interested in contributing to the final version of this article is invited to contact him, via e-mail, at: pshapiro@aol.com, or by phone at: (202) 686-5465.]

SCHOOLS AND libraries are in the enviable position of being on the receiving side of large numbers of donated older Macs these days. The Mac Plus and SE models are particularly common as donated items. Knowing how to put these older computers to work is one way of stretching your technology budget.

This article will share some ideas on possible uses of Mac Plus and SE models. Some of the comments and explanations may apply to later model Macs as well.

To put things into perspective, it's best to start off with a mini history lesson. The Mac Plus first came out in January of 1986. It was the first Macintosh model to be shipped with a built in SCSI port. Every Mac Plus was shipped with a minimum of one megabyte of memory. The first LaserWriter printers also came on the market at about the time the Mac Plus was introduced, so the Plus played a significant role in launching the desktop publishing revolution.

The Mac SE came out in March of '87. It too shipped with a minimum of one megabyte of memory.

"How about educational programs for a Mac without a hard drive? Well, for those artistically inclined, the public domain version of Kid Pix runs fine from a floppy disk. This original version of Kid Pix is in black and white, and lacks sound effects. But the dynamite graphics effect (and others) work splendidly. What more could anyone want than to blow up their graphical doodlings with the dynamite screen-clearing effect?"

But the SE had a few extra capabilities. Some SEs were shipped with internal hard disk drives. (Mac Pluses were designed to use external hard drives only.) Early SEs shipped with two internal 800K floppy disk drives. Later model SEs had high-density disk drives, commonly denoted as: "FDHD" (floppy drive high density) on the case of the computer,right below the floppy drive opening.

Using Pluses and SEs Without a Hard Drive

It's quite common that donated Macs arrive without any hard disk drive. Recipients of these Macs then are placed in the position of having to decided whether to spend money on a new (or second-hand) hard drive for each of the donated Macs.

Interestingly enough, there are ways of getting quite a lot of use from a Mac without a hard drive. You can use such Macs for word processing and telecommunications, two of the most common uses of newer Macs. And you can find interesting public domain and freeware educational programs that can run on a Mac without a hard drive.

Let's start with word processing. If you want to do word processing on a Mac without a hard drive, you need to find a word processor small enough not to require a hard drive. Early versions of MacWrite can work entirely from floppy drives. But my preference is to use a very well done shareware text editor named "TexEdit," by Tom Bender. This $5 shareware program has dozens of useful features for users of newer Macs, and works eminently well as a floppy based word processor on older Macs.

To create a "boot-disk" with TexEdit on it you'll need to get a copy of the System Tools disk from system software 6.0.5 or higher. This software is obtainable from several places: 1) Your local user group, or 2) Various online sources. The online source I find most convenient is the Mac Operating System library on America Online. (Key-

word: MOS.) Note: System software in this library is available as "disk images." You'll need to also obtain a copy of the program, "DiskCopy," to convert the disk image back into system software. DiskCopy can also be downloaded from the MOS library on AOL.

After obtaining a System Tools disk for System 6.0.5 or higher, your next step is to strip the disk of all files except the system folder. Just drag them all into the trash can and then empty the trash. The reason for deleting all these extra files is to make maximum room for TexEdit and the data files created by TexEdit.

The next step is to copy TexEdit onto this disk. After doing so, you'll be left with about 100 to 150 kilobytes of free room on the disk. This free space can be used for saving the writings you make with TexEdit. How much space is 100 to 150K? You can save about 50 to 60 typed pages of text in this space. Friendly suggestion: Don't push your luck in trying to wring the last byte from your floppy based word processor. If you need more room on your "boot-disk floppy," copy the files you've made onto another floppy (or hard drive) and then delete the files from the boot-disk floppy.

Another useful program that runs from a disk-based floppy is ZTerm, the immensely popular shareware Mac communications program. The other day I tried running ZTerm from a disk-based floppy, on a one meg Mac Plus. Here is what I found.

It is possible to get ZTerm to boot from a floppy disk, but sometimes you encounter small problems at the point where the phone directory loads into ZTerm. Here's a quick workaround. On your boot-disk floppy with ZTerm delete the file named "Phone Directory."

This means that you'll have to "manually" enter the phone number each time you place a call. This is mildly inconvenient, but not such a big deal. In my mind, getting ZTerm to boot on a Mac without a hard drive is worth a bit of inconvenience.

Interestingly enough, ZTerm performs valiantly well without a hard drive once the program has booted. To put the program through its paces I called CapAccess, the local "freenet," with my 14.4 modem. I was particularly curious to see how large a scrollback buffer ZTerm would have when running from a one meg Mac Plus.

To my surprise, I stayed online for over an hour, at high speed, and still was able to scroll back to the beginning text of my online session. My estimate is that ZTerm's scrollback buffer on a one meg Mac Plus is about 500 kilobytes. From my point of view this is extremely large and generous. (Some of the communications programs I've work with on my Apple IIc have scrollback buffers of 20 to 30K.)

Of course, the thing to keep in mind when using ZTerm from a boot-disk floppy is that you don't have a lot of storage space to capture text. No matter. ZTerm can easily save just those sections of text you've highlighted in the scrollback buffer. If you are selective in the text you choose to capture (i.e. save) to disk, ZTerm will perform fine from a boot-disk floppy. Naturally, you'll likely want to copy the saved text to another floppy (or hard drive) at some point.

How about educational programs for a Mac without a hard drive? Well, for those artistically inclined, the public domain version of Kid Pix runs fine from a floppy disk. This original version of Kid Pix is in black and white, and lacks sound effects. But the dynamite graphics effect (and others) work splendidly. What more could anyone want than to blow up their graphical doodlings with the dynamite screen-clearing effect?

In terms of educationally oriented "thinking games," one of my all time favorite Mac freeware programs, MacSokoban, runs fine from a floppy based Mac. The simplified version of these logic puzzles, "Simple Sokoban, volumes 1 and 2," also run fine.

And if you're looking for arcade games, the black-and-white shareware version of Columns could fit the bill. This fun software is a variation on Tetris. You might recognize Columns as being the younger sibling of the wildly popular color version of this game, Jewelbox.

Many other public domain, freeware, and shareware programs could also run from a boot-disk floppy. General rule of thumb: If the program itself is smaller than 200K, you can probably run it from a boot-disk floppy.

Putting One Meg Mac Pluses and SEs to Work

Okay, say your school or library receives a donated Mac Plus or SE, with a hard drive, but with only one megabyte of RAM. Is it necessary for you to run out to install more RAM? Nope.

Here are some ideas for putting these computers to work with one meg of RAM.

First, all the programs that can run from a boot-disk floppy will also be able to run when installed on a hard drive. But beyond that, here are some other programs you can put to use.

If you live in an area where there are First Class electronic bulletin board systems (BBSs) set up, you can call these bulletin boards using the freeware First Class client software. The nice thing about First Class bulletin boards is that

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the user interface is very Mac like. (Entirely graphical, as opposed to "text-based" bulletin boards.)

I find that First Class BBSs are a gentle way of introducing telecommunications to Mac users who haven't been online yet. And since many First Class BBSs are free (or come as a benefit of a belonging to a user group), people can practice their online skills without having to worry about the expense of a running clock.

You might be surprised to hear this, but it's even possible to use a one megabyte Mac Plus to set up your own First Class BBS. The First Class "host" software doesn't require much memory at all.

(Article to be continued at a later time, with additional inoput.)

Other topics I'd like to see covered in the final version of this article.

—Discussion of HyperCard use on one meg Macs
—Setting up BBSs on one meg Macs (Second Sight/First Class)
—Memory requirements for using an inkjet printer (2.5M? 4M?)
—Using one meg Macs as disk-formatting and disk-duplicating machines
—Commercial sources of older Macs
—Getting older Macs fixed. (Larry Pina book, *Mac Classic & SE Repair and Upgrade Secrets*. Also, mail order repair services)
—Setting up a writing lab with older Macs (Use of "sneakernet")
—Using the new Low-End Speach Manager in educational settings
—TrueType Fonts With System 6.0.7
—"Sticktion" problems with older hard disk drives: what this problem is and how to minimize it.■

The Electronic Schoolhouse

by Emery Roth II

ARE TEACHERS in your school looking for an easy to operate on-ramp to telecommunications in the classroom? If collaborative projects and activities with other classes in distant schools is the goal, the Electronic SchoolHouse on America Online offers a wide range of projects and a supportive community of teachers always eager to welcome newcomers. The America Online interface is simple enough that anyone with the skill to operate a word processor will quickly feel comfortable online, and it is a small step to begin exchanging text, graphics and HyperMedia.

The Electronic SchoolHouse is a grass roots operation entirely run by practicing teachers. It is coordinated by Emery Roth II, a high school English teacher and middle/high school computer facilitator in Washington, Connecticut, and Leni Donlan, a computer facilitator and past elementary school teacher at the Town School in San Francisco, California. They work with a staff of a dozen other teachers from around the country. However, many teachers from many states offer projects in the Electronic SchoolHouse. Projects cover a wide range of age levels and disciplines, but one mission of the SchoolHouse is cross-grade and interdisciplinary education. Anyone with an account on America Online is invited to join projects or to offer them in ESH. Those who offer successful projects for a year are invited to join the ESH PROJECT LEADERS' CONSORTIUM.

The work of the Consortium assures that there is always a core of quality projects running in the Schoolhouse. Roth runs his award winning ScrapBook Writing Project in the Schoolhouse four times each year. Donlan runs Postcard Geography, Westward Ho!, and Taking Stock. However, there are many other projects in the Schoolhouse from Math Online Games and ESP for Students At Risk, to the annual Spring Egg-A-Thon, the National Student Research Center, and the Schoolhouse news Bureau. To contact Roth or Donlan from the internet, send e-mail to ESHTooter@AOL.com or ESHLeni@AOL.com. To arrange for America Online in your school, call 1-800-344-6219. To reach the Electronic SchoolHouse, once on America Online, hit COMMAND-K and then type ESH, and the Electronic SchoolHouse will come into view. Contact any of the staff, and you will find them eager to help you find your way around.

Electronic SchoolHouse Projects

Activities of the Electronic SchoolHouse are coordinated by AFC Tooter and AFC Leni, but the projects of the Electronic SchoolHouse are the work of many teachers. Here is a sampling:

continued on page 74

Using the Macintosh, Special Edition and Sad Macs, Bombs and Other Disasters

review by Bill Jensen

JUDGING BY the variety on the shelves reference books for general help continue to be popular. When I am writing this it is a wintry (by Washington, DC standards) weekend, a perfect time to check out two books for the beginning to intermediate Mac computer user.

Using the Macintosh, Special Edition

Gene Steinberg leads a team of 15 authors covering all aspects of Mac hardware and software. One page short of 1,200 the first of edition of Using the Macintosh attempts to provide a manual where the other manuals, and online help folders leave off.It enters a field of wide reference books already dominated by the Macintosh Bible, and the Mac version of the Dummies series. Does Que Publishing's book stack up? Sort of.

*Using...*is collection of articles summarizing the use of the Mac and popular programs on the market. The 38 chapters are organized in the same fashion, often ending with "hot tips" concerning the programs discussed, and providing links to further reading on related topics at the end of each article in a conclusion titled "From Here". The common format helps to navigate the areas of overlap (no doubt caused by the multitude of authors), and the generous use of screen shots, graphics and special "note" features improves the tour even more. Yet the use of 15 authors gives rise to some odd concentrations, and the book could use some better editing.

Even in 1,200 pages, covering the current range of system and application software involves some decisions on what not to include, and the depth of what is explained. In some cases, Steinberg as lead author has made some questionable calls. The Mac has been known as a leader in music creation, so it is not unusual that he covers this topic in a general reference. But he uses the same space (40 pages) covering music, MIDI and specialized software as he does for word processing, covering MacWrite Pro, Word, Nisus, and WordPerfect. He covers database programs in 28 pages, reviewing only FileMaker Pro and Fox Pro. It is likely that the use of 15 authors has resulted in the uneven coverage of software. Readers can obtain better summaries by reviewing MacWorld's mini-reviews monthly.

Mr. Steinberg could have used better editors. Certainly in 1,200 pages errors can occur (I am sure even this short review of mine contains a few!) but some glaring ones raise questions in the mind of any user on the quality of advice on the whole. Examples of poor editing include a summary of the maximum RAM of the LCII as 12MB (only 10MB is usable by the LCII, which was correctly summarized for the original LC in the book) and picture of an LCIII identified as a PowerPC.

Using the Macintosh does provide an easier probe of System 7.5's features than using Apple Guide. But this, and other issues such as networking,troubleshooting, and other tips for hardware and software are described at a level appropriate for the beginning, and not intermediate to advanced user. The lack of depth, questionable selection of coverage, and rather bland style of the collected authors limit the usefulness of the book.

"The common format helps to navigate the areas of overlap (no doubt caused by the multitude of authors), and the generous use of screen shots, graphics and special 'note' features improves the tour even more. Yet the use of 15 authors gives rise to some odd concentrations, and the book could use some better editing."

Sad Macs, Bombs, and Other Disasters, and What to Do About Them.

Ted Landau has compiled a comprehensive guide to anyone who has seen a bomb alert or has seen the Mac fail to boot properly-all of us! In other words, sometimes the Mac

doesn't "plug and play" the way we would want.

Landau brings every user up to the same level of understanding by starting with an overview of "Background and Basics" of the Mac-a better overview than the rather dry attempt in Using the Macintosh. By walking the reader through the basics of the systems file, application use and documents, the specialized sections discussing symptoms and solutions fit well. One can actually read the book cover to cover, or use it to understand and deal with specific problems. It has a comfortable format, and uses screen shots frequently. Aided by a friendly style (one of the headings is "When the Going Gets Weird") Landau covers system and hardware problems, and ways to solve them.

Using a Mac today means you may have init problems, font conflicts, memory complications, and a host of interesting complications. By explaining the working of the software and hardware, the user actually gains an insight into suggested solutions, rather than being given esoteric fixes. Landau completes the book by offering four case studies describing real life problems and their solutions. The only complaint I have is the edition I read (the first, printed in 1993) was written prior to the introduction of the Power Mac and System 7.5. So if you are interested in coverage of either of these topics, check the edition date or ask your book store about the latest edition available.

Sad Macs ...is just the kind of book that could turn a frustrating day (or long night) around. If you are interested in learning more about the hardware and software problems and solutions, or having the computer equivalent of cold medicine on your bookshelf, I strongly prescribe *Sad Macs, Bombs, and Other Disasters.*

Using the Macintosh, Special Edition, by Gene Steinberg et al, published by Que Publishing. $34.99. ISBN 1-56529-826-8

Sad Macs, Bombs, and Other Disasters, by Ted Landau, published by Addison-Wesley Publishing Company. $24.95. ISBN 0-201-62207-6

By day, Bill Jensen masquarades as a benefit administration firm vice president, so that he can afford new toys like the Power Mac 6100 that sits at his desk at home. Sadly, Mr. Jensen has spent over ten years trying to master the Puzzle under the Apple Menu. But we all have goals in life. ■

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

Apple II/III

Apple II

General

Dave Harvey (days only) (703) 578-4621
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
Ken DeVito (703) 960-0786

Accounting Packages

—BPI Programs
Jaxon Brown (301) 350-3283
—BPI & Howardsoft (Tax)
Otis Greever (615) 638-1525
—Dollars & Sense
Barry Fox (717) 566-6709
—Home Accountant
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—Apple SSC
Bernie Benson (301) 951-5294
—AppleWorks
Ken DeVito (703) 960-0786
Ray Settle (301) 647-9192
Gary Hayman (301) 345-3230
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
Bill Campbell (301) 498-6380
Allan Griff (301) 654-1515
—AppleWorks Database
Morgan Jopling 1 (301) 721-7874
Milt Goldsamt (301) 649-2768
Allan Griff (301) 654-1515

Communications

—ProTerm
Allan Levy (301) 340-7839
Ray Settle (301) 647-9192
—Talk is Cheap/Pt. to Pt.
Barry Fox (717) 566-6709
—DataBases
—DBMaster, Pro IIe
Bob Sherman 1 (305) 944-2111
—dBase II
John Staples (703) 255-6955
—dBase II&III, Data Perfect, Db Master-PRO
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—Profiler 3.0
Barry Fox (717) 566-6709

Hard Disks

—CMC (not CMS)
Barry Fox (717) 566-6709
—Corvus
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—Sider
Otis Greever (615) 638-1525

Languages

—Apple Soft
Louis Biggie (301) 967-3977
Peter Combes (301) 251-6369
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—Pascal
Michael Hartman (301) 445-1583

Operating Systems

—ProDOS 8 and 16
Barry Fox (717) 566-6709
—Print Shop
Thomas O'Hagan (301) 593-9683

Spreadsheets

—General
Walt Francis (202) 966-5742
—MagicCalc/SuperCalc2.0
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—Telecommunications
Dale Smith (301) 762-5158
Allan Levy (301) 340-7839
Ken DeVito (703) 960-0786
—TimeOut Series
Morgan Jopling 1 (301) 721-7874
—Utilities: ProSel
Barry Fox (717) 566-6709

Cross-Platform Translation

—MS/DOS-Apple-Mac Transfers
Ken DeVito (703) 960-0786

Word Processors

—General
Walt Francis (202) 966-5742
—Apple Writer 2
Ron Evry (703) 490-1534
Dianne Lorenz (301) 530-7881
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—AppleWorks GS
A.D. (Bill) Geiger (703) 237-3614
Andy Gavin (703) 734-3049
—Letter & Simply Perf
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—Mouse Write
Barry Fox (717) 566-6709
—Publish-It!
Ray Settle (301) 647-9192
—ScreenWriter II
Peter Combes (301) 251-6369
Gene Carter (202) 363-2342
—Word Perfect
James Edwards (301) 585-3002
Henry Donahoe (202) 298-9107
—Word Star
Art Wilson (301) 774-8043

Apple II GS*

Neil Laubenthal (703) 691-1360
A.D. (Bill) Geiger (703) 237-3614
—General
Barry Fox (717) 566-6709
—IIe Upgrade
Morgan Jopling (301) 721-7874
—APW
Andy Gavin (703) 734-3049
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—Deluxe Paint II
Rich Sanders (703) 450-4371
—GS BASIC
Barry Fox (717) 566-6709
—Multiscribe GS
Ray Settle (301) 647-9192

Telecommunicatons (Mac & Apple)

—TCS Help
Dale Smith (301) 762-5158
Nancy Seferian (202) 333-0126
Paul Schlosser (301) 831-9166
—General
Dale Smith (301) 762-5158
Allan Levy (301) 340-7839
Bob Sherman (305) 944-2111
—Mouse Talk
Dale Smith (301) 762-5158
Ray Settle (301) 647-9192
—TimeOut Series & Utilities: ProSel
Ray Settle (301) 647-9192
Barry Fox (717) 566-6709
—816 Paint/Writ'rs Ch.El
Andy Gavin (703) 734-3049
—Apple II Hardware Epson printers, hard drives
Guy Durant (202) 363-0366
—Apple II laser printing
Bob Sherman 1(305) 944-2111

Apple III*

—General
Paul Campbell (313) 255-6497
Dave Ottalini (9-10:30 pm) (301) 681-6136
—3 Easy Pieces
Robert Howe (916) 626-8198
David/Joan Jernigan (before 9 pm) (703) 822-5137
Steve Truax (304) 267-6429
—Word Juggler
Tom Linders (408) 741-1001
J. Carey McGleish (evenings) (313) 332-8836
—Pascal
Dr. Al Bloom (703) 951-2025
—Apple Speller
Robert Howe (916) 626-8198
—Apple Writer
Eric Sheard (908) 782-6492
—Stemspeller
Steve Truax (304) 267-6429

Beagle Buddies

Maryland

Ray Settle (Annapolis) (301) 647-9192
Scott Galbraith (Frederick) (301) 865-3035
W.T. Cook (Columbia)(301) 995-0352
Lee Raesly (Adelphi) (301) 599-7530
Don Avery (Bethesda/DC) (202) 362-1783

Virginia

Kenneth DeVito (Alexandria) (703) 960-0786
Neil Laubenthal (703) 691-1360

April 1995

Washington Apple Pi Office
12022 Parklawn Drive, Rockville, MD, 20852.
M-W-F 10 a.m. to 6 p.m.; Tue 7 p.m to 9 p.m.; Sat 9 a.m. to 2:30 p.m.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30						1
2	3 Newton SIG	4 TeleComm SIG	5 Mac Programmers SIG DTP SIG	6 Columbia Slice Game SIG	7	8 Frederick Slice
9	10 *Intro to the Mac–Part 1*	11 *Intro to MS Works-Part 1*	12 DB SIG WAP BoD	13 Stock SIG	14	15 Annapolis Slice
16	17 *Intro to the Mac–Part 2*	18 *Intro to MS Works-Part 2*	19 Excel SIG	20 PI SIG	21	22 NoVa ComCol WAP General Meeting
23	24 *Intro to the Mac–Part 3*	25 *Intro to MS Works-Part 3*	26 *Maintaining Your Mac*	27	28	29

May 1995

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3 Mac Programmers SIG DTP SIG	4 Columbia Slice Game SIG	5	6
7	8 Newton SIG	9 TeleComm SIG	10 DB SIG WAP BoD	11 Stock SIG	12	13 Frederick Slice
14	15 *Intro to the Mac–Part 1*	16	17 Excel SIG	18 PI SIG	19	20 Annapolis Slice
21	22 *Intro to the Mac–Part 2*	23	24 *Maintaining Your Mac*	25	26	27 NoVa ComCol WAP General Meeting
28	Office Closed 29 *Intro to the Mac–Part 3*	30	31			

See page 3 for journal deadlines.

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
2nd Saturday; 9:30 AM; Severna Park Library on McKinsey Rd (off Rt 2), Severna Park, MD.
Answering Machine: (410) 761-4260
CrabApple BBS: (410) 315-8532

Apple IIGS SIG
Meetings at various locations an don various dates. Looking for new chairperson. Call Gary Hayman (301) 345-3230, for details.

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

AppleWorks SIG
Meetings at various locations and on various dates. Call Gary Hayman (301) 345-3230, for details.

CAD SIG
Call SIG chair.

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

DataBases (Mac) SIG
2nd Wednesday; 7:15 PM; FHWA R&D Labs, near McLean, VA—from GW Parkway, exit at the interchange marked CIA HQs, then make a right turn to the FHWA gate, and check in with the guard.

DeskTop Publishing (DTP) SIG
1st Wednesday; 7:30 PM; PEPCO Auditorium, 1900 Pennsylvania Ave. NW, DC. For further details, we encourage you to attend the monthly DTP meeting.

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.

HyperTalk SIG
Call SIG chair for information.

Mac Programmers' SIG
1st Wednesday; 7:30 PM; WAP office.

Newton Developer's SIG
1st Monday, 7:30 PM; WAP Office.

NoVa Education (Ed) SIG
Last Wednesday; 7:30 PM; Walnut Hill Ctr., 7423 Camp Alger Ave., Falls Church, VA.

Programmer's Interface (PI) SIG
Meetings are announced on the Announcements Board of the TCS. Call Gerry Wright at (301) 422-4286 for details.

QuickTime SIG
Quarterly; 7:30 PM; WAP Office.

Stock SIG
2nd Thursday; 7:30 PM; WAP office.

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

UltraMacros SIG
Meetings at various locations and on various dates. Call Gary Hayman (301) 345-3230, for details.

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
Usually held every quarter on the fourth Thursday of the month at the Pi Office at 7:30 PM. Call SIG Chair, Ann Aiken (301) 530-1990 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) 654-8060.

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

Macintosh

General
Tom Witte (703) 683-5871
Harry Erwin (703) 758-9660
Dan White (301) 843-3287
—Art & Video
Nancy Seferian (202) 333-0126
—Borland Products
Doug Ferris (daytime only) (800) 826-4768

Database Programs
—Fourth Dimension
Bob Pulgino (301) 474-0634
Peter Yared (301) 564-1560
—FileMaker Pro
Tom Parrish (301) 654-8784
Mort Greene (703) 522-8743
—Foxbase
Rick Shaddock (202) 829-4444
—Helix
Jim Barry (to midnight) (703) 662-0640
Harvey Levine (301) 299-9380
—MS-File
Mort Greene (703) 522-8743
—Omnis 7
Jeff Alpher (to midnight) (301) 630-2036
—OverVue
J.T. Tom DeMay, Jr. (301) 461-1798
Tom Parrish (301) 654-8784
—Pro-Cite
Elizabeth Mangan (703) 750-2710

Desktop Publishing
—General
Jay Rohr (301) 655-0875
Freddi Galloway (V/TTY) (410) 268-5793
—ReadySetGo
Jim Graham (703) 751-4386
Freddi Galloway(V/TTY) (410) 268-5793
—PageMaker
Mort Greene (703) 522-8743
—Quark Xpress
Ron Mann (202) 333-3409

Graphics
—General
Bill Baldridge (301) 779-8271
Jay Rohr (301) 655-0875
—Adobe Illustrator
Ling Wong (703) 803-9109
—Aldus FreeHand
Nancy Seferian (202) 333-0126
—Canvas
Bill Baldridge (301) 779-8271
Tom Parrish (301) 654-8784
—MacDraw
Tom Parrish (301) 654-8784
—Image Studio
Mort Greene (703) 522-8743
—Studio/1
Jamie Kirschenbaum (evenings) (703) 437-3921
—SuperPaint 2.0
Mort Greene (703) 522-8743
—Video Works
Mort Greene (703) 522-8743

Programming
—General
Harry Erwin (703) 758-9660
—Inside Mac
John Love (703) 569-2294
—Pascal
Michael Hartman (301) 445-1583

Spreadsheets & Charts
—General
David Morganstein (301) 972-4263
Bob Pulgino (301) 474-0634
Tom Cavanaugh (301) 627-8889
—ClarisWorks
Roger Burt (301) 424-6927
—Excel
David Morganstein (301) 972-4263
Mark Pankin (703) 524-0937
Jim Graham (703) 751-4386
Dick Byrd (703) 978-3440
Bob Pulgino (301) 474-0634
Tom Cavanaugh (301) 627-8889
Paula Shuck (before 10 pm) (301) 740-5255
Kirsten Sitnick (301) 750-7206
Mort Green (703) 522-8743
Rick Shaddock (202) 829-4444
—WingZ
Kirsten Sitnick (301) 750-7206

Telecommunications
—General
Allan Levy (301) 340-7839
—CompuServe
Michael Subelsky (301) 949-0203

Virtual Reality
—Virtus Walthorough Pro
—Virtus VR, Virtus Voyager
Jaque Davison (703) 644-7354

Word Processors
—Microsoft Word
Harris Silverstone (301) 435-3582
Tom Cavanuagh (301) 627-8889
Freddi Galloway (V/TTY) (410) 268-5793
Kirsten Sitnick (301) 750-7206
—Think Tank-More
Jim Graham (703) 751-4386
Tom Parrish (301) 654-8784
—Hebrew Word Processing
Tim Childers (301) 997-9317
—Microsoft Works
Amy Billingsley (301) 622-2203
—WordPerfect-Mac
Curt Harpold (202) 547-8272

Miscellaneous
—IIe Card for the LC
Bernie Benson (301) 951-5294
—MacProject
Jay Lucas (703) 751-3332
Norbert Pink (703) 759-9243
—HyperCard
Rick Chapman (301) 989-9708
Tom Witte (703) 683-5871
—HyperTalk
John O'Reilly (703) 521-8121
Tom Witte (703) 683-5871
—File Transfer
Mort Greene (703) 522-8743
—Backfax
Mort Greene (703) 522-8743
—HyperCard Scripting
Jamie Kirschenbaum (evenings) (703) 437-3921
—Sound Edit
Jamie Kirschenbaum (evenings) (703) 437-3921

Mac Disketeria Library
Dave Weikert (301) 963-0063

General

—Assistive Tech
Missy McCallen (703) 323-6079
—Games-Apple II
Charles Don Hall (703) 356-4229
John Wiegley (after 2:15) (703) 437-1808
—IBM
Leon Raesly (301) 599-7530
—Math-OR Applns
Mark Pankin (703) 524-0937
—Modems-General
Allan Levy (301) 340-7839
—Hayes Smartmodem
Bernie Benson (301) 951-5294
—Practical Peripherals
Allan Levy (301) 340-7839
—Printers-General
Walt Francis (202) 966-5742
Leon Raesly (days: 5 am to 5 pm) (301) 868-9554
—MX-80
Jeff Dillon (301) 662-2070
—Stat Packages
David Morganstein (301) 972-4263
—Stock Marker
Robert Wood (703) 893-9591
—MS/DOS
Tom Cavanaugh (703) 627-8889
—Dvorak Keyboard
Ginny & Michael Spevak (202) 244-8644

Frederick Apple Core Help Line

Please limit calls to reasonable evening and weekend hours and **NEVER** after 10 PM.

Oscar Fisher (Frederick)	694-9237	A2, G2	Doug Tallman (Frederick)	663-3268	Mac
Dick Grosbier (Frederick)	898-5461	A2, GS, Mac	Scott Galbraith (Montrovia)	865-3035	A2, GS
Harold Polk (Frederick)	662-6399	A2	J. Russell Robinson (Hagerstown)	739-6030	Mac
Tony Svajlenka (Frederick)	694-6209	A2	Ken Carter	834-6515	A2, GS

Annapolis Slice Help Line

Area Code 410. Call in the PM unless you have an emergency.

Mac

Richard MacLean (Crofton)	721-8157	MacIIsi	Gini Waters (Crownsville)	923-0139	Mac+, DTP
Steve Toth (Edgewater	956-6557	Mac+	Bill Derouin (Severna Park)	766-1154	Centris 650, DTP
Bob Peterson (Crofton)	721-9151	MacSE	Bill Waring (Severna Park)	647-5605	Mac, Excel
Sandy Bozek (Annapolis)	974-6062	MacII,Scanner	Helen Harnerstrom (Severna Park)	647-1720	Mac,CD-ROM
Lou Spienza (Crownsville)	573-7140	Mac IIsi, Canvas, DTP	**Apple II**		
Barry Conner (Annapolis)	573-7140	Mac Telcomm	Seth Mize (Glen Burnie)	766-1154	IIGS,II+, III
Brian Bassindale (Arnold)	757-9541	Mac IIci, CAD	Helen Hamerstrom (Severna Park)	647-1720	IIGS,IIe, DTP,HS

TCS Help Sheet

A quick reference sheet while on the TCS

TCS Phone Numbers

301-984-4066 (for 300, 1200, 2400 bps)

301-984-4070 (for 9600, 14400)

Main Menu

<B>....Bulletin Boards
<C>....Change conferences
<F> ....File Transer
<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

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- Quit the System
<Q>.... Quit to Main Menu
<R>.... Read a Msg or Msgs
<S>.... Scan Message Headers
<T>.... Title Scan Msg Headers
<W>.... Welcome Bulletin for Board
<X>.... Xfer (Download) a Msg or Msgs

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

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

TCS 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

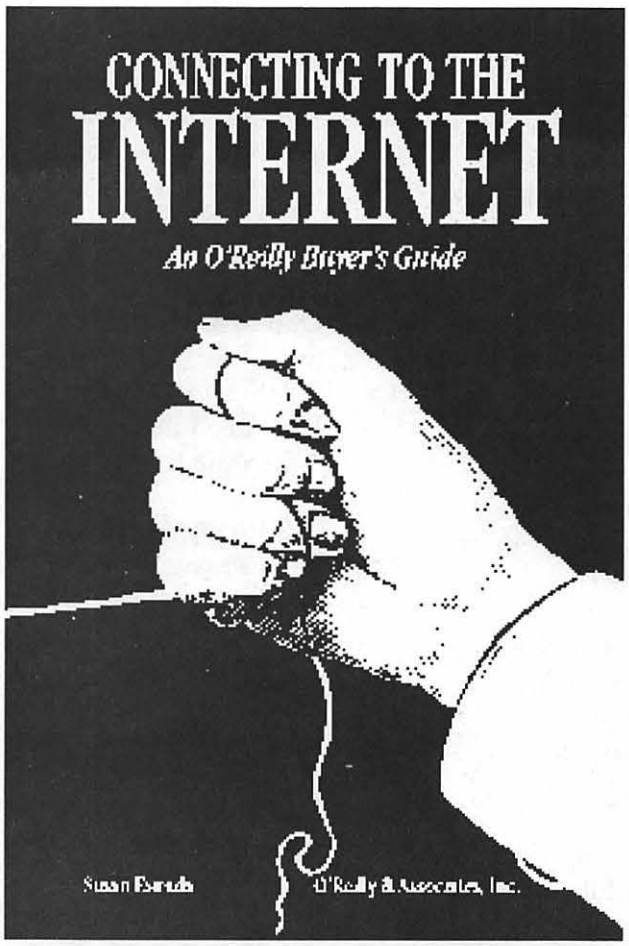
■

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

π

Internet in a Nutshell

"KNOWLEDGE IS power," according to an ancient cliché that, for a change, is also accurate. And *everyone* knows that the way to knowledge in the immediate future is through the Internet, the "National Information Infrastructure" (Vice President Al Gore), the "Information Superhighway" (virtually every magazine and newspaper in the country), the "CyFiWay" (*Washington Post Fast Forward* magazine). All these even sound powerful, or at least mysterious, but the truth is: the Internet is just a bunch of computers linked together, without a plan, without an index, without a map, and frequently without a purpose. Unless you have unlimited time and wealth, you can't expect to discover anything useful on the Internet unless you have a passionate interest in reading.



A good place to start is the O'Reilly Nutshell series. O'Reilly is well known, even revered, in the UNIX world for their books, but relatively unknown in the Mac world. This is a shame; their books are not only superbly written, but superbly edited, and the company has a touch of whimsy that fits perfectly into the Macintosh culture.

Virtually all their book covers, for example, have black and white illustrations, frequently of animals, designed to look like 19th century lithographs. The illustrations give their books a distinctive "look" that is both more professional than, say, the inane *Dummies* series from IDG and, simultaneously, off-the-wall. If you order direct, the box containing your books will be sealed with custom-made clear plastic tape illustrated with many of the animals seen on the book covers—a nice touch. Plus, you'll often get some extra "goodie," such as a paper animal mask that says on the back, "Your order has been pawed by [name of employee]." Thank you, Amber; my daughter loved the mask.

World Wide Web

Once you get beyond the packing material, you can feast on authoritative answers to puzzling questions and problems, written in clear English that is neither "dumbed-down" nor numbing gray text. *The Mosaic Handbook for the Macintosh*, by Dale Dougherty and Richard Koman, is an almost perfect beginner's guide to the Internet, offering up the attractions and ease of use of the World Wide Web (WWW) through the first "killer application," Mosaic. It even comes with a copy of Spyglass' Enhanced NCSA Mosaic, though the book's subject is applicable to most Web browsers, including Netscape and MacWeb.

The combination of book, software and subject make *The Mosaic Handbook* an attractive combination. Boot up the supplied software and you are greeted with a Mosaic Home Page that runs off your local hard disk; no live Internet connection is required. This Home Page allows you to explore many subjects covered in the book at your leisure, without spending a dime on an Internet connection. The book

even covers the basics of HTML (Hyper Text Markup Language) so you can create, and test, your own custom Home Page, right in the comfort of your own hard disk.

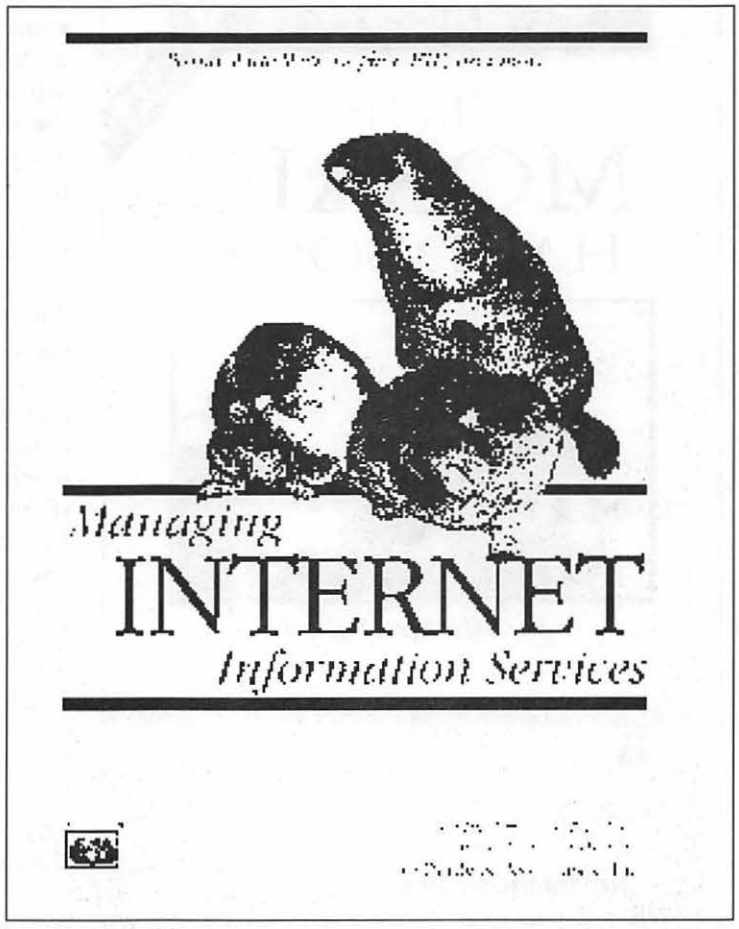
If you have a live Internet connection, the supplied Home Page links you directly to GNN, the Global Network Navigator, a sophisticated Internet project launched by O'Reilly to serve as a global Internet information center. GNN has links to popular World Wide Web sites, has errata for O'Reilly publications, has advertisements for various businesses — in short, it is the perfect place for a new Internet user to land and explore.

There are chapters on how the Internet works, how WWW was created, and chapters on Mosaic "helper" applications (programs that Mosaic can launch to handle special kinds of information, such as sound or video clips). There is fairly detailed documentation on Spyglass' Enhanced Mosaic; if there are lapses, they are usually due to lapses in the software more than the documentation.

There are, additionally, some interviews, and discussions of mailing lists, gophers, and other strange denizens of the Internet. There is even a decent index, and nice glossary. About the only thing not covered is how to get an Internet connection.

Buying Connections

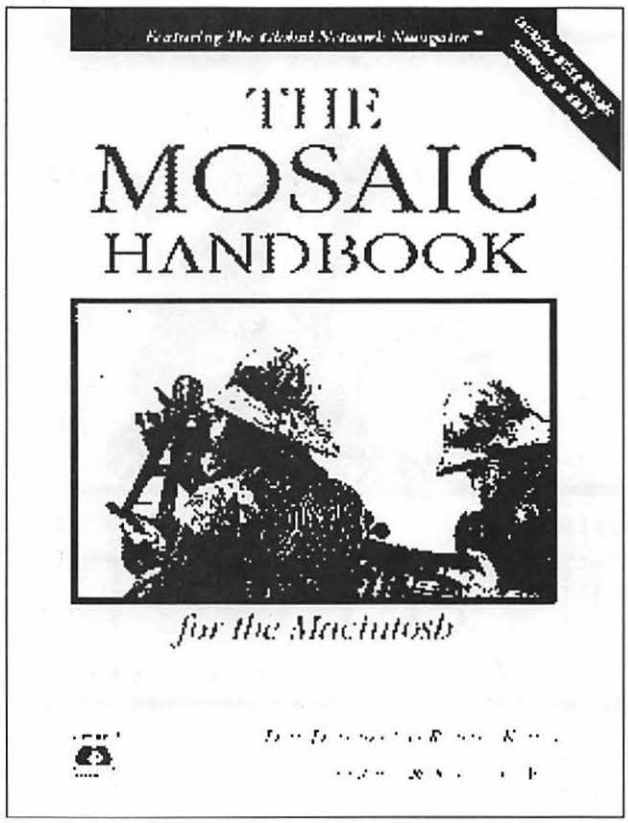
Connecting to the Internet: An O'Reilly Buyer's Guide, by Susan Estrada, is well described by the title. Do you want to be on the Information Superhighway? Do you want to play with Mosaic? Do you know how to do this? Estrada's guide is filled with tips on what kind of connections to look for (there are many choices), and devotes many pages to reviewing, by name, many Internet providers.



Published in 1993, the list of providers, and their services and costs, is technically out of date. Worse, it is largely based on information freely available — on the Internet. So, if you are already on the Internet and want to go shopping for an Internet provider, you probably don't need this book. And if you appreciate the irony of that last sentence, you'll also appreciate the value of Estrada's listing: even if some details have changed, she still provides a priceless list of names, phone numbers, E-mail addresses and contact points for informed shopping.

She also devotes time to such matters as how the Internet works, how these workings influence different kinds of connections, and which type of connection might be best for your use. She has prepared a nice checklist for comparing service providers, and offers guidance on how to measure their services and performance. Separate chapters are devoted to the very different criteria involved in "Selecting Dialup Connections" (the Internet via modem) and "Selecting Dedicated Line Connections" (the Internet via connection to your local area network).

Covering exactly what equipment to buy and how to set it up for Internet access is beyond the scope of the book — which is a blessing. There is virtually no Apple or Macintosh-specific information in the book and, given the great variety of Internet connections possible with a Mac (direct-connect TCP/IP, SLIP, PPP, AppleTalk Remote Access, etc.), such matters are best left to other books. But Estrada does cover the basics, and even manages to give some idea of the costs associated with different components and options.



Not for the Novice

What if you already have an Internet connection, and have mastered the wonders of Mosaic? *Managing Internet Information Services,* by (deep breath) Cricket Liu, Jerry Peek, Russ Jones, Bryan Buus and Adrian Nye, covers the next step. As the name suggests, this is a "how to" manual of setting up Internet sites for gopher, WWW, ftp, mailing lists, and other popular means of providing information.

Aimed at the technically sophisticated, the book is intended for either UNIX system administrators or a group the author calls "data librarians." A data librarian is the person who populates an information service with information, setting up menus and files for gopher, creating Web pages for Mosaic, setting up user lists for mailing lists, or similar tasks. Such a person should have some familiarity with UNIX, say the authors, (though there are many Mac programs for providing these services that require no such knowledge). This doesn't mean the book doesn't have value to Mac users; learning how it is done on a UNIX machine is a must if you want an Internet site to be useful to the rest of the planet since UNIX is essentially an Internet "standard."

There are some basic chapters of use to almost anyone, such as those describing Internet services, an overview of the World Wide Web, an overview of mailing lists, and separate chapters on legal issues and intellectual property rights. An excellent chapter on authoring for the World Wide Web (using Hyper Text Markup Language) is bolstered by a nice appendix on HTML tags. Fledgling service providers should also find the chapters on preparing information for ftp archives and gopher servers relatively easy going as well.

Setting up the gopher or web server, however, is another matter. Much of the book is hard-core, and requires not only knowledge of UNIX but an understanding of the fundamental principles of operating systems and networking, and a sound knowledge of programming. Put another way, virtually anyone can read this book, but understanding all of it will not come without many hours spent sweating and suffering over a UNIX machine. This is not a fault of the book, but of the subject.

If you can accept less than full understanding, the book is still of great value, even if you never intend to get familiar with UNIX. For those contemplating creating, or fully exploiting, Internet services, you'll suffer quite a bit more if you *don't* read the book. The authors provide many examples of what happens if things are not done correctly, and this knowledge is sobering. Also, often intimidating; I've postponed several mad schemes regarding the Internet until I can find someone else to do them for me. Sadly, the book offers little help in "searching for naive volunteers."

I also liked the cute bobacs frolicking on the cover.

Bugs and Errors

All three books probably have some errors, but they weren't significant enough to attract my attention. The indices, however, are another matter. While the first two books have barely adequate indexing, the last — and most complex — volume needs a far more detailed index, since few individuals are willing to read all 600+ pages cover to cover. Granted, the index plus the table of contents does allow you to quickly reach most information, but this is time-consuming and awkward, frequently resulting in a loss of concentration.

Not as awkward or irritating, however, as the advertising. Yes, many other publishers do it, too, but the practice of filling the last pages of a book with advertising, coupons, postcards, Rolodex cards and other nonsense *greatly* diminishes the value of an index. There are six pages separating the back cover from the index in *Connecting to the*

Internet, twenty-seven pages in *The Mosaic Handbook*, and sixteen pages in *Managing Internet Information Services*. The correct number, of course, should be "zero."

For Further Information

As you might expect, O'Reilly is exceptionally well connected to the world of computers. In preparing this review, current prices of the books were pulled directly off O'Reilly's computers, via the Internet, as were the thumbnail pictures of the book covers. If you have an Internet connection that supports Mosaic, try:

http://gnn.com/ora/

or use a gopher client to connect to:

gopher.ora.com

or use anonymous FTP to get material from:

ftp.ora.com

For those lacking direct Internet access, try E-mail. General questions about O'Reilly publications should be sent to **nuts@ora.com**; technical questions should be directed to bookquestions@ora.com; you can order books by sending a message to order@ora.com; and you can ask to be added to their mailing list, to receive their next catalog, by writing to catalog@ora.com.

—Dale Dougherty and Richard Koman, *The Mosaic Handbook for the Macintosh*. O'Reilly & Associates, 1994. xxiv, 171 pp. ISBN 1-56592-096-1. $29.95

—Susan Estrada, *Connecting to the Internet: An O'Reilly Buyer's Guide*. O'Reilly & Associates, 1993. xviii, 170 pp. ISBN 1-56592-061-9. $15.95

—Cricket Liu, Jerry Peek, Russ Jones, Bryan Buus and Adrian Nye, *Managing Internet Information Services*. O'Reilly & Associates, 1994. xxxvi, 630 pp. ISBN 1-56592-062-7. $29.95 ■

Spigot II Tape: Second Generation QuickTime Board

SUPERMAC'S descendant of Video Spigot has a new name and more talents. Called Spigot II Tape, this full-size NuBus board digitizes QuickTime quarter-screen video and provides video-out abilities so you can print to tape or watch movies on TV.

With a powerful computer, you can get 30 frames per second capture and playback in 320x240 pixel size windows. Spigot II Tape's built-in hardware "SpigotZoom" enlarges movies to fill a TV screen when you print to tape or view with an NTSC monitor (TV). The quality isn't "broadcast," but it is sure good enough for most types of presentations, multimedia, or personal productions.

My experience with QuickTime capture boards first came with Sigma Designs' Movie Movie Though I liked the capable Movie Movie and it's ability to also capture sound, I was always wondering how

The Big Window: *ScreenPlay II comes with Spigot II Tape and serves as a video capture and playback application. This window, at 320x240 pixels, is the biggest size you can get full-motion video with Spigot II Tape. With the right computer you can make 30 frames per second movies, though most Macs capture at slower rates. (This is my daughter Claudia's second birthday party.)*

to show my (small-screen) productions. I didn't have an AV Mac, and my IIci didn't offer NTSC video out, so QuickTime became a one-way street.

Enter Spigot II Tape. I've been using the board since May 1994, and can say it's a pretty good deal. Besides video out ability, Spigot II Tape produces bigger, faster movies than Movie Movie. Of course it's not Radius VideoVision Studio or some other $4,000 board, but believe it or not I've been able to fool people into thinking the movies from Spigot II Tape came from a high-priced setup. (Spigot II Tape's current retail is $849, and street price can be as low as about $670.)

More importantly, I can now share my creations with non-computer people whose VCR is their sole concession to technology. There are more folks like these than we might think, and Spigot II Tape lets me speak to them on their terms.

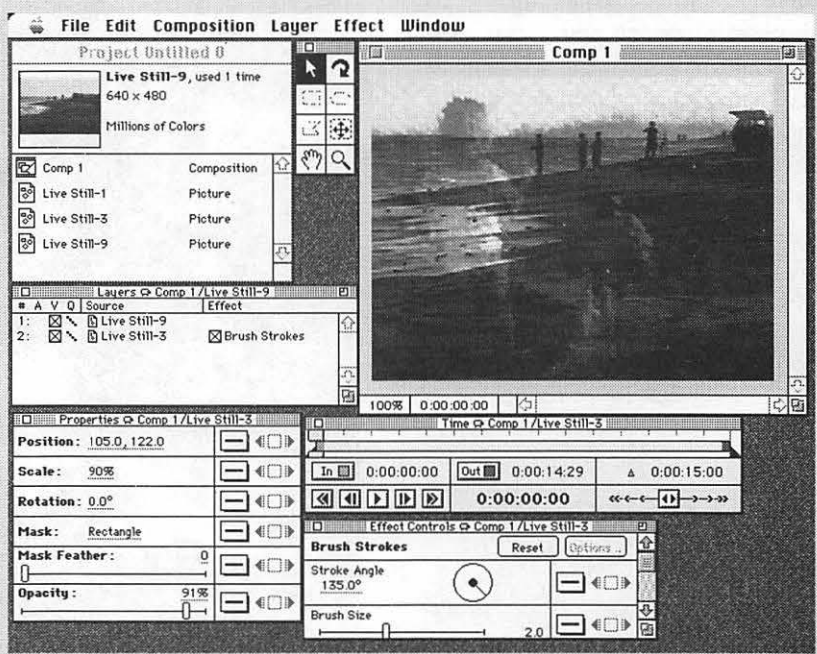
Still Frame Capture: *This is a 640x480 full screen still capture from videotape via Spigot II Tape and ScreenPlay II. (Both video fields are captured.) Still frame capture allows you to grab images from video for use in publications or other documents much the same way Apple's QuickTake 100 digital camera does. My daughter Claudia and her grandfather are riding the Okracoke Ferry in North Carolina.*

QuickTime Editors for Spigot II Tape

by Dennis R. Dimick, © 1995

SPIGOT II TAPE provides a comparatively inexpensive hardware solution for moving QuickTime digital video into and out of a NuBus Mac, but you will need an editing program to produce movies containing more than raw video clips or simple cuts editing.

Though SuperMac's ScreenPlay II utility offers high-quality video capture and playback via Spigot II Tape, QuickTime editing programs will help you add titles, transitions, additional sound, and video and graphics special effects. Several programs complement



After Imaging: Modeled on After Effects, a broadcast-quality QuickTime editor, Adobe's (CoSA) After Image provides nearly infinite flexibility for creating layered movies containing animated images, type, graphics, and other dramatic visual elements.

NuBus and TV Connections

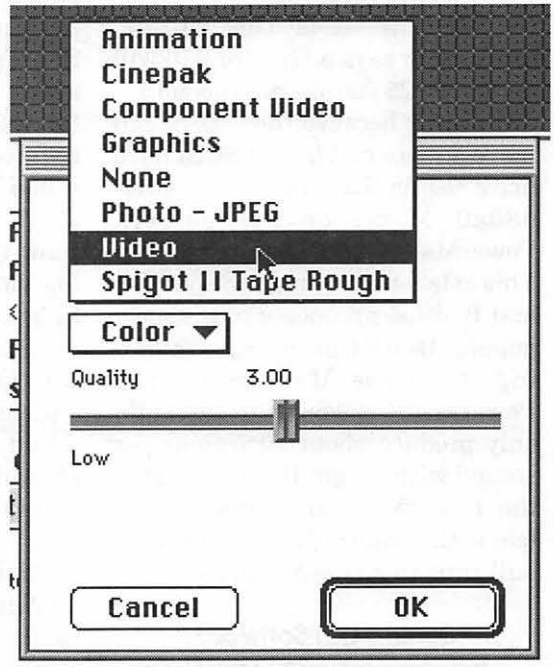
You'll need a full-size Mac with sound capture ability such as a Quadra or Centris, or if you have an older Mac-II class machine you'll need a sound board or Macromedia's Mac Recorder. Spigot II Tape captures and outputs video at 16-bit color depth (thousands of colors), the optimum depth for QuickTime. It supports composite and S-Video in and out to tape.

You'll also need a TV monitor that supports regular North American NTSC standard. Spigot II Tape's output is designed for viewing on TV, and you'll see smoother movie playback on TV than on an RGB monitor. If you have a TV monitor that supports S-Video in-out you'll see an improvement in video quality.

Spigot II Tape is a full 12-inch NuBus board, hence will not fit any "pizza-box" Macs such as the Quadra/Centris 610 series, 660AV, or the Power Mac 6100. You'll need a Mac II series such as a IIci, IIcx, IIx, IIfx or IIvx, Quadra 650, 700, 800, 840AV, 900, or 950, or a PowerMac 7100 or 8100.

But why put a Spigot II Tape in an 840AV when 840's already have video in-out? Spigot II Tape will give you bigger movies at higher frame rates than the built-in digitizing hardware on the 840AV. Besides, the 840AV will give you the best frame-rate performance from Spigot II Tape of all 680x0 NuBus Macs.

SuperMac says you should have a hard drive that sustains read and write performance of 2.5 MB per SECOND if you hope to get optimal 30 frames per second from Spigot II Tape. As of this writing the only Mac that can consistently support

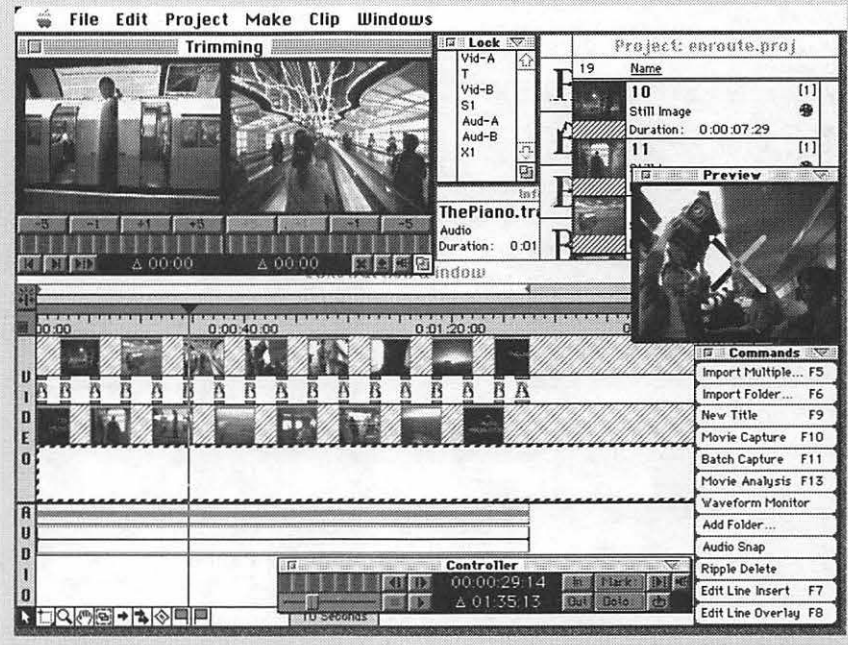


Spigot Rough Preferred: *Several compression options are available for making movies from within ScreenPlay II. Spigot Rough is the preferred compression option for best output quality with Spigot II Tape.*

ScreenPlay II, and your choice will depend on production features you need at a price you want to pay.

All Together: The Field

As a general purpose editing program, Adobe Premiere 4.0 leads the pack in features and popularity, but Avid's VideoShop 3.01 offers many of Premiere's abilities at a lower price. From Radius there's QuickFlix 1.1.1, a bargain-priced basic editing package, and sibling VideoFusion 1.6.1, a popular and powerful special effects editing program. After Effects and After Image are special effects editing programs from the CoSA division of Adobe. All programs here except After Image ship in Power Mac native versions.



Premiere's Windows: Adobe Premiere is the most popular QuickTime editing program. The new trimming window, top left, allows frame-by-frame editing of movies, and the main movie construction window offers an easy-to-understand timeline approach.

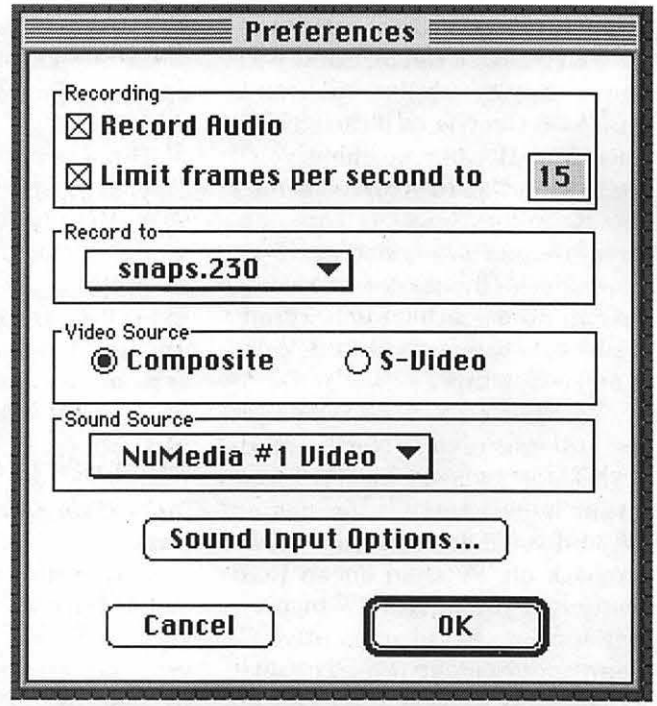
this much data transfer from NuBus to hard drive is the 840AV. (SuperMac says a Quadra 950 will get about 25 frames per second.)

This is because the 840AV can move data to and from a SCSI hard drive faster than any of the other 680x0 Macs, or the current PowerMacs (7100/66 and 8100/80.) This at least according to SuperMac and Radius, producers of the most popular QuickTime boards. According to SuperMac, even the PowerMac 7100/66 can currently only produce about 20 frames per second with Spigot II Tape. Part of the PowerMac performance problem is that Spigot II Tape software still runs in emulation mode.

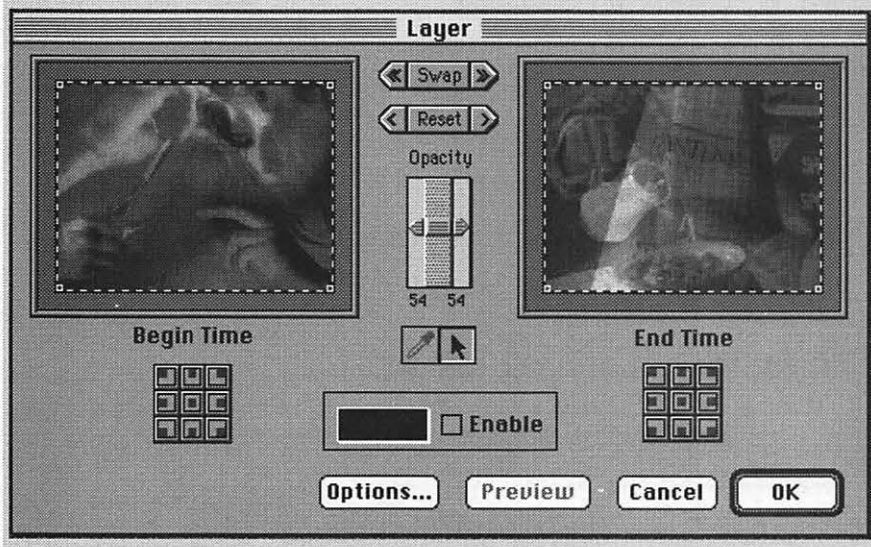
Sorting Out Software

Besides placing Spigot II Tape into a NuBus slot, you'll also need to install a VDIG (Video DIGitizer) extension into your System folder. A program called ScreenPlay II comes with, and provides tools for capturing and printing video. ScreenPlay II also captures full-screen still frames (both video fields in PICT format) from the incoming video signal. Spigot II Tape requires System 7.1, QuickTime 1.6.1 or 1.6.2, and sound hardware should support Sound Manager 3.0.

Screen Play II offers four video capture window sizes. They include 160x120, 240x180, 320x240, and 640x480. All except 640x480 will



Preferred Signals: *ScreenPlay II preferences box allows choice of composite or S-Video incoming signals, and also allows choice of sound input devices and frame rates. Always record incoming video to your largest, fastest hard drive.*



QuickFlix Layering: Though light in price, Radius (VideoFusion's) QuickFlix offers an array of special effects, including this layering module, which allows compositing of images and movies on one another.

Premiere 4.0: Favorite Early Entrant

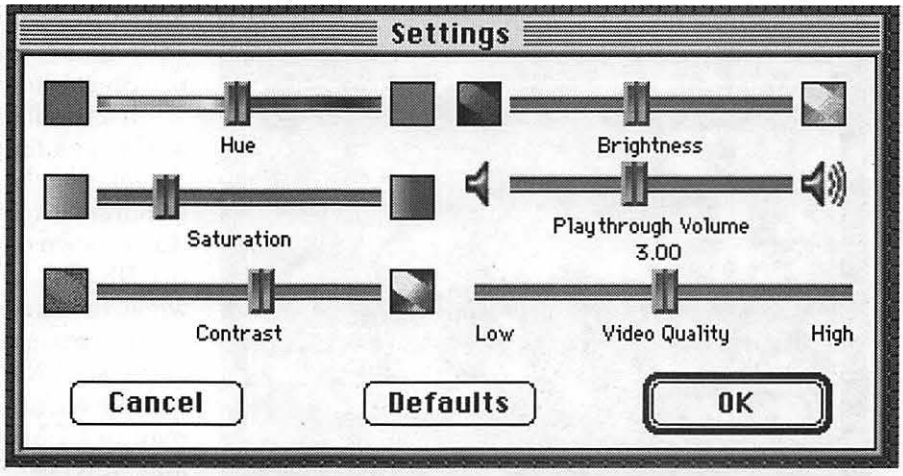
Premiere first came bundled with SuperMac's original VideoSpigot (the first low-cost QuickTime digitizing board), when QuickTime debuted three years ago. Just as PageMaker and the LaserWriter helped the Mac define desktop publishing, QuickTime's arrival gave Premiere and VideoSpigot the chance to redefine the Mac (and desktop personal computers) as good for more than producing "ink-on-paper" output.

QuickTime's evolution to version 2.0 has allowed postage-sized video windows to get larger, and action has become much smoother. At the same time, Premiere has matured into a full-featured, robust, easy-to-use

capture motion video, as the largest window is meant for still grabs. The two smallest windows will produce 30 frames per second on many Macs, it's when you get to 320x240 windows that Spigot II Tape taxes hardware abilities.

Once installed, Spigot II Tape allows the NTSC monitor to act as a second desktop monitor. The TV will show up in your monitor's control panel, and it's actually possible to use the TV for other work when not actively printing or viewing QuickTime projects. You'll soon find image quality on an NTSC monitor is not of the same quality as an RGB monitor, and you may choose to use the TV only for your Quicktime projects.

Software setup is fairly simple. As with any of these bleeding-edge technologies, I had to fiddle with extension loading order and try different QuickTime compression and playback options to get best output. Printed instructions that came with it were fairly clear, but could have been more emphatic on how to get the best output using SuperMac's special QuickTime compressor.



Adjusting Your Signals: *You can vary six different aspects of the incoming video signal with ScreenPlay II's Settings box. It's also possible to use other editing programs for video capture such as Adobe Premiere or Video Fusion's QuickFlix.*

Spigot II Tape uses a proprietary SuperMac QuickTime compressor-decompressor (codec) called "Spigot Rough." It takes advantage of what SuperMac calls the "Photo-JPEG compliant" aspects of Spigot II Tape to produce very clean and smooth video. Movies made in

program that has helped Macintosh lead the desktop video "dynamic" data revolution.

Where Premiere excels is its easy-to-understand timeline editing approach, stability, support of timecode, and flexibility at controlling video recorders and cameras. Device control and timecode support allow automatic capture of predetermined sequences or "batches" of video clips to your hard disk, and this greatly helps keep your QuickTime projects manageable and organized.

Premiere's batch capture tools allow editing creativity: using the timecode written into videotape by some camcorders, you can digitize a series of precisely selected clips at a small frame size, say 160x120. Once you've created your edited masterpiece, batch capture allows redigitizing just the video clips you want at 320x240 for full-screen printing to videotape via Spigot II Tape's hardware zoom interpolation feature.

You can use third-party PhotoShop plug-in filters with Premiere to expand the range of special effects in editing (these include Kai's Power Tools, XAOS Tools' Paint Alchemy and Terrazzo, for example). Other new features include a "clipping window" for easy frame-by-frame editing, a "filter factory," so you can create your own effects filters, and you can now vary intensity of special effects and filters over time. Premiere 4.0 offers a "batch compress" option, to allow creation of a series of QuickTime movies unattended.

Premiere supports what's called "EDL" or edit decision lists. This means you can create a project in Premiere and take your source videotapes to a production house to make high-quality edited tapes. This feature is meant more for professionals or those with Hi-8, S-VHS, or better source materials containing embedded timecode.

Like other editing programs here, Premiere doesn't need video to make QuickTime movies. With the ability to import graphics, photos and audio, Premiere's titling, overlay, transition, and filtering tools offer flexibility to create dramatic movies combining most any visual or audio source.

Popular Mid-Size: *A great feature of Spigot II Tape (and ScreenPlay II) is the ability to capture at 240x180 screen size. This size currently is popular for CD-ROM authoring, so Spigot II Tape can be an affordable tool for lower-budget multimedia production work.*

Spigot Rough are much cleaner than any produced with Apple's software codecs, and you should always use Spigot Rough when capturing video.

It's possible to use a high-compression codec such as Cinepak for output, but quality pales compared to Spigot Rough. You can use any Apple QuickTime compressor to make movies, but other than Cinepak (to cut down data rates and file sizes or for authoring to CDROM), you'll find best results via Spigot Rough when viewing on TV or printing to tape.

The main downside to Spigot Rough codec movies is file size. My movies at 320x240 pixel screen size have been all at 15 frames per second, and they require 1.1 MB per second of playback. If you have a Mac with faster SCSI throughput than my accelerated IIci, you can expect higher frame rates and correspondingly higher file sizes per second of playback. Thank goodness hard drive prices keep dropping.

Editing Programs and Performance

Spigot II Tape has its quirks, and as long as you know them in advance, it's easy to work around and get fine quality output. For example, the only way to Premiere to compile a final movie once your production work is done.

VideoShop 3.01: Strong Competitor

The original version of VideoShop, from Diva, was a flexible editing program based on HyperCard. When Avid bought VideoShop a couple of years ago, it eliminated the HyperCard dependence and the redesign resulted in a speedup of operations and ability to handle larger projects. (Avid also produces desktop digital video editing systems for broadcast costing $50-100,000.)

If Premiere could be considered the "Quark XPress" of QuickTime video editing, VideoShop probably would be "PageMaker." VideoShop offers nearly 200 filters, transitions and effects, and also supports Photoshop plug-in filters, but unlike Premiere it's not used as the primary editing program by most QuickTime professionals.

VideoShop only supports external devices via what's called "Sony VISCA" control. You must buy a $300 Sony VISCA box in addition to VideoShop if you plan to control your camcorder when digitizing video, or to control VCR's when printing to videotape. Premiere allows much of this control by using a cable from your Mac's serial ports and by adding software plug-ins to Premiere's setup.

VideoShop has its advantages on Premiere: a storyboard view where Premiere offers only timeline view, QuickTime MIDI support, and transitions are compiled as you go, so it can take less time than

VideoShop's current version is 3.01, but you can get a full (not save-disabled) version of VideoShop 2.03 for $45. Just buy a newly published book from Hayden called "QuickTime: The Official Guide for Macintosh Users." It offers a great overview on how to use QuickTime 2.0, and VideoShop can be found on the accompanying CD-ROM. If you like the program, you can upgrade to the latest version for $79. The CD-ROM also includes Radius QuickFlix (see below,) and many other QuickTime utilities from Apple.

QuickFlix and VideoFusion: Separated at Birth

Both programs were created by VideoFusion, a 20-person Ohio firm acquired last year by Radius, the company that now markets and supports Spigot II Tape. QuickFlix 1.1.1 offers no-frills video capture and editing, VideoFusion 1.6.1 provides special video effects not found in either Premiere or VideoShop. QuickFlix offers most tools anyone will ever need to make movies, VideoFusion offers the tools pros need to make fancy-looking QuickTime movies.

In QuickFlix you get a solid video digitizing and editing program offering basic transitions like wipes and dissolves, scrolling title ability, several filter effects and some image compositing (layering) tools.

get optimal playback with Spigot II Tape is to use the ScreenPlay II application. I've used several QuickTime editing programs to capture successfully with Spigot II Tape, but the only way to get smooth full-screen playback is with ScreenPlay II.

For example, I've been able to automatically capture several segments of video from a Hi-8mm camera using Abbate's Video Toolkit Plug-in for Adobe Premiere. This device control plug-in allowed me to control the on-off playback of the camera and data capture by Premiere to create what's called a "batch capture" of several desired segments from tape. Spigot II Tape and its associated VDIG extension performed flawlessly when capturing video to disk this way.

But when attempting Spigot Rough codec playback to my NTSC monitor from within Premiere 3 or 4, playback quality was degraded by stuttering. This playback stuttering occurs in any QuickTime editing program I've used, including Avid VideoShop 2.0.1 and 3, VideoFusion's QuickFlix 1.1.1, or any QuickTime program that depends on the Spigot II VDIG (ScreenPlay II doesn't use the VDIG extension.) Solution: create final QuickTime movies using Spigot Rough codec and use ScreenPlay II for playback. All is smooth and very clean on the TV and tape.

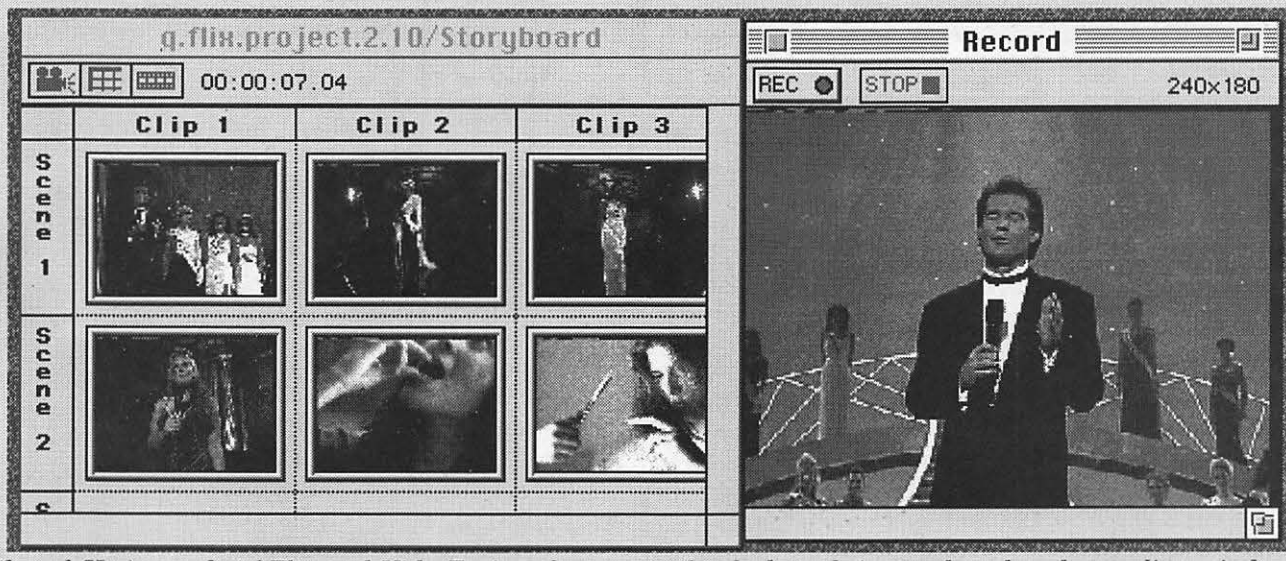
Spigot II Tape is picky about QuickTime version compatibility. (Maybe Apple and SuperMac/Radius will work out their differences by the time you read this.) Though Apple has released QuickTime 2.0, SuperMac claims its boards are compatible only with QuickTime 1.6.1 and 1.6.2. ScreenPlay II is said to not work under QuickTime 2.0. ScreenPlay II does break under QuickTime 2 when capturing video but I have been successful playing back movies authored under QuickTime 2.0. SuperMac claims QuickTime 2.0 has bugs, and software updates for Spigot II Tape VDIG and ScreenPlay II won't appear until a fixed QuickTime 2 does.

The Big Picture

Despite software and configuration specifics, and required use of ScreenPlay II for best playback performance, Spigot II Tape is a very good tool at a reasonable price. It provides bigger video capture than its predecessor, and produces decent quality video for a fraction of the cost of boards like VideoVision Studio.

QuickFlix is a great program for the money, and it too can be found on the CD-ROM with "QuickTime: The Official Guide" mentioned above. The book's CD-ROM includes a full Power Mac native (not save-disabled) version of QuickFlix, and a demo version of VideoFusion. Normal street price for QuickFlix has been about $100.

VideoFusion works better for creating special effects in movies after you've digitized video to disk, since it offers no tools for controlling external recorders or batch capturing. VideoFusion's main features include extensive and customizable special effects like morphing, warping, chroma keys, color effects, and customizable pans, zooms, and rotations.



Shared Heritage: QuickFlix and VideoFusion share a similar look to their storyboard and recording window modules. QuickFlix offers basic editing tools, VideoFusion adds an array of special effects.

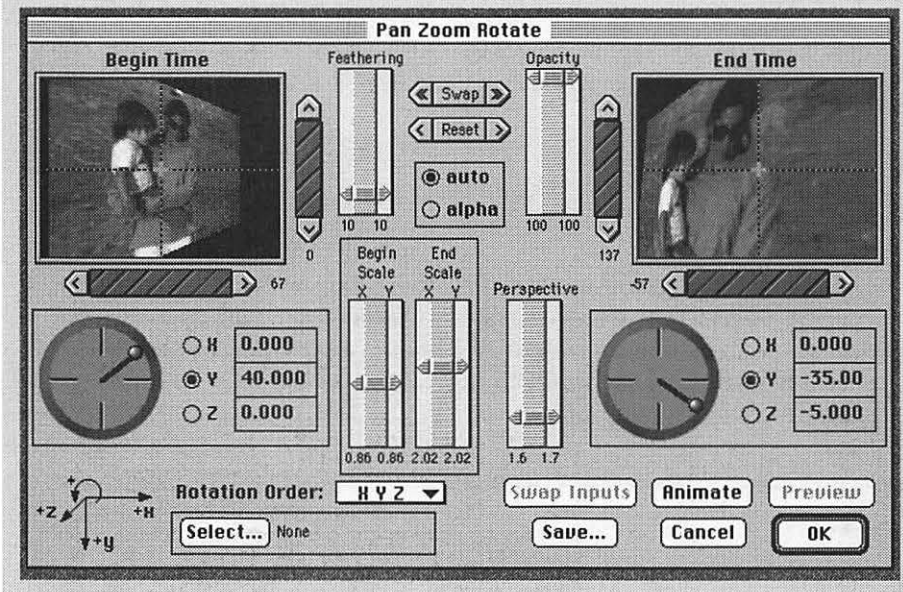
SuperMac claims a priority for full compatibility with QuickTime 2.0, I only wish they would hurry up and fix that. I also hope SuperMac can improve output performance when using editing programs requiring the Spigot II VDIG extension.

Beware, optimal performance with Spigot II Tape requires healthy hardware support. Spigot II Tape, like any of the QuickTime capture boards that produce larger than postage-stamp size video, will require a healthy investment in CPU power, installed RAM, and fast hard drives. Realistically, you'll need at least 20MB of installed RAM (RAM Doubler will not help,) and a Mac with a fast 68040 processor. Plan on a hard drive of at least 1 Gigabyte size, preferably one of the newer AV drives that provide smooth capture when digitizing video.

Spigot II Tape
SuperMac Technology Inc./
Radius Inc.
215 Moffett Drive
Sunnyvale, CA 94089-1374
Phone: 408-541-6100
Retail Price: (12/94) $849

Quicktime video capture and output board. Requires 68030 or 68040 Macintosh with full size (12-inch) NuBus slots. Power Mac 601 compatible. Requires System 7.1, QuickTime 1.6.1 or 1.6.2. NTSC TV monitor required. 8MB RAM minimum, 12 MB or more recommended. ■

Dennis Dimick helps mediate discussions of QuickTime and multimedia on the TCS. He lives in Arlington, VA, with his wife Kim Kostyal and daughter Claudia. Besides the TCS he can be reached by Internet e-mail: ddimick@aol.com



Pan-Zoom-Rotate: VideoFusion's most complex special effects windows is pan-zoom-rotate. Though complex appearing, VideoFusion's special effects modules are easy to master.

After Image and After Effects: Specialists

The Company of Science and Art, a small Rhode Island firm now a division of Adobe Systems, has produced in After Effects 2.0 the most expensive and acclaimed QuickTime movie-making program going. (CoSA was owned for a while last year by Aldus, before Aldus was bought by Adobe.) At $2,000, After Effects is used daily by professionals to produce high-quality special effects for television broadcast and film production.

Adobe recently released a scaled-down version of After Effects, called After Image 1.0. Currently available as a 680x0 (Power Mac emulation only) application, After Image is based on the imaging engine of After Effects 1.1, and offers most of After Effects' tools at less than a quarter of the price.

After Effects 2.0 creates movies with images up to 4000x4000 pixels, while After Image 1.0 is limited to 640x480 screen size. Like VideoFusion, After Effects and After Image are designed mostly for "post-production." You'll need a general editing program like Premiere or VideoShop for video capture and project organization.

What makes After Effects and After Image special is their ability to easily create layering and compositing, animation of graphics, and complex visual effects beyond the level of any other QuickTime program. After Effects excels at broadcast and film quality output, After Image is meant for multimedia producers whose delivery medium may be on-line or CD-ROM.

If you think you're interested, check with Adobe Systems, as neither program is easily found via catalog resellers. (DTP Direct of Edina, MN recently was selling After Image for less than $200, which is a steal for what it offers.)

It's Official: Buy the Book First

If you're just getting started in QuickTime, buy "QuickTime: The Official Guide for Macintosh Users," new Hayden book. It has full versions of QuickFlix and VideoShop, and either program may be all you ever need. If you think you're interested in more robust projects, take a look at Premiere. It costs more than VideoShop, but Premiere's extra features and flexibility are worth the price. If you want to become the next MTV-style video producer via the Mac desktop, VideoFusion and After Image will help you make your artistic mark.

Product Information

(Street prices are quoted approximately from a major vendor's mail order catalog for January 1995, and are for informational purposes only.)

Adobe Premiere 4.0
Adobe Systems, Inc.
1585 Charleston Road
Mountain View, CA 94039
Phone (800) 833-6687
CompuServe Forum: Adobe Apps
Street Price: $490

Avid VideoShop 3.01
Avid Technology, Inc.
Metropolitan Technology Park
1 Park West
Tewksbury, MA 01876
Phone (800) 949-2843
America Online: Avid NewMed
Street Price: $260

QuickFlix 1.1.1 and Video Fusion 1.6.1
Radius Inc.
215 Moffett Park Drive
Sunnyvale, CA 94089-1374
Phone (408) 541-6100
America Online: Radius
QuickFlix street price: $100
Video Fusion street price $450

After Effects 2.0 and After Image 1.0
CoSA, a Division of Adobe
411 First Avenue South
Seattle, WA 98104
Phone: (206) 628-4526
America Online: CoSA
After Effects retail: $1995
After Image street price: $200-400

"QuickTime: The Official Guide for Macintosh Users"
By Judith L. Stern and Robert A. Lettieri
The Don Crabb Macintosh Library
Price $45 ISBN 1-56830-129-4
Hayden Books
201 West 103rd Street
Indianapolis, IN 46290
Phone (800) 428-5331
America Online: Hayden Bks ■

VideoShop's Titling: General purpose editor VideoShop holds a strong hand when it comes to titling. You can easily create scrolling titles directly on clip windows.

Software Review

Anything Word Can Do Nisus Does Better

Review of Nisus Writer 4.0

by C. R. Clowery

ONE SUMMER night in 1989, Paul, our local computer savant showed me a brochure for the original Nisus. The first look stretched the limits of my electronic imagination. There was an integrated graphics layer that could rotate text 90°; there were ten (count 'em) ten clipboards, limitless levels of undo, Find and Replace options that could locate anything you could define and swap it for anything else, and an entire language for writing customized macros. The program was creating a sensation among MacWrite and WordStar users. Clearly Nisus's authors Jerzy Lewak and Vic Romano understood and had answered the real needs that arose when serious writers switched from typewriter to computer. The Nisus founder was a professor in the University of California (San Diego), and the program carried a demanding intellectual's quality. It was not pedantic, mind you, it was a power-house. *Nî'sus* means effort, it is a noun of action, from Latin *niti*, to strive, to endeavor. Nisus was crafted with a vision, and it could show me ways to accomplish tasks hitherto impossible from a keyboard.

At the opening screen you meet the Nisus Writer mascot who looks like Hermes, the messenger god. He's a writer, he's got power, he's flying through the page frame, carries sharp pen in hand and wears a winged hat. There is a rumor that if you invoke his muse as the icon comes up he'll bless your project from inside the computer.

Figure 1. Nisus logo

I was fascinated by the amount of features packed into this power tool. For example, there are menu item changes waiting when you hold down the option key on four of the seven basic menus. Open the Font menu while holding the option key and you see WYSIWIG samples of all your font styles. Hold down Command/Shift and Nisus Writer toggles a third layer of menus and goodies. Over time I saw that Nisus set high standards, and seemed to grow with my skills. New features appeared when I was ready, as if Nisus had anticipated my future needs and programmed functions and capacities that I would surely want as my writing improved.

With the transformation to Nisus Writer 4.0, the Nisus I admired six years ago has evolved and established its authority in a new dimension of communication. CEO Jerzy Lewak says that Nisus Writer 4.0 does not just add new features, it re-defines word processing. I believe he means that the field of word processing has grown more complex, and has evolved a new paradigm of how we exchange knowledge and experience. For example, multimedia involves other senses, and different portions of the brain are now engaged as we process information on the computer. Sound, motion, space and color have expanded the experience of communicating beyond two-dimensional text documents. Nisus Writer is the first major word processor to register awareness of this sea change and respond with the important tools, integrated in a single package.

Nisus is more than a word processor, it sets the standards and introduces new parameters of communication in several respects. In Nisus we have the ability to write text, and to illustrate it with powerful graphics tools. We can lay out text for publishing, or watch our story roll by in a QuickTime movie. Moreover, Nisus Writer delivers the ability to make your Mac speak French, Spanish German or Italian. Japanese will be added soon. (Never mind that the digitized voice still sounds like the Talking Moose.) This is yet the dawn of talking computers. Read on.

Japanese Language Capability

Nisus Writer's outstanding feature is its multi-lingual capabilities. Thanks to Apple's WorldScript technology, Nisus lets

you write and talk to the world in 19 Romanic, Middle Eastern and Asian languages! Here Nisus's distinction appears: it is no rival among the other major word processors. The skillful implementation of Asian word-processing power via Apple's Japanese Language Kit began for Nisus several years ago with the release of SoloWriter, Nisus's pre-WorldScript, localized version of their document processor. Now Nisus Writer delivers most all of SoloWriter's Kanji-savvy features except vertical text running top to bottom. If your document isn't overly long, then text can be dropped into a graphics text box and dragged vertical. Looks so good nobody would guess that you did it manually!

Last Year's Favorite: Brand X

Four years ago I abandoned my CPM Digilog machine for early WinWord on a 286, and for weeks after the switch, my fingers reflexively reached for the WordStar diamond. Last year when I stopped using Word and switched to Nisus 3.4, I wanted the tables feature, the "last opened" file access, and the custom-made toolbar. But now with the advent of NisusWriter 4.0, I no longer need to go back to Word. No matter my opinion of Microsoft, Word continues to be a reliable, if limited tool. MacAcademy's training seminar data for last year show that seven out of ten people who process words currently use Microsoft Word. People are picky about their preferences in word processors, and it is hard to avoid reluctance when you are considering moving to a new one. But I predict many writers who have been looking for an alternative, are going to change from Word to Nisus Writer.

The reason is that with release 6.0, Word has grown outrageously fat and Microsoft has spoiled a good thing. Size is no measure of quality, and Microsoft has designed loaded this program like a trash barge. Word has bulked itself right off my hard drive.

Nisus Writer has added features: cutting-edge speech capability, (Text to Speech by BeSt Speech of Berkeley), equation and table editors (Tycho TableMaker 2.2.2, and MathType 3.0), presentation tools, color graphics and movies. At the same time, instead of swelling up to accommodate these improvements, Nisus Writer has refined its interface and made it easier to use than ever. Nisus has slimmed down and speeded up, while at the same time integrating many enhancements that set state-of-the-art standards.

Nisus handles mundane tasks as well as the other major word-processors, and makes subtle improvements to solutions that others overlooked. The Nisus team consistently displays a commitment to excellence, and a high standard of integrity. When it adds a feature the competition had first, Nisus goes one better. For example, I like Word's "last opened" file access on the Edit menu. Nisus Writer added it, and improved on Word's version with an option to select Essential Items. Again, users felt that Word's mail merge was the stronger feature, so Nisus Writer 4.0 included a simple, and elegant mail merge, and to top it off, added FAX merge, FAX cover sheet templates. Nisus then put them on a floating tool bar, which you can conveniently drag over next to a merge project.

Another example of the raising of standards: those of us who were used to Word's table function requested a modular table tool. Nisus licensed Tycho, which is as fancy a table utility as you will find in the Macintosh world. Then to show sincerity, Nisus announced in the table editor manual that not all of the regular Nisus features that you have come to expect are available in the Table Editor: you only get one level of redo and undo, macros won't all work at full strength inside the tables, and you can't use noncontiguous selection!

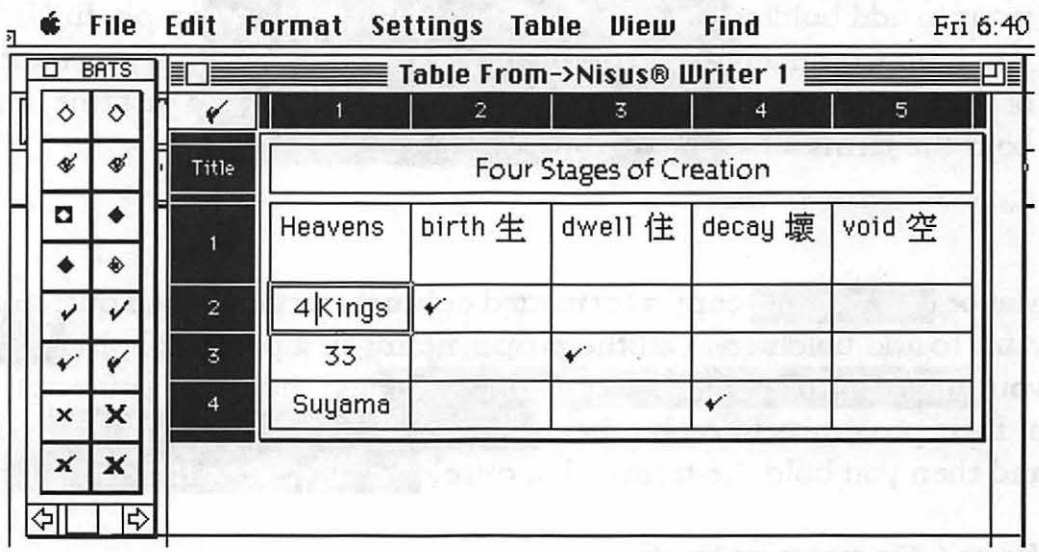


Figure 2. Table Tool

As if other processors had these features in the first place? For Japanese in your tables, simply reach for the WorldScript icon, change the font and type away. The results will please your eye!

Yet another example of bettering the original is Nisus's control of the windows on your desktop. I frequently used MS Word's split window feature to cut, paste and integrate parts of different versions of a document. Nisus lets you split windows vertically as well as horizontally, and allows you to synchronize the scrolling of those windows. You can stack or tile open windows like the Windows platforms' File Manager; you can number lines or make text invisible as you wish. All these features may take a bit longer to learn, but it is time well-spent. Who would go back to a less able processor after experiencing the power and convenience of the tools built into Nisus Writer?

WorldScript has been part of the Mac System for nearly two years but, Nisus is the only major product that has addressed it. Apple Pacific acclaimed Nisus for the Best WorldScript technology implementation of 1994. Nisus won the award for its ability to run text left to right, as usual, for writers of Romanic languages, but then also to run text from to left within the same document. If you work in Hebrew or Arabic or Sanskrit, Nisus lets you type from right to left, with full utilities, including proofing tools, find and replace, macros and indexing. Then, if you want to add traditional Chinese or Japanese or Korean, Nisus will run your text in two-byte *kanji* characters, integrating them smoothly into any other language. You need not switch to a different system or leave the application. How did they get text to flow right to left, and also to interface seamlessly with standard, left to right European-style conventions? If you are the Nisus Writer's winged-cap mascot, you do it perfectly, while including all the other features: PowerFind, graphics, macros, tables, and equations, and you make it look easy. Bravo!

Sound

Nisus Writer's new interface includes text, graphics, layout and sound layers. If your Mac allows, you can record your own voice with audio tape clarity, and leave a voice-note to accent your file. Anybody with similar equipment can hear your message the way you wanted it said.

But Nisus does sound one better. Type the following sentence, select it and under the Sound menu, choose "French Voice", next to the French flag. Then click the speaking lips icon on the "text to sound tool bar" and your Mac, with a computerized Parisian accent that sounds not much, but a little like Inspector Clouseau or Jean-Paul Belmondo, will say the following for your disbelieving ears,

Alphonse: *"Zut Alors! Excusez-moi, vôtre ordinateur, il brule, vous savez?"*

Gaston: *"Comment? Non, merci, je ne fume pas. Ici, c'est interdit de fumer."*

Translation:

A: (Gosh! Pardon me, do you know that your computer is on fire"?

G: "What? Oh, no thank you, I don't smoke. It is forbidden to smoke here.")

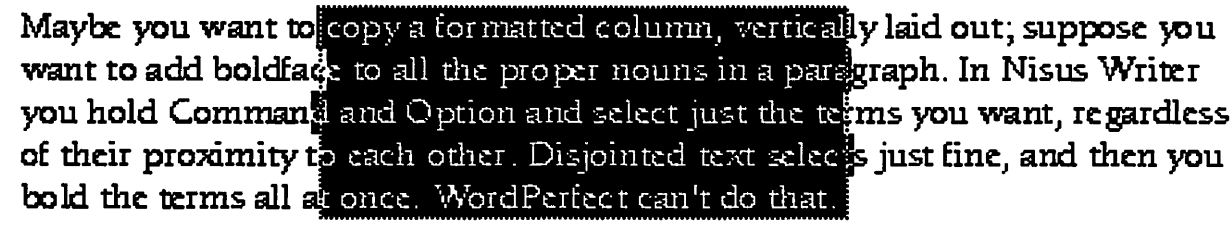


Figure 3: Vertical Selection

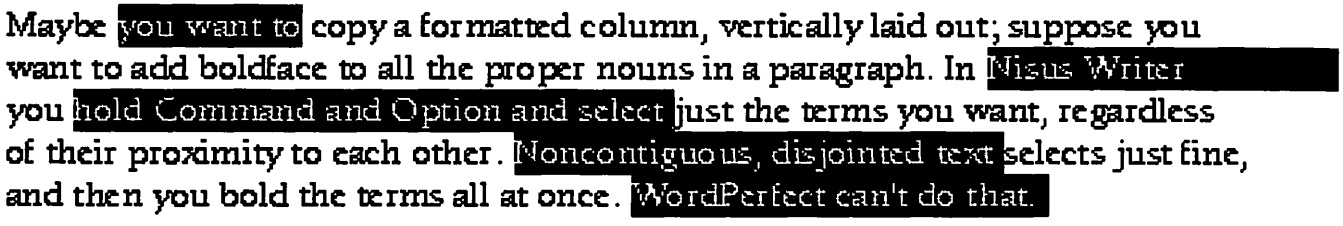


Figure 4: Non-contiguous Selection

When you click on "speak", your machine will read your passage briskly in a digitized, synthetic European accent. Some people hate the tinny sound, others can't stop listening. Should you ask it to speak with a Spanish accent, Señor Macintosh will read tortilla as *tortiEEya*. It reads "*Ciao, bambino*!" like a mechanical Italian. This skill comes to you courtesy of our local Berkeley Speech Technologies, and I understand they are working on a Japanese voice. Soon your Macintosh can say *Ohayoo gozaimasu* like Toshiro Mifune in *Yojimbo*. Just the thing for training in prepartion for Foreign Service posts! But don't mix up languages with voices. If you click on the German flag when you've written French text, or vice versa it won't please your ears.

Features Roundup

Here is a roundup of the most famous, familiar Nisus features from earlier versions, that once you try, you will wonder how you did without.

Limitless Undos and Redos

If Nisus Writer is your processor, and you realize you cut and pasted the wrong paragraph five minutes ago, save your document, then start back through the levels of undo until you reach the faulty action and reverse it. Click on Revert to Saved under the File Menu or jump back manually through the other redos to where you left off. The lost paragraph is back. Try to do that in Word.

Vertical and Non-contiguous Text Selection

Maybe you want to copy a formatted column, vertically laid out; or suppose you want to boldface all the proper nouns in a paragraph. In Nisus Writer you hold Command and Option and select just the terms you want, regardless of their proximity to each other. Non-contiguous, disjointed text selects just fine, and then you blacken the terms all at once. Can WordPerfect do that?

Multiple Clipboards

This feature spoils you for other word processors. You may be on-line and want to copy four different e-mail messages into memory. In Nisus Writer you simply open four clipboards, one per message, and paste them back in any order when you logout. The clipboards are fully editable, with all usual Nisus features available, and there are ten in all.

Macro language

Nisus bundles many macros with the program. Perhaps you don't like the conveniences they thought of? Write your own. The Macro language lets you tell Nisus to do what you want it to. People regularly write creative macros and post them to the Nisus Software/Paragon library on CompuServe (type GO MACAVEN), or try the Nisus forum on America Online. If you want your Mac to do something nobody's thought of and you can't script it yourself, Nisus will write a macro to your specs for a fee.

PowerFind

PowerFind is discussed in a 200-page Advanced Features manual that explains how to locate all passive verbs in a document, how to change the font of all capitalized words, and how to highlight every paragraph that contains a semi-colon. Perhaps you need an item somewhere among various versions of a project in progress. If you can define the key idea, Nisus Writer's PowerFind will search through even unopened files to seek out such definition resistant items as phone numbers, character graphics, and bold words. Other companies liked

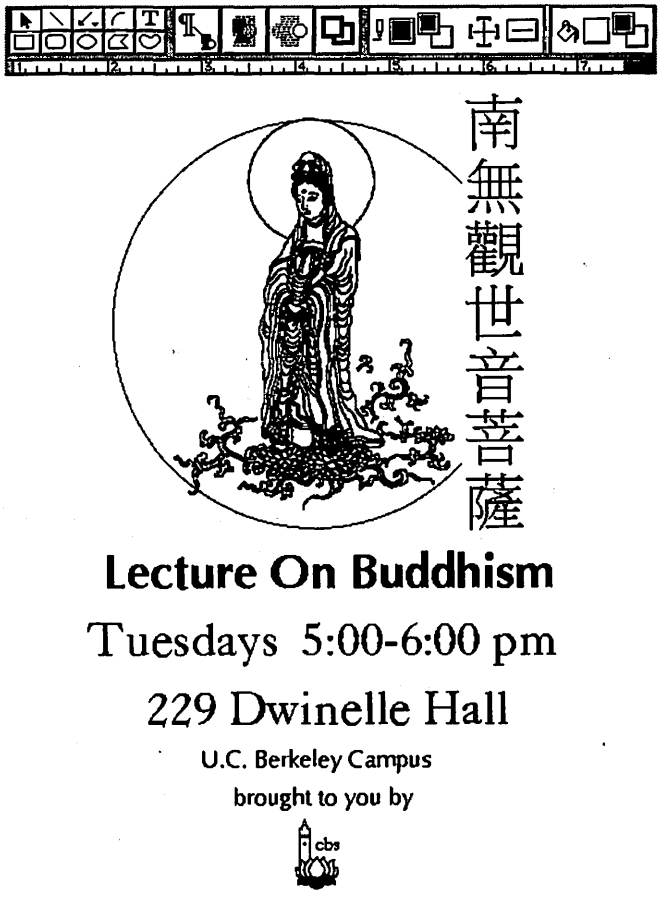


Figure 5: Graphics Tool

this feature enough to copy it from Nisus. Some people will recall several years ago when Word and WordPerfect finally came up with a definable find and replace. Which word processor had it in 1989? With PowerFind and PowerFind Pro's wild-card, Nisus Writer has the most sophisticated Find and Replace functions available.

Graphics

The Nisus feature I have come to depend on most, after the Chinese Language input, is the graphics layer. The original Nisus included text rotation, full drawing tools, importation of EPSF, MacPaint, TIFF and PICT graphics, scaling and inversion of images, and layout capabilities to produce grab-ya graphics. I can create advertising posters that include line art, multi-lingual text, wrap-around text, borders, and color with surprising ease. Here is where the *kanji* characters shine!

Floating Tool Bars

I used to write in Word because I liked the convenience of Word's tool bar and the ability to access tools by clicking an icon, one level up, without having to drop a menu down. Now I write exclusively with Nisus Writer because they put nine essential tool groups and functions on floating tool bars that change shape from horizontal to vertical.

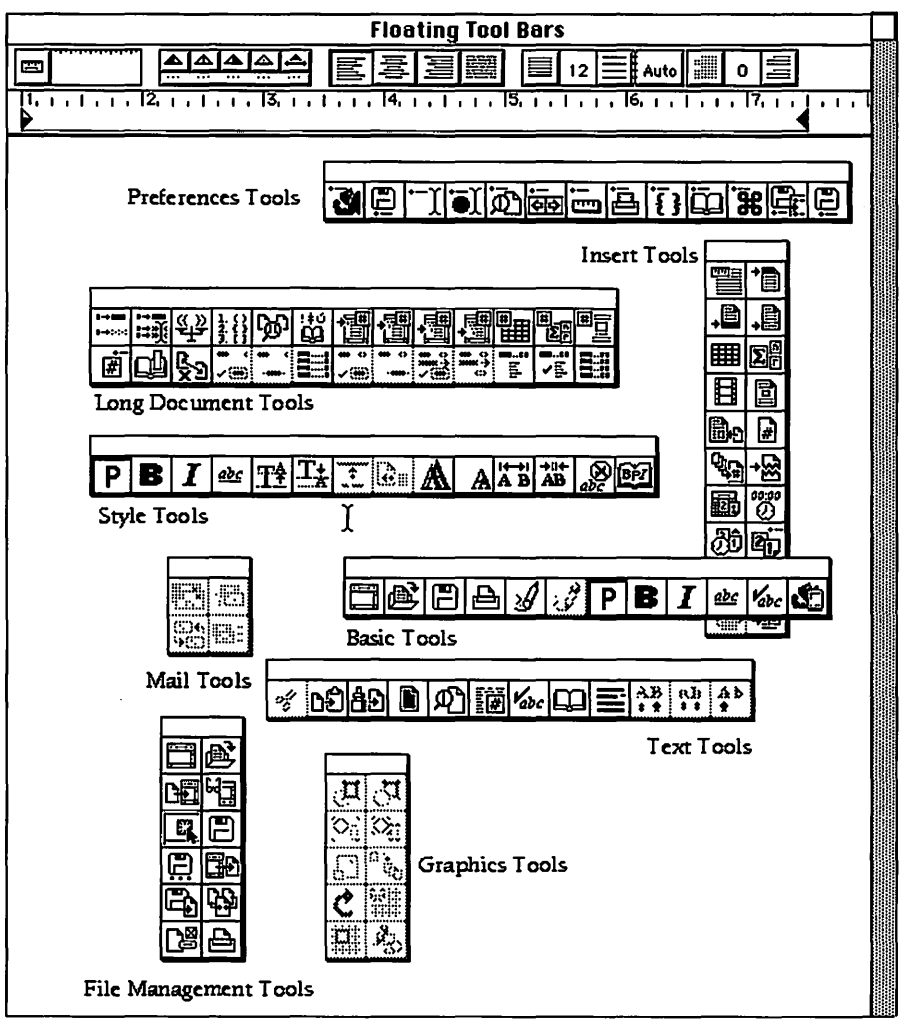


Figure 6: Tool Bar

Manuals

Nisus Writer comes with five manuals, all of them written completely in Nisus. Including the Nisus Table Editor. This new module use to be called Tycho, and had its own manual, done in QuarkXpress. Nisus exported it from Quark as a Microsoft Word document, and then imported the manual into Nisus Writer 4, where it was included in the suite of Nisus manuals. FrameMaker is not the only processor strong enough to handle book-length documents, Nisus's reference volume was a 5+Megabyte file, with a 155K index file merged in. Support for books and long documents includes indexes, glossaries, and automated searches.

The Macintosh is essentially non-threatening and intuitive. Yet I can recall the moments of panic that I, as a beginning computer-phobe felt when first staring into the electronic window. Nisus Writer begins its documentation in a sensible way. Instead of warning newbies that they must already know how to navigate the Macintosh interface, the Nisus Basics Manual steps us through the important Mac operations without condescension, and without a wasted word. The telling moment was revealed upon realizing that after reading the manuals and experimenting with the Nisus version of my system's virtues, I found myself using features of Apple System 7.0 and 7.1 that I had never grasped in Word, such as .Publish & Subscribe, and Frontier Scripting. The clarity and ease of the Nisus implementation showed their use and value. The manuals are marred by occasional typos and errors, probably due to the rush to get the thousands of pages of hard copy

done by deadline. For collectors of Nisus arcana, please not that before it was detected and fixed, early versions of this release contain a misspelling in the Printing Preferences menu. (*Attrubutes*).

The Advanced Features manual explains also the Macro feature, tells you how to handle Frontier scripts, and how and why many software engineers prefer to use Nisus for programming. I understand that for those who never read manuals, MacAcademy training videos for Nisus Writer will be available soon.

Numbering

The Numbering feature further implements Arabic and Hebrew systems, and gives you a choice of customizing your lists of tables, chapters, graphics, sections, and sub-subsections, including six definable blocks and pages including automatic numbering. You can keep track of them in Arabic numerals, Roman (upper and lower case), Alpha (upper and lower case), Abgadhawaz, and Hebrew styles.

Equation Editor

Nisus incorporated DesignScience's MathType as the Nisus Equation Tool, which is an intelligent mathematical editor that allows you to build up complex equations and import them into a document.

On-line and Balloon Help

The on-line help does its job, and lucidly explains how to use various features. I couldn't, however, find on-line help for the Compare Editing Tool. Ordinarily I turn off Balloon Help, but I found that ballons help identify the icons on the floating tool bars. Here is where you will get instructions on using Nisus's formidable array of ingenious text tools such as cross-referencing and marking, automatic

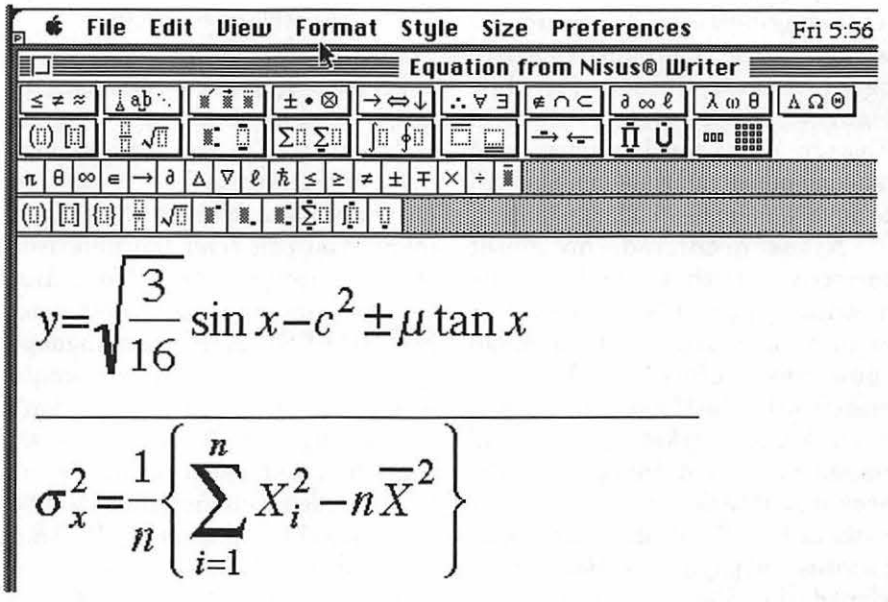


Figure 7: Equation Editor

indexing with hyper-links to index entries, "place page" with its hyper-text-like capacity to update sequential versions of a subscribed document, and Character Graphic, which inserts pictures that behave according with the line-height in your paragraph.

Finally, Nisus Writer is System 7.5 savvy, and will incorporate the advances in that new collection of gadgets.

The Multilingual Language Processor

To launch into multilingual European and Asian language word-processing, you need various combinations of Apple's Chinese and Japanese Kits, Nisus's Language Key, and/or Nisus's language modules. Bear with me while we sort it out.

For each of the Romanic, i.e. Latin-based European languages you need a Language Module. Modules include proofing tools: dictionary, thesaurus, hyphenation, user dictionary, and keyboard layout. Japanese requires that you purchase Apple's Japanese language kit separately. For certain languages Nisus requires a separate Language Key, which they will sell you for about $100.00. The language key includes a hardware lock called a PetLock and the software extensions which will enable all the languages that need the key: They are: Arabic, Hebrew including Yiddish, (Yiddish, by the way requires special fonts that you must obtain separately); Farsi, Chinese (buy Apple's Chinese language Kit separately), Korean, (buy the Korean operating system separately); Cyrillic (which includes Russian & Bulgarian); and Eastern European, (which includes Czech, Polish, and Hungarian). Diplomatic Corps professionals and State Department secretaries have been waiting for this program.

Why the Language Key?

The language key is a euphemism, market-speak for "hardware lock" called a PetLock for which Nisus holds the patent. You need to plug the language key into an ABD port (the keyboard, or the mouse for instance) before you can work in Arabic, Chinese and other non-romanic languages

(excluding Japanese). Can you guess why? Because the countries where people speak Chinese, Arabic, Hebrew, Korean, Cyrillic and Eastern European languages and use computer software, are known to have high rates of software piracy.

Nisus predicted, no doubt correctly, that they would sell only a couple copies of Nisus Writer in certain Near and Far East Asian countries, before the Russian underworld, the Hong Kong Triads, other black market types would recognize a good thing and take over distribution of NisusWriter without benefit of such niceties as licenses and payments. Before they signed the distribution contract, retailers in the Middle East, who know their market, demanded that Nisus ship the lock with the software. Software pirates can drive manufactures out of business, and this is rude reality. Plug in your PetLock and process your multilingual documents, friends.

Personal Experience with the Language Key

Because I used Nisus Complete Flag 3.4 with Chinese and Japanese language kits on my Mac, I learned to live with the hardware lock. I plugged in my Pet Lock between keyboard and Desktop Bus port a year ago, when I installed it and that was that. I understand that if you use it without the PetLock, you get the words Nisus Demo printed across every page you print, or else the WorldScript language module remains gray, and simply doesn't activate on your desktop. Nisus has introduced a new smaller Petlock, with the release of Nisus Writer 4.0, and has streamlined the software lock so that any Romanic language can still function fully without it. If you re-install your software and forget to pack the language key, only the copy-protected languages will be unavailable for use.

Multilingual World

One of the defining features of America's first two centuries of nationhood has been our linguistic isolation. In Europe, for instance, drive any direction for an hour and the road signs change languages. (okay, you can read the bilboards everywhere: Coke and Nike). But we drive for days East and West across the USA and hear no language spoken but English (some would argue that in Brooklyn they don't speak English). Recall, however, that in recent memory Americans have needed to understand and be understood by speakers of Korean, Vietnamese, Somalian, Panamian Spanish, Arabic, Farsi, and Hatian French. Our important business partners now also speak Japanese and Chinese. Since NAFTA, shop foremen have to understand Mexican Spanish and Quebecois French, and the Macintosh this was composed on was assembled by folks who speak Singapore Cantonese and Irish Gaelic.

Part of America's maturation as a member of the global community in the next decades and perhaps a factor in our continued economic survival will be our willingness to learn to speak and write on our computers in foreign languages. Up to now American's attitude has been that anybody who wants to buy our blue jeans and burgers had better learn English. That attitude won't work in the new era of multi-national corporations. Any more, the plant is overseas, and the workers on the line all speak something other than English. Clearly, to sustain our survival in the marketplace, Americans must do what one does when you join a new community: you learn the local talk. Since so much of our commerce has come to rely on computing skills, we aren't going to leave our computers behind when we do business with Mr. and Ms. Gonzales, Prof. Takahashi, and Supervisor Ivanovitch. We must learn to process foreign languages on computers!

A distinctive aspect of dealing with Nisus is that its creators are human beings who credit each other for their work, and who step forward to explain its use. The founder wrote two pages of acknowledgements to let us know who to thank for what helpful time-saving gadget. Nisus Writer came to us from people who care about communication. If we can understand what people are saying when they speak, and if we can write to them in their own tongue, it reduces the chances that we will go to war with them. Jerzy Lewak's vision of Nisus Writer, with its thoughtful linguistic functions may lead the tribes and nations closer to understanding. ■

Requirements:
Macintosh SE or later with a hard drive.
Mac OS 7 or later
Language Key requires OS 7.1 or later
2 Mb of available RAM, 5 Mb disk space.
Multimedia features may require more memory.
Suggested price: Nisus Writer 4.0 $275.00
Language key $100.00
Writer and Key bundled: $365.00
Language modules $49.00 each

Lunicus: A Review

by Jerome Williams

FORGIVE ME IF I don't write like the typical software reviewer, because I'm not. I'm just an ordinary user and my task is to review the interactive CD-ROM game "Lunicus" by CYBERFLIX. Well here goes.

First a little about the game and operation requirements. "Lunicus" is an interactive movie on CD-ROM by CYBERFLIX. The game uses 256 colors and dual channel digital sound. The high speed arcade CD-ROM product shows some really cool battle sequences all done from a 3-D point of view. The game's minimum requirements is a Macintosh II with 4 MB of RAM, a 256 Color monitor, CD-ROM drive, and a hard disk. I ran the game on a Centris (Quadra) 660 AV with 8 MB of RAM, Apple Color Monitor and 230 MB hard drive. The game can be run totally from the CD-ROM or a player can install a portion of the game software on your hard drive. For better performance, I recommend game installation if player can spare the disk space. The installer on the disk gives the player the choice of either large, medium or small installation. Note for all AV players, there is a patch you will need to run the game. I obtained my patch from America Online. I'm sure the patch is available on the WAP TCS as well.

The plot of the game is simple. Man uncovers an ancient alien artifact, repairs it, and uses it. But, unbeknownst to him, it is a two-way device and it signals the aliens that left it Of course the aliens are not friendly. The aliens launch an invasion of Earth, enslave humanity and that's where you enter the picture. You are located on the "Lunicus" space station orbiting Earth. Your job is to conquer the aliens and free humanity from its extraterrestrial captors.

The game play begins on "Lunicus" station Inhabiting the space station are the several individuals—cyber-puppets—that control the flow of the game. They are the typical people one expects to find at a space station, a commander, a super scientist, security guards and a couple of college kids. The space station is also littered with communication terminals. It is from these terminals that game play information is received. This is enough about the generalities of the game, let's get to the meat and potatoes.

The game is constructed in a level format. In this game, level is designated as a day. As expected "Day 1" is the easiest. The day begins with the checking of the communication terminal for the duty schedule, which usually includes a briefing from the commander in the briefing room. It is during this briefing that the player receives his mission assignment and learns of the nastiness the aliens have unleashed upon the planet. Following the briefing, the player proceeds to the weapons locker to obtain his armaments and cyber-suit. After which, he boards the hover craft and the mission begins.

The flight to Earth's surface is a wonderfully scripted QuickTime movie. In the movie, the craft

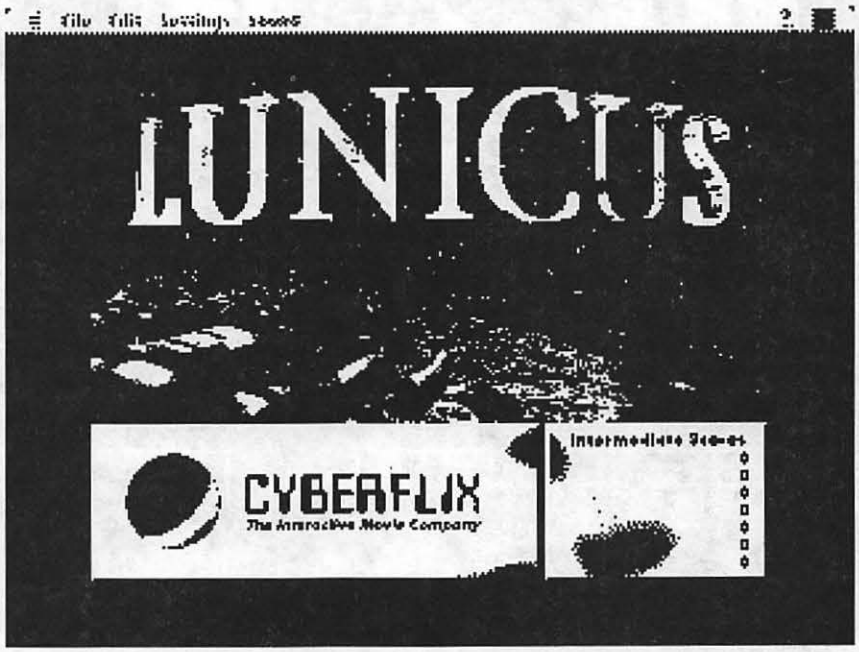


Figure 1. Lunicus Start-up screen

departs the space station and lands on the top of a city building. The movie ends when the player's character enters the building.

The building game play is set up in a maze format with several levels called floors. The player's goal is to blast the alien robots while working as quickly as possible to the ground floor. Replacement weapon ammunition, shields, energy bars and alien artifacts can be found behind hidden wall compartments inside the building. The player accesses these compartments by clicking on them with the mouse. The hidden compartments are disguised differently each game day but always the same within the building. The only twist, the compartments are not always in the same location on each floor. Once the player has worked his way to the ground floor, he exits the building and a QuickTime movie executes, placing him in a tank vehicle in the city.

Once in the city, the player traverses the city to destroy the target identified in the space station command briefing. I found this to be the most challenging part of the game, because accuracy matters. There are no hidden compartments to obtain ammo, shields and energy outside the building. Therefore, if a player runs low, he has to leave the tank and work his way back up the building floors to replenish his stores

With few exceptions, each game day follows this format, with some notable exceptions. One exception being the game play for "Day 6." I can't give any more details because that would ruin the challenge of the game. I can say, however, if the player clears this level, a nice surprise awaits.

During the game play, I did discover some areas of future improvements. The first is the aiming sites of the weapons. I found them to be a little off. With practice, I got used to the inaccuracy. The other drawback came from the cyber-puppets on the space station. While cute and attention getting, they contributed little to the game play. My last comment, while not a real drawback, but more like a comment, involved the musical score. While music came through beautifully on my Apple Design Speaker IIs and significantly enhanced the intensity of game play, after a couple hours, I found the musical score to be repetitive.

In conclusion, I found "Lunicus" to be intense and the 3-D graphics excellent. Even with the few noted drawbacks, the game is worth purchasing and will provide many hours of exciting game play. Stay tuned for my next article on the CYBERFLIX CD-ROM product "Jump Raven." ■

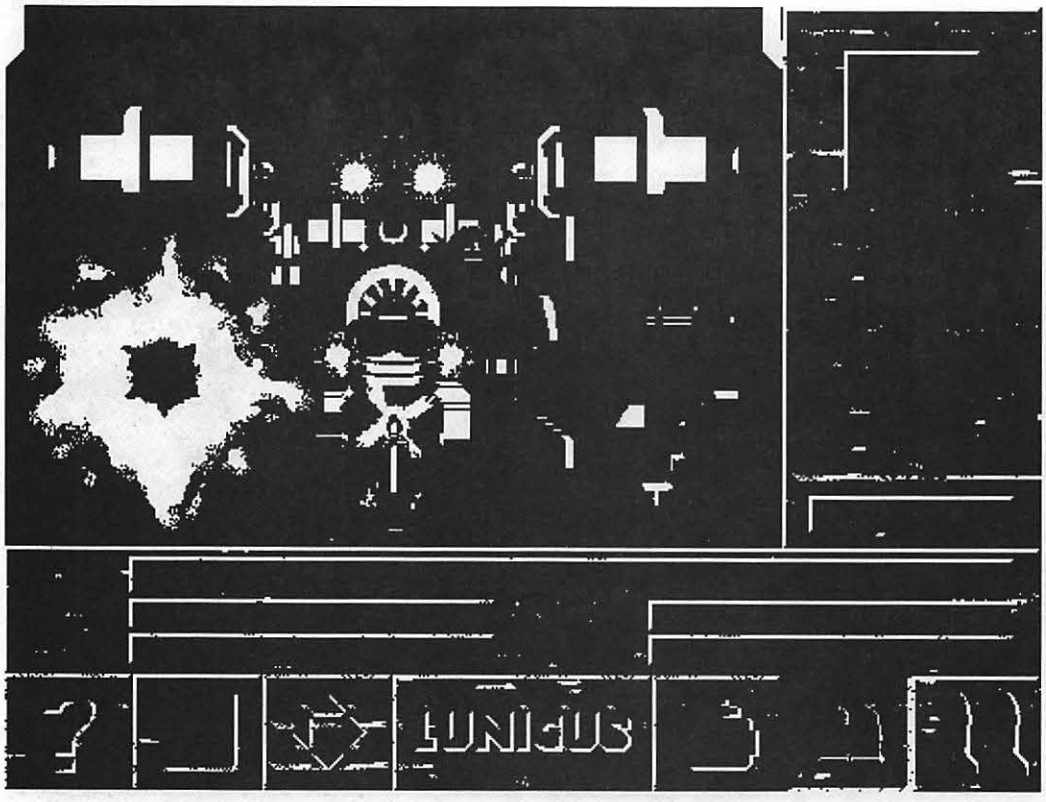


Figure 2. Game Scene

Game Review

"Missing Myst"

Myst CD-ROM Adventure Game by Broderbund

WHEN ASKED what I wanted for my birthday, I hesitated only a moment before I said I would like the game Myst. The only hesitation was the fact that I had only played two CD-ROM games before, Iron Helix and Journeyman Project. They were both so slow moving that I quickly lost interest in them. I thought Journeyman Project would have been a great game but I couldn't get past the sluggish graphics. Myst supposedly would not have that problem.

When I opened the box, it contained a CD-ROM disk, a small book that gave directions on installing the game, and a much larger book of blank lined paper called The Journal of MYST, and a folded piece of paper with a warning that three Myst hints were inside. Although the CD held over 521 MB, I only needed to copy 3 MB of files onto my hard disk to make it zip along. I wondered aloud what kind of game this was that came with no directions.

I talked my friend, Terry, into playing the game with me. She has never liked adventure/role playing games, but she was as mesmerized as I was not long after the opening credits rolled by.

The graphics are stunningly beautiful. Neither of us had a clue what the game was about or what we were supposed to do. Exploring Myst island and the secrets it held, especially at night with the room lights off, was dazzling enough to keep us happy.

When we finally solved enough puzzles to leave Myst and explore other islands (what Myst calls ages), we were just about screaming with delight. Every night I would ask Terry if she had time to 'Myst around.' Every night the CD-ROM took us back to an enchanted place—we were hooked and we loved it!

"Myst is not an easy game to play. It requires concentration and logical thinking to solve the puzzles. You spend a lot of time in the library on Myst island reading old journals about the ages. This is not a Prince of Persia kind of a game. The weapons you find here are merely clues. There are no adrenaline rushes."

I kept looking around the island for people. There are no little point-and-click people here on Myst-you are the main character. You are the sleuth opening drawers and rummaging around in other people's bedrooms looking for some shred of information to jot down in your journal, hoping you will make the connections to send you off on another adventure in another age.

All the ages are beautiful. But all is not pretty. In every age the brothers have rooms, and even before you enter their private spaces, music sets the mood. Ethereal music plays in the opulent settings of the 'good brother' and sinister music adds to the already gloomy, menacing atmosphere of the other brother's quarters.

There are a few things to pick up and carry, but not very many; most of the things you find are questions or answers for your journal. Drawings of constellations, compass points and other tidbits of information, be it colors or sounds, fill the once empty journal pages. You soon realize that figuring out the storyline is just as important to winning the game as finding a clue in a treehouse.

Myst is not an easy game to play. It requires concentration and logical thinking to solve the puzzles. You spend a lot of time in the library on Myst island reading old journals about the ages. This is not a Prince of Persia kind of a game. The weapons you find here are merely clues. There are no adrenaline rushes.

A friend of mine came over for a visit and I slipped my favorite CD-ROM into the Centris and off we went. He was soon yawning. He didn't get it. But if you have been bitten by the Myst bug it is hard to drag yourself away. I found it hard to walk him to the door. Luckily my other friends were just as enthralled as I was.

Robyn and Rand Miller are brothers (who look just like Achenar and Sirrus, the brothers in Myst), and it took them two years to make this game. You think it might take you that long to solve it, but it only takes about 40 hours. Forty hours isn't nearly enough. When you solve the last puzzle you don't feel happy or

relieved. When you turn in that last piece of paper you are sorry it is over. You aren't ready to leave. Terry and I played all three of the possible endings just to prolong our stay in Myst.

Atrus, the father in the story, invites you to stay and enjoy Myst. You might poke around a bit more, hoping you missed something in your travels, but it is over. The Myst experience is done.

America Online had a lot of conversation about Myst in the Games Forum. People were having lots of fun trading clues and information, loving the game. Robyn Miller, with his great sense of humor, always seemed to be available to answer questions. Myst acquired such a cult status that someone even posted a message of excerpts from an autobiography he had found under the drug kit in a bedroom in one of the ages. The autobiography was bogus, of course, but it was amusing and helped keep Myst alive for all of us. Terry missed Myst so much that she got online and subscribed to Mystique a quarterly interactive E-magazine put out by Ivan Cockrum.

Atrus promised us an even better adventure the next time we visit. And I'm sure the good sons Robyn and Rand will come through for us. 5 stars for this one.

System Requirements:
CD-ROM Drive
System 7.0.1 or higher
256 colors
4 MB RAM

Available from:
MacConnection: $49.99, 1-800-800-2222
MacMall: $49.99, 1-800-222-2808
Quality Computers, $47.95, 1-800-777-3642 ■

continued from page 44
The Electronic Schoolhouse

*** Westward HO!** Yee ha! Warp back to the 1850s and hitch up your wagons for the trek of your life. Each year a party leaves from the Electronic SchoolHouse to face the hazards of the Oregon Trail. Teachers meet to share ideas for hitching this online adventure to their classroom curriculums.

*** Word Web for Foreign Language Classes:** Add to the HyperStudio word web and expand everyone's vocabulary. Selecting a picture that lets you illustrate a family of words. What words do you find in a supermarket? What words do you find in a meadow? Use it as the basis of a HyperStudio mini-stack to be added to the Web Center in the SCHOOLHOUSE MAGAZINE library.

*** The SchoolHouse News Bureau** is for any school or class that publishes a newspaper. In the News Bureau Library schools share articles, pictures, cartoons, research, and ideas. On the Student to Student board they may collaborate on topics of interest to schools everywhere.

*** Postcard Geography & Geography Detectives:** Here are two projects for newcomers to telecommunications. In Postcard Geography, classes use snail mail to collect picture postcards from other online classes. In Geography Detectives, classes fill boxes with clues to their location. Paired classes exchange boxes via snail mail and then these super-sleuths go online to ask questions and solve the mystery.

*** Classroom On Ice! & Project Central America:** Field trips anyone? This past year we linked with Frank Ball and learned what winter was like in the South Pole. We also followed three bicyclists on their journey through Central America. We heard from teenagers in Moscow during the storming of the Russian White House and crossed AFC RRJoe's Bering Bridge to his many contacts in the East.

*** Winter Math Online Games:** Well, they started as winter games, but spring is here and this popular activity continues. Classes take turns measuring, counting, analyzing, and writing math word problems about their towns and schools. Then they host an online competition to solve the problems. This is a good interdisciplinary activity that provides experience in social studies research, math problem solving, writing, telecommunications, and group interaction. Invite your principal in while your class is playing, mention the word "holistic," and see your evaluation shoot up 20 points!

*** Spring EGG-A-THON:** Sometimes a simple question leads to an extravaganza. When StewClem asked about the rules for running an Egg Drop, he didn't know he would wind up coordinating a major spring event including a cross-country egg toss, an art egg relay, egg recipes, eggcellent poetry, and much more. And, the egg drop itself has become an online event with schools participating from all across the country.

*** Name That State:** Participants write Jeopardy style questions in designated categories. Questions are posted online for research and study. Students earn points for writing good questions and answering them as they meet online to test

them as they meet online to test their knowledge in friendly competition.

* **Freedom Wall:** Who are the outstanding champions in the quest for freedom? From November through March students from around the country gave their answers. They wrote short essays justifying their choices, and artist, Adam Brooks, took the 100 champions who were chosen most frequently, and he is painting them into a sixty-foot tall mural on the side of a building in Chicago.

* **Sister Shore Bird Project & Steelhead Trout Hatching Project:** Network with schools tracking the migration of shorebirds or share information with a school hatching Trout. Many schools with special projects bring them to the Electronic SchoolHouse where additional schools join the fun and learning.

* **ScrapBook Writing Project:** Begun in 1989, 260 classes in 35 states have linked, exchanged essays, and added chapters to the ScrapBook Library. ScrapBook was recognized by the IMPACT II affiliated Connecticut Celebration of Excellence and is described in detail in a ten-page brochure available from COE and in a 70 page Curriculum ToolKit available from AFC Tooter. Spin-off projects have led to a DareBook, Season Stories, and two ScrapBookCookBooks of international recipes and their stories.

"Stop"—An Apple // Program

by Ed Morykwas

I WORK AS A substitute teacher in elementary and middle schools. I'm also an Apple II programmer. Wherever I go, I take along a disk of activities I've created myself. Contrary to rumors you may have heard, there are LOTS of Apple II computers still happily in use in schools.

In the life of a substitute there are often challenging moments. The class has finished its spelling test and there are still 15 minutes before lunch. Jordan and Steven have started to fold paper airplanes, while Lydia and Anne are melting crayons with a magnifying glass.

It's time for SOMETHING INTERESTING, something that will bring them back together, focus their attention, and maybe even inspire more learning! I need something colorful, fast, reliable, and fun.

So I pull out my handy disk.
Then I plug in the Apple II.
And we play the "Stop" game.

This is a program I wrote years ago, which everyone seems to love. Imagine two spiral staircases, winding from the bottom to the top of the screen. "Stop" is a race to see who can climb all the way up.

We start by putting in our names: Teacher, Students. The computer decides at random who goes first. Let's say it's them.

A pair of colorful dice rolls: 9. So they climb a little way up their staircase (it's animated). They'll need a total of 100 or more to win. Now comes the interesting part.

"In the life of a substitute there are often challenging moments. The class has finished its spelling test and there are still 15 minutes before lunch. Jordan and Steven have started to fold paper airplanes, while Lydia and Anne are melting crayons with a magnifying glass."

The computer asks, "Roll or Stop?" If the students elect to roll, fine. They can actually keep rolling the dice as many times as they like, climbing and climbing. I've seen players win in one turn; it doesn't happen often. It takes a lot of courage.

Why? Because if the dice come up doubles, they'll fall all the way back down and it becomes my turn. Oh, no.....

If the students climb a certain part of their staircase and then say

"Stop," their score is locked in, but then of course I get to roll as many times as I like.

The secret is to push your luck, but not too far.

I've witnessed some heated debates over odds and probabilities among students trying to win this game. We're halfway there, should we keep on? Is it better to take things in small steps and risk the teacher winning, or just go for it bigtime?

Before we realize it, lunchtime has arrived, order has been restored, and all of us have enjoyed using the computer.

I will place a copy of my "Stop" game in the public domain library of the Washington Apple Pi Users Group. It's freeware, so pass out copies to anyone who might enjoy it. You don't have to be a teacher to play, by the way. Parents and kids can enjoy it just as much. Even very young children seem to catch on quickly.

Apple II forever!

Ed Morykwas is an Apple][-using educator from Troy, MIchigan. His creative bent extends from software design to writing about computers. Ed can be reached via Internet e-mail at: edog@oeonline.com ■

Press Release

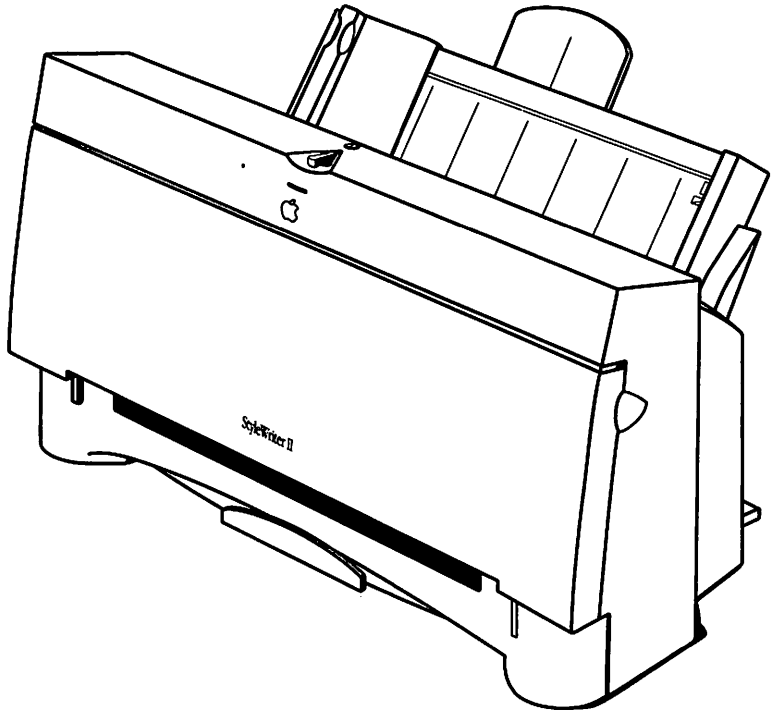
For Immediate Release— Balloon V2.0 is Now Available for the IIGS

January 25th, 1995

EGO SYSTEMS is pleased to announce that version 2.0 of Balloon is now shipping.

Balloon is a new desk accessory (NDA) that allows you to easily create and maintain NuFX (ShrinkIt) archives on your IIGS. Since Balloon is a NDA, you no longer have to run GS-ShinkIt to extract files from archives. So, if you use a desktop telecommunictions program, like Spectrum from Seven Hills Software, you can manipulate your

"As if that weren't enough great stuff, the Balloon v2.0 package also includes a copy of our popular new desk accessory text editor, EGOed lite."



ShrinkIt archives while still online.

Here are a few of Balloon's features:

- Balloon can extract files from ShrinkIt archives.
- Balloon can create new ShrinkIt archives.
- Balloon can add/remove files to/from existing ShrinkIt archives.
- Balloon recognizes ShrinkIt archives that are enclosed in BinaryII, MacBinary and America Online for Macintosh "wrappers."
- Balloon works properly in both 640 and 320 modes, just like all good new desk accessories should.
- Ballon allows you to have multiple ShrinkIt archives and file information windows open at once.
- Balloon is Finder friendly. Double-click on a ShrinkIt archive and Balloon opens it automatically! Balloon can also communicate with other system extensions to automatically open files after they are extracted from an archive.

The Balloon v2.0 package also comes with the Balloon XCMD for Spectrum v2.0. By using this XCMD with Spectrum v2.0, you can have Balloon AUTOMATICALLY expand the ShrinkIt archives that you download with Spectrum. You don't even have to open Balloon.

In addition, the Balloon XCMD for Spectrum v2.0 lets you write Spectrum scripts that give you full access to the Balloon new desk accessory and all its capabilities. For example, you can write a script that will create a new archive and add files to it. Or, you could write a script that would open an existing archive and extract all the files from it to a folder that you specify.

As if that weren't enough great stuff, the Balloon v2.0 package also includes a copy of our popular new desk accessory text editor, EGOed lite. With EGOed lite installed in your system, you can quickly and easily read and print text, Teach, AppleWorks Classic and AppleWorks GS word processor files.

Balloon and EGOed lite will even work together to let you automatically open and read the word processing files that you extract from your ShrinkIt archives!

So, how much does all this cost? Believe it or not, the retail price for Balloon v2.0 is just $25. This price includes first class shipping to anywhere in the United StatFor Air Mail delivery outside North America, add $3, for a total of $28.) As an added bonus, when you send in your Balloon registration card, we'll send you a FREE issue of GS+ Magazine, the only Apple IIGS Magazine and Disk publication. (If you are already a GS+ Magazine subscriber, sending in your Balloon registration card will get you a free magazine-only back issue of your choice.)

Speaking of GS+ Magazine, if you are a GS+ Magazine subscriber, you can get Balloon v2.0 at a special introductory price of only $20. When you order, just let us know that you are a subscriber and include your customer number (it's on your GS+ Magazine mailing label above your name) to qualify for the special introductory price. This special offer ends on April 3rd, 1995.

The Ever So Fine Print

Balloon requires System Software v6.0.1, at least 2MB of RAM, and a hard drive. Spectrum v2.0 is required to use the Balloon XCMD for Spectrum v2.0, it will NOT work with earlier versions of Spectrum. (However, the Balloon new desk accessory WILL work with older versions of Spectrum.)

Balloon v2.0 is a complete rewrite of the original Balloon Finder extension that appeared in GS+ Magazine V5.N2. Balloon v2.0 is a stand-alone product and will NOT appear in GS+ Magazine. Only current GS+ Magazine subscribers can purchase Balloon for the special introductory price of $20. However, if you subscribe when you place your order for Balloon, you can get the special pricing. This special offer expires on April 3rd, 1995.

To order Balloon, give us a call at 1-800-662-3634 between 9 a.m. and 5 p.m. Monday through Friday. (Outside the United States, call 615-332-2087.

We accept Visa and MasterCard for all phone orders.) You can also FAX your order to us at 615-332-2634. If you prefer to order by mail, send your check or money order (made payable to "EGO Systems" and in US funds only), or credit card information to:

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Apple // January & February Meetings

by Joan Jernigan

THE WASHINGTON Apple Pi met on Saturday, January 28, 1995. The naysayers were still in bed because the weather men/women kept telling us that there would be snow on the ground. The faithful few were at the NOVA campus attending the monthly meeting.

Andy Wallo (accompanied by his faithful partner Aaron) gave us a great presentation on the GS Quick Calc Spreadsheet. This product can be purchased through Byte WorksGS+ which is advertised in GS+. Those of us present enjoyed watching Andy breeze through the options that the program has to offer. It was evident that we had an expert at work.

While we watched Andy, young Aaron was videotaping our proceedings with the Wallo Camcorder. Andy subsequently produced some of those images on his Video card and digitized images upon request. This is exciting technology. You do not need a special (expensive) camera to get digital images. The Apple IIGS can do it with a few add-ons such as these.

The February meeting (which unfortunately will have passed by the time you read this journal) will be at the Pi office. Andy and son Aaron will again be the stars. This time they will be showing a CD Rom drive and a Stereo Card for the Apple IIGS. We hope that many of you will attend.

In March we will host Larry Luger from MECC

BTW—Lorin tells me that the Pi now has a subscription to Shareware Solutions, written and edited by Joe Kohn. The Winter 1995 edition has an article reporting Joe's "Visit with Steve Wozniak." The publication comes out bimonthly, and is worthwhile reading. I personally try to support any effort to keep the Apple II alive. I don't buy "Shareware Solutions" for the shareware (our WAP library has what is needed), but for the articles.

Speaking of "Apple II Alive," the magazine of that name is looking very slim these days. Quality Computers publishes it, and has made a commitment to the Apple II. I would suspect that they need articles. Our own Phil Shapiro has admirably submitted many articles. Do you have an idea under your hat? Anything that you would like to share with your Apple II community would be most appreciated—in "II Alive" and here in your WAP Journal.

The February and April meetings will be at the Pi office, and we are unsure of a location for May. Watch for updates from time to time.

THE FEBRUARY meeting was at the Pi office. Thanks to Beth (who called to let folks know about the change in location) we had a great turnout. 13 people attended Andy Wallo's demonstration of a CD Rom drive for the Apple IIGS. He was using a DisQuest drive from Alltech Electronics. Thank you Andy (and Aaron) for a great presentation.

The next meeting will be at the NOVA campus. Larry Luger will be showing us the latest MECC software for the Apple//. Larry is the MECC representative for this area.

April and May will be at the Pi office. Beth was unable to get us a room at NOVA these months. I am open to suggestions for presentations. I can show BannerMania, PrintShop GS, HyperStudio, PulbishIt4, or GraphicWriter///. If I can't find another presenter I will have these as a backup.

There was a discussion at our meeting as to what would be a good time to meet. Many folks feel that they would like to meet (Apple //, that is) at a different time from the general meeting (and at a different place, in many circumstances). Please let me know your preferences. I no longer have a TCS e-mail account, but my internet address is: jjerniga@pen.k12.va.us.

My hard drive on my GS is singing, which tells me that it is on its last legs. David and I are getting the needed files off the GS and onto our Macs. Now that David is unemployed and attending Seminary we are not in a position to replace the GS hard drive. In fact, we will probably be selling a lot of our "stuff" at the June Garage Sale.

I have enjoyed being Apple // VP and hope to keep up contact with many of you. Thank you for your support and please continue to support the new VP. ■

The Apple /// Inpert's Corner

Allan M. Bloom, PhD CDP
Institutional Research, Virginia Tech, Blacksburg VA 24061

WELCOME THE Inpert's Corner! What is inpertise? It arises from the old categorization of being a jack of all trades and master of none. An inpert knows a few arcane things about a lot of stuff, the sum of which doesn't amount to actual expertise in anything. This column will be devoted to tips that I have gleaned over the years.

Let's start with the bugaboo of many novice Apple /// owners, that strange thing called SOS.DRIVER on your boot (startup) disks. The biggest bug among those boos is the printer driver. The Apple /// is very flexible in what kind of printer you can hook up to your computer. Baby Blue and Tandy limit all but the expert to Epson-type parallel printers. A Macintosh is assumed to have either an ImageWriter or a LaserWriter printer. The Apple /// has no such restrictions, and a lot of people have difficulty with that kind of ambiguity. Especially when they get new boot disks or add BOS3, Catalyst or Selector /// and find their printers have gone to cloud cuckoo land.

When you get a new boot disk, it very likely does not contain a driver for your particular combination of printer and printer interface. You can find that out the hard way by trying to print something and having your computer hang up. I prefer finding out beforehand what I'm up against and fixing it before I lose the Great American Novel that I forgot to save before trying to print it and hanging up the computer and losing all that deathless drivel in the machine's death throes. Maybe you would, too. Let's see if I can give you a cookbook approach to the mystery of the missing printer.

Save a Printer Driver

Let us assume you have a printer and you have used it successfully in one or more application programs. In the spirit of planning ahead, let's save a copy of that printer's driver just on the off chance that you may get another program that you want to print from. Trust me. You will get another program. You will want to print from it. You won't be able to do so with the printer driver that comes with it. If you're prepared, it will be no problem.

Let's prepare for that eventuality by having a "good" printer driver immediately on hand. You will need at least two disks — your System Utilities boot disk and a formatted blank disk. If your System Utilities boot disk can write to the printer, fine. Otherwise, you'll need a third disk —any boot disk that works with your printer. Put a label on the formatted blank disk that reads "My Printer Driver" and date it. Ready? Let's go.

1. Boot System Utilities, select SCP (the System Configuration Program) from the main menu, and select READ A DRIVER FILE from the SCP menu.

2. Remove System Utilities from the inboard drive, and insert the boot disk that knows about your printer. If that's System Utilities, skip this.

3. Accept the SCP default to read a driver file from .D1/SOS.DRIVER. When the driver file has been read in, escape to the SCP menu.

4. From the SCP menu, select DELETE A DRIVER. Delete everything but the .PRINTER driver. When only .PRINTER is left, escape to the SCP menu.

5. Remove the boot disk from the inboard drive and insert the blank disk.

6. Select GENERATE NEW SYSTEM from the SCP menu. After verifying the system configuration, SCP warns that you don't have a .CONSOLE driver. That's OK, since we're not trying for a full SOS.DRIVER here.

7. SCP offers .D2/SOS.DRIVER as the default destination for the new driver file. Replace that by typing ".D1/MYPRINTER.DRIVER" and pressing RETURN. Your printer driver will be placed on the previously blank disk.

8. Remove your "printer driver" disk, put the System Utilities boot disk back in the onboard drive, and quit from the SCP menu.

You are now prepared for the certain eventuality of running across some boot disk from which you cannot print. You may already have some of those. What happens when the "no print" situation occurs? Read on.

Adding Your Printer Driver

When you find a boot disk from which you cannot print, the odds are that the boot disk's SOS.DRIVER file does not contain a .PRINTER driver for your particular setup. Screwy printing from /// Easy Pieces is another topic that I'll take up at a later date. Let's stick to printer drivers.

The smart thing to do with any new boot (startup) disk is to put your own printer driver in the SOS.DRIVER file before you do anything else. I do that as a matter of course because I'm certain no disk (except those I created myself) will have a driver for a Qume Sprint 5/45 hooked up to an Apple II Super Serial Card in Slot 1. If you have any of my stuff, you have already run into the problem. My boot disks are configured for my machine, and I fair promise that you don't have my printer setup.

However, you are prepared for this eventuality, yes? Adding your printer driver is like what you went through to save your special printer driver in the last section. You will need three disks — your System Utilities boot disk, the "unprintable" boot disk, and your "My Printer Driver" disk.

1. Boot System Utilities, select SCP (the System Configuration Program) from the main menu, and select READ A DRIVER FILE from the SCP menu.
2. Remove System Utilities from the inboard drive and insert the boot disk.
3. Accept the SCP default to read a driver file from .D1/SOS.DRIVER. When the driver file has been read in, escape to the SCP menu.
4. From the SCP menu, select DELETE A DRIVER. Delete everything that looks like a printer driver. Most often that will be a single PRINTER entry, but you might see PARALLEL, QUME, SILENTYPE, DAISYWHEEL, any number of names for printers. When no printer driver is left, escape to the SCP menu.
5. Select GENERATE NEW SYSTEM from the SCP menu. After verifying the system, SCP offers .D2/SOS.DRIVER as the default destination for the new driver file. Replace that by typing ".D1/SOS.DRIVER" and pressing RETURN. Yes, you DO want to replace the existing SOS.DRIVER file.

   This step isn't always necessary, but I recommend it for generality. When SCP deletes one or more drivers, it does not release the memory they used, so you may not be able to add your own printer driver. This way is safe.
6. Remove the boot disk, put System Utilities in the onboard drive, and quit from the SCP menu to the main menu.
7. Select SCP, and select READ A DRIVER FILE from the SCP menu.
8. Remove System Utilities from the inboard drive and insert the boot disk.
9. Accept the SCP default to read a driver file from .D1/SOS.DRIVER. When the driver file has been read in, escape to the SCP menu.
10. Remove the boot disk from the inboard drive and insert your "My Printer Driver" disk.
11. Select READ A DRIVER FILE from the SCP menu. When asked, replace the default ".D1/SOS.DRIVER" by typing ".D1/MYPRINTER.DRIVER" and pressing RETURN. When your printer driver has been read in, escape to the SCP menu.
12. Remove the "My Printer Driver" disk from the onboard drive and replace it with the new boot disk.
13. Select GENERATE NEW SYSTEM from the SCP menu. After verifying the system, SCP offers .D2/SOS.DRIVER as the default destination for the new driver file. Replace that by typing ".D1/SOS.DRIVER" and pressing RETURN. Yes, you DO want to replace the existing SOS.DRIVER file.
14. Remove your boot disk, put the System Utilities boot disk back in the onboard drive, and quit from the SCP menu.

You're almost done. The process is really easier to do than to describe in excruciating detail. The final step is to check your work. Remove System Utilities from the inboard drive and replace it with the new boot disk. Press CONTROL and RESET to boot the program. If you did good, you'll be able to print. If you blew it, call the WAP Hotline. That's what dues are for. ■

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BITNET: IRBLOOM at VTVM1

Printing in Apple// Emulation Mode on an APPLE ///

Edited by Dave Ottalini
WAP /// SIG

Note: The following Q and A column comes from a few years ago but is still relevant today for those SARAsaurs interested in learning more about how to print in Apple // emulation mode. Originally taken from the Apple /// forum on CompuServe's MAUG—the Micronetworked Apple Users Group.

QUESTION: Help!!!! I am running some business programs in Apple // emulation. How do I get the information to the printer? A screen dump would help, but some of the data is more than one page long. I have an Okidata 83A attached to the serial port. Do I need a driver added in the emulation mode or what?

Answer 1: Basically, emulation pretends that there is a serial card in slot-7 (but occasionally in slot-5 with some programs). Try doing a pr#7 and then typing a few characters followed by a return and see if your printer works there. I'm talking about doing it right out of Applesoft Basic in emulation. Then the question is: do your business programs have a printer setup menu to tell them what to send to. Many of them will allow all sorts of options.

Answer 2: Perhaps the "parallel" printer card needs to know exactly how many characters are to be put onto a line (with commands such as "^I80N"). Serial cards seem to just not care one way or the other.

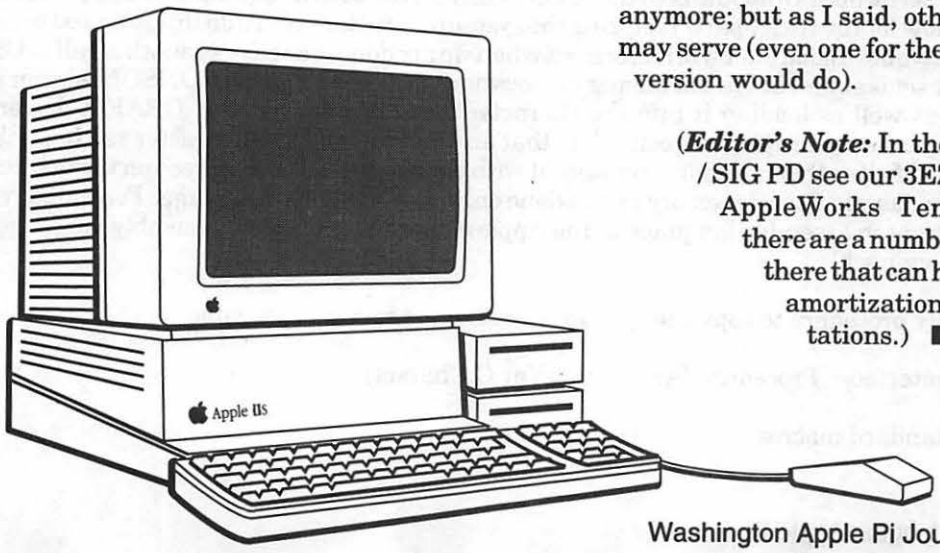
I had a CCS 7710 card with a DECwriter IV serial printer for years, and I recently switched to Epson FX-286 and Grappler+ when I bought the //e. A dip switch on the Grappler sets the card to "transparent" mode, whereby it will apparently ignore all line length statements; at any rate, I haven't had to use a line length statement yet. I don't do any graphics work, so I'm not sure if the "transparent" mode matters or not (I did print one graphics page when I first got the card).

Answer 3: Right now I have used both Print Shop and Newsroom in emulation (natch) with the ImageWriterII (serial) with no problems at all. They have a printer setup menu. The one program I can't get to work right with it is the 64K version of Gutenberg Sr. The old (48K) version had a setup menu that included the /// serial port, but the guy who wrote the new version didn't know about the ///+][board so didn't include that option.

Question 2: You must understand I am new at this. I needed a program which would compute amortization and I bought an Apple // public domain disk that did this. I found out about entering pr#7 and tried it. All I got on the printer was garbage. I hate to think about resetting the switches inside my Okidata 83A every time I use emulation. Is that what I need? Also, is there an Apple /// program in the public domain that will compute amortization?

Answer: Try Visicalc or Advanced Visicalc (native ///) (Editor's Note: even better, 3EZ Pieces), there is a great paperback book called VISICALC (Advanced Version) Worksheets for Business by Van Wolverton out of VisiPress that has all that stuff and more in worksheet form. That is, it contains all the working formulas for specific business spreadsheets. It is very well done, but I'm sure it is not the only book on such things. The only hitch is that I'm not sure it is published anymore; but as I said, other books may serve (even one for the Apple][version would do).

(***Editor's Note:*** In the WAP // / SIG PD see our 3EZ Pieces/ AppleWorks Templates, there are a number of files there that can help with amortization computations.) ■



Downloading Apple /// Character Sets

Edited by Dave Ottalini, WAP /// SIG

NOTE: This article originally appeared on CompuServe's Apple /// forum, which is part of the Micronetworked Apple Users Group or MAUG as we call it. You'll also find it on /// SIG PD disk 3UTL-22, our Apple /// FONTS disk.

ONE OF THE powerful features of the Apple /// is the ability to change the character set used to display characters on the screen easily from a program. A program can define its own characters to perform special effects such as drawing graphics on the text screen. A good example is the System Utilities program which uses custom characters to draw boxes around things and display arrows as they appear on the keyboard to help the user. However, any program which changes the system character set should be careful to restore it before exiting so that other programs can use the normal character set. This isn't very difficult to do, but it requires the use of assembly language, and is thus a bit tricky. For purposes of this discussion, let's use Pascal. Similar techniques can be used with other languages. To begin with, we need to have a TYPE for character sets:

```
Type Charset = Packed Array [0..127, 0..7] of 0..255;
```

A character set consists of 128 characters (numbered 0 through 127), each consisting of 8 rows. Next, we need a procedure to download character sets. Referring to the Standard Device Drivers manual, pages 70 and 169-171, the following procedure will do the trick:

```
Procedure LoadCharset(C:Charset);
Var RequestCode: Packed Record
                   Channel: 0..1;
                   Stat_or_Ctrl: 0..1;
                   Request_Num: 0..255;
                   Reserved: 0..63;
                 End;
Begin { LoadCharset }
RequestCode.Channel := 0;
RequestCode.Reserved := 0;
RequestCode.Stat_or_Ctrl := 1;
RequestCode.Request_Num := 16;
UnitStatus(1,C,RequestCode);
End { LoadCharset };
```

This just performs a UnitStatus to the .CONSOLE driver with a request code to download a character set. So far, so good; now for the tricky part: restoring the system character set. To do this, we need to copy the system character set before we download our own; restoring it when we are done is as easy as another call to LoadCharset. The current character set is stored in system memory at locations $C00-$FFF. The .CONSOLE driver stores the new character set here as well as loading it into the character generator so that the .GRAFIX driver can use it for drawing characters onto the graphics screen. Note that anyone can read this character set, but only the .CONSOLE driver should modify it so that it remains consistent with the character set displayed on the text screen. Copying data from system memory to Pascal memory can be done only from assembly language. For the convenience of programmers not proficient in assembly language in the Apple ///, here is a complete assembly language procedure which copies the character set.

```
; Assembly procedure to copy the system character set to a user variable

; Pascal interface:  Procedure SysCharset(Var C:Charset);

; Some standard macros
```

```
    .MACRO POP
    PLA
    STA   %1
    PLA
    STA   %1+1
    .ENDM

    .MACRO PUSH
    LDA   %1+1
    PHA
    LDA   %1
    PHA
    .ENDM

; Some zero page temporaries
Return      .EQU   0E0          ;To save return address
Ptr         .EQU   0E2          ;Pointer to user's variable
SysSet      .EQU   0E4          ;Pointer to system charset

    .proc  SysCharset,1

    POP    Return              ;Save return address
    POP    Ptr                 ;Get location to put charset
    LDA    #00                 ;Set up pointer to system charset
    STA    SysSet
    LDA    #0C
    STA    SysSet+1
    LDA    SysSet+1601         ;Save old X-byte
    PHA
    LDA    #8F                 ;System charset is in system bank
    STA    SysSet+1601

    LDY    #0
NxtChr LDA    (SysSet),Y       ;Copy a character
    STA    (Ptr),Y
    INY                        ;Do next one
    BNE    NxtChr
    INC    Ptr+1
    INC    SysSet+1
    LDA    SysSet+1            ;See if done (if we reached $1000)
    CMP    #10
    BCC    NxtChr

    PLA                        ;Restore X-byte for Pascal
    STA    SysSet+1601
    PUSH   Return
    RTS

    .END
```

The code is straightforward for those familiar with assembly code; the only tricky part is saving the X-byte of the variable we use to access system memory (SysSet) and restoring it before returning so that Pascal will not get confused. To use it, copy it into a file, assemble it, and then link it into your program. It defines a procedure called SysCharset which copies the current character set into a Pascal variable. Here is an example program to demonstrate its use:

```
Program TestCharset;

Type Charset = Packed Array [0..127, 0..7] of 0..255;
```

```
Var SysSet: Charset;
   C: Char;
   S: String;
   F: File of Charset;

Procedure SysCharset(Var C:Charset); External;
 { The assembly language program to get the system character set }

Procedure LoadCharset(C:Charset);
{ Loads the character set C into the character generator }
Var RequestCode: Packed Record
                  Channel: 0..1;
                  Stat_or_Ctrl: 0..1;
                  Request_Num: 0..255;
                  Reserved: 0..63;
                 End;
Begin { LoadCharset }
RequestCode.Channel := 0;
RequestCode.Reserved := 0;
RequestCode.Stat_or_Ctrl := 1;
RequestCode.Request_Num := 16;
UnitStatus(1,C,RequestCode);
End { LoadCharset };

Begin { Main program }
{ First, save the system character set in SysSet }
SysCharset(SysSet);

{ Ask the user for a file with a new character set }
Write('Character set to load: ');
Readln(S);
Reset(F,S);

{ Load the user's character set and close the file }
LoadCharset(F^);
Close(F);

{ Put some characters on the screen to show off the new character set }
For C:=' ' to '~'
Do
  Write(C);
Writeln;

{ Wait until the user is ready to exit }
Write('Press return to exit. ');
Readln;

{ Restore the old character set before exiting }
LoadCharset(SysSet);
End.
```

Exercises

1. It is often not necessary to download a complete character set. The System Utilities program, for example, downloads only a few characters so that it can draw boxes and arrows. Explain how to do this.

2. Write an invokable module for Business Basic so that programmers can write Basic programs which use custom fonts but restore the system font before exiting. ■

Apple II Disk Library Order Form

5-1/4" DISKS:

System Software
___ APSD-01 #1
___ APSD-02 #2

Apple Disk Catalog (DOS 3.3)
___ 3 disk set #3

Apple Disk Catalog (PRODOS)
___ 4 disk set #4

Appleworks
___ APWK-01
___ APWK-02

Communications
___ 10 disk set =$15.00
___ COMM-01
___ COMM-02
___ COMM-03
___ COMM-04
___ COMM-05
___ COMM-06
___ COMM-07A
___ COMM-08
___ COMM-09
___ COMM-10A

CP/M
___ 11 disk set =$16.50
___ CP/M-01
___ CP/M-02
___ CP/M-03
___ CP/M-04
___ CP/M-05
___ CP/M-06
___ CP/M-07
___ CP/M-08
___ CP/M-09
___ CP/M-10
___ CP/M-11

Eamon Adventures
___ 24 disk set = $36.00
___ EAMN-01
___ EAMN-02 #5
___ EAMN-03 Eamon Master
___ EAMN-04 #5
___ EAMN-05 #5
___ EAMN-06 #5
___ EAMN-07 #5
___ EAMN-08 #5
___ EAMN-09 #5
___ EAMN-10 #5
___ EAMN-11 #5
___ EAMN-12 #5
___ EAMN-13 #5
___ EAMN-14 #5
___ EAMN-15 #5
___ EAMN-16 #5
___ EAMN-17 #5
___ EAMN-18 #5
___ EAMN-19 #5
___ EAMN-20 #5
___ EAMN-21 #5
___ EAMN-22 #5
___ EAMN-23 #5
___ EAMN-24 #5

Education
___ 20 disk set =$30.00
___ EDUC-01
___ EDUC-02
___ EDUC-03
___ EDUC-04
___ EDUC-05
___ EDUC-06
___ EDUC-07
___ EDUC-08
___ EDUC-09
___ EDUC-10
___ EDUC-11
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___ EDUC-13
___ EDUC-14
___ EDUC-15
___ EDUC-16
___ EDUC-17
___ EDUC-18
___ EDUC-19
___ EDUC-20

Forth
___ FRTH-01
___ FRTH-02
___ FRTH-03

Games
___ 13 disk set = $ 19.50
___ GAME-01
___ GAME-02
___ GAME-03
___ GAME-04
___ GAME-05
___ GAME-06
___ GAME-07
___ GAME-08
___ GAME-09
___ GAME-10
___ GAME-11
___ GAME-12
___ GAME-13

Logo
___ LOGO-01
___ LOGO-02

Membership Directory
___ MEMD-01

Miscellaneous
___ 25 disk set = $37.50
___ MISC-01
___ MISC-02
___ MISC-03
___ MISC-04
___ MISC-05
___ MISC-06
___ MISC-07
___ MISC-08
___ MISC-09
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___ MISC-21
___ MISC-22
___ MISC-23
___ MISC-24
___ MISC-25

New Print Shop
___ 31 disk set = $46.50
___ NWPS-01 Graphics
___ NWPS-02 Graphics
___ NWPS-03 Graphics
___ NWPS-04 Graphics
___ NWPS-05 Graphics
___ NWPS-06 Graphics
___ NWPS-07 Graphics
___ NWPS-08 Graphics
___ NWPS-09 Graphics
___ NWPS-10 Graphics
___ NWPS-11 Graphics
___ NWPS-12 Graphics
___ NWPS-13 Graphics
___ NWPS-14 Graphics
___ NWPS-15 Graphics
___ NWPS-16 Graphics
___ NWPS-17 Graphics
___ NWPS-18 Graphics
___ NWPS-19 Graphics
___ NWPS-20 Graphics
___ NWPS-21 Graphics
___ NWPS-22 Graphics
___ NWPS-23 Graphics
___ NWPS-24 Graphics
___ NWPS-25 Graphics
___ NWPS-26 Graphics
___ NWPS-27 Graphics
___ NWPS-28 Graphics
___ NWPS-29 Borders
___ NWPS-30 Borders
___ NWPS-31 Fonts

Pascal
___ 8 disk set $12.00
___ PASC-01
___ PASC-02
___ PASC-03
___ PASC-04
___ PASC-05
___ PASC-06
___ PASC-07
___ PASC-08

Pilot
___ PILT-01

Utilities
___ 24 disk set = $36.00
___ UTIL-01
___ UTIL-02
___ UTIL-03
___ UTIL-04
___ UTIL-05
___ UTIL-06
___ UTIL-07
___ UTIL-08
___ UTIL-09
___ UTIL-10
___ UTIL-11
___ UTIL-12
___ UTIL-13
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___ UTIL-19
___ UTIL-20
___ UTIL-21
___ UTIL-22
___ UTIL-23
___ UTIL-24

(#1) System Disk V. 4.0.2 - $1.50
(#2) DOS 3.3 System Master - $1.50
(#3) Apple Disk Catalog (A) (DOS 3.3) - 3 disk set - $3.00
(#4) Apple Disk Catalog (A) (ProDos) - 4 disk set - $4.00
(#5) Requires EAMN-03

3-1/2" DISKS:

System Disk
___ 2APS-01 #6

Apple Disk Catalog
___ 2ADC-01A #7
___ 2ADC-02A #7

Appleworks
___ 2AWK-01

Communications
___ 2COM-01
___ 2COM-02
___ 2COM-03

Education
___ 2EDU-01

Membership Directory
___ 2MRD-01

Utilities
___ 2UTL-01
___ 2UTL-02A

(#6) - System Disk - V. 4.0.2 - $3.00
(#7) - Apple Disk Catalog - 2 Disk set - $4.00

Note: Some disks may contain Shareware. Please send a remittance to the author of the program if you use it.

Apple IIGS Disk Library Order Form

3-1/2 DISKS:

System Software
___ GSAS-01 (*1)
___ GSAS-02 (*2)
___ GSAS-03 (*3)
___ GSAS-04 (*4)
___ GSAS-05 (*5)

Communications
___ 7 disk set = $21
___ GSCM-01E
___ GSCM-02C
___ GSCM-03B
___ GSCM-04C
___ GSCM-05B
___ GSCM-06
___ GSCM-07

DAs, CDevs, FExts, Dvrs, and Inits
___ 16 disk set = $48
___ GSDA-01C
___ GSDA-02D
___ GSDA-03E
___ GSDA-04C
___ GSDA-05C
___ GSDA-06B
___ GSDA-07C
___ GSDA-08B
___ GSDA-09A
___ GSDA-10A
___ GSDA-11A
___ GSDA-12A
___ GSDA-13A
___ GSDA-14A
___ GSDA-15B
___ GSDA-16B

Demos
___ 35 disk set = $35 or $1 per disk
___ GSDM-01
___ GSDM-02
___ GSDM-03
___ GSDM-04
___ GSDM-05
___ GSDM-06
___ GSDM-07
___ GSDM-08
___ GSDM-09
___ GSDM-10
___ GSDM-11
___ GSDM-12
___ GSDM-13A
___ GSDM-14
___ GSDM-15
___ GSDM-16
___ GSDM-17A
___ GSDM-18
___ GSDM-19
___ GSDM-20A
___ GSDM-21A
___ GSDM-22
___ GSDM-23
___ GSDM-24
___ GSDM-25
___ GSDM-26
___ GSDM-27
___ GSDM-28
___ GSDM-29
___ GSDM-30
___ GSDM-31
___ GSDM-32
___ GSDM-33
___ GSDM-34
___ GSDM-35

Developer
___ 20 disk set = $60
___ GSDV-01
___ GSDV-02
___ GSDV-03
___ GSDV-04
___ GSDV-05A
___ GSDV-06A
___ GSDV-07
___ GSDV-08A
___ GSDV-09
___ GSDV-10A
___ GSDV-11A
___ GSDV-12A
___ GSDV-13
___ GSDV-14A
___ GSDV-15A
___ GSDV-16
___ GSDV-17A
___ GSDV-18
___ GSDV-19
___ GSDV-20

Disk Catalog
___ 3 disk set = $6
GSDC-01J
GSDC-02J
GSDC-03J

Education
___ 10 disk set = $30
___ 7 disk set = $21 (*6)
___ GSED-01A (*6)
___ GSED-02A (*6)
___ GSED-03A (*6)
___ GSED-04A (*6)
___ GSED-05A (*6)
___ GSED-06A (*6)
___ GSED-07A (*6)
___ GSED-08A
___ GSED-09
___ GSED-10

Fonts - BitMapped
___ 27 disk set = $81
___ GSFT-01
___ GSFT-02
___ GSFT-03
___ GSFT-04
___ GSFT-05
___ GSFT-06
___ GSFT-07
___ GSFT-08
___ GSFT-09
___ GSFT-10
___ GSFT-11
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___ GSFT-26
___ GSFT-27

Fonts - TrueType
___ 30 disk set = $90
___ GSTT-01
___ GSTT-02
___ GSTT-03
___ GSTT-04
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___ GSTT-29
___ GSTT-30

Games
___ 64 disk set = $192
___ GSGM-01B
___ GSGM-02B
___ GSGM-03
___ GSGM-04
___ GSGM-05
___ GSGM-06A
___ GSGM-07A
___ GSGM-08
___ GSGM-09A
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___ GSGM-18A
___ GSGM-19A
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___ GSGM-37A
___ GSGM-38
___ GSGM-39
___ GSGM-40
___ GSGM-41
___ GSGM-42A
___ GSGM-43
___ GSGM-44
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___ GSGM-58
___ GSGM-59A
___ GSGM-60
___ GSGM-61
___ GSGM-62
___ GSGM-63
___ GSGM-64

Graphics
___ 68 disk set = $204
___ GSGX-01
___ GSGX-02
___ GSGX-03
___ GSGX-04
___ GSGX-05
___ GSGX-06
___ GSGX-07A
___ GSGX-08A
___ GSGX-09B
___ GSGX-10A
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___ GSGX-14
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___ GSGX-16
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___ GSGX-21C
___ GSGX-22B
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___ GSGX-28A
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___ GSGX-31A
___ GSGX-32A
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___ GSGX-66
___ GSGX-67
___ GSGX-68

HyperCard
___ 6 disk set = $18
___ GSHC-01
___ GSHC-02
___ GSHC-03
___ GSHC-04
___ GSHC-05
___ GSHC-06

HyperStudio
___ Demo Ver. (1-10) = $10

Apple IIGS Disk Library Order Form

___ GSHS-01
___ GSHS-02
___ GSHS-03
___ GSHS-04
___ GSHS-05
___ GSHS-06
___ GSHS-07
___ GSHS-08
___ GSHS-09
___ GSHS-10

___ 66 disk set (11-76) = $198
___ GSHS-11
___ GSHS-12
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___ GSHS-75
___ GSHS-76

Icons
___ 12 disk set = $36
___ GSIC-01B
___ GSIC-02B
___ GSIC-03B
___ GSIC-04B
___ GSIC-05B
___ GSIC-06B
___ GSIC-07B
___ GSIC-08A
___ GSIC-09A
___ GSIC-10A
___ GSIC-11A
___ GSIC-12A

Membership Directory
___ GSMD-01

Miscellaneous
___ GSMS-01A

Music
___ 83 disk set = $249
___ GSMU-01C
___ GSMU-02
___ GSMU-03
___ GSMU-04
___ GSMU-05
___ GSMU-06
___ GSMU-07
___ GSMU-08
___ GSMU-09
___ GSMU-10
___ GSMU-11
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___ GSMU-13C
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___ GSMU-15
___ GSMU-16A
___ GSMU-17
___ GSMU-18A
___ GSMU-19A
___ GSMU-20A
___ GSMU-21A
___ GSMU-22
___ GSMU-23A
___ GSMU-24A
___ GSMU-25A
___ GSMU-26A
___ GSMU-27A
___ GSMU-28A
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___ GSMU-82
___ GSMU-83

Sounds
___ 20 disk set = $60
___ GSSN-01A
___ GSSN-02A
___ GSSN-03
___ GSSN-04
___ GSSN-05
___ GSSN-06
___ GSSN-07
___ GSSN-08
___ GSSN-09
___ GSSN-10
___ GSSN-11
___ GSSN-12
___ GSSN-13
___ GSSN-14
___ GSSN-15
___ GSSN-16
___ GSSN-36
___ GSSN-37
___ GSSN-38
___ GSSN-39

Sounds - CDev rSounds
___ 20 Disk Set = $60
___ GSSN-17A
___ GSSN-18
___ GSSN-19
___ GSSN-20
___ GSSN-21
___ GSSN-22
___ GSSN-23
___ GSSN-24
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___ GSSN-29
___ GSSN-30
___ GSSN-31
___ GSSN-32
___ GSSN-33
___ GSSN-34
___ GSSN-35
___ GSSN-40

Utilities
___ 18 disk set = $54
___ GSUT-01C
___ GSUT-02
___ GSUT-03C
___ GSUT-04B
___ GSUT-05C
___ GSUT-06A
___ GSUT-07B
___ GSUT-08D
___ GSUT-09B
___ GSUT-10B
___ GSUT-11B
___ GSUT-12
___ GSUT-13B
___ GSUT-14
___ GSUT-15B
___ GSUT-16
___ GSUT-17
___ GSUT-18

Best of The Apple IIGS
___ 25 disk set = $56.25 (save $6.25 - normally $62.50)

Best of The Apple IIGS Disk Catalog
___ 1 disk set = $2.00 (free w/Purchase of 25 Disk Set)

Best of Communications
___ 1 disk set = $2.50

Best of DA's, CDevs, FExts, Dvrs, & Inits
___ 1 disk set = $2.50

Best of Bit-Mapped Fonts
___ 2 disk set = $5.00

Best of Games
___ 5 disk set = $12.50

Best of Graphics
___ 2 disk set = $5.00

Best of Icons (Finder)
___ 1 disk set = 2.50

Best of Music
___ 4 disk set = $10.00

Best of Sounds
___ 2 disk set = $5.00

Best of True Type Fonts
___ 5 disk set = $12.50

Best of Utilities
___ 2 disk set = $5.00

The Best of the Apple IIGs may be purchased as a 25 disk set or as individual sets as listed above.

(*1) System 5.0.4 - 2 Disk Set = $6.00
(*2) Hyper Mover v1.1 -(Macintosh & IIGS) 2 Disk Set = $6.00
(*3) GS Bug & Debug Tools v1.6 = $3.00
(*4) System 6.0.1 - 6 Disk Set = $18.00
(*5) HyperCard IIGS - 6 Disk Set = $18.00
(*6) Astronomer - 7 disk set (GSED-01 to GSED-07) $21.00

Note: Some disks may contain Shareware. Please send the requested remittance to the author if you use the program. Most of the programs on these library disks may require a IIGS with a minimum of 1.25 megs of memory.

Apple III Disk Library Order Form

5-1/4" DISKS:

Accounting
___ 3 disk set =$4.50
___ 3ACT-01B
___ 3ACT-02B
___ 3ACT-03B

3 Easy Pieces Templates
___ 15 disk set = $22.50
___ 3AWZ-01
___ 3AWZ-02
___ 3AWZ-03
___ 3AWZ-04
___ 3AWZ-05
___ 3AWZ-06
___ 3AWZ-07
___ 3AWZ-08
___ 3AWZ-09
___ 3AWZ-10
___ 3AWZ-11
___ 3AWZ-12A
___ 3AWZ-13
___ 3AWZ-14
___ 3AWZ-15

Business Basic
___ 9 disk set = $13.50
___ 3BSB-01
___ 3BSB-02
___ 3BSB-03
___ 3BSB-04
___ 3BSB-05
___ 3BSB-06
___ 3BSB-07
___ 3BSB-08
___ 3BSB-09A

Disk Catalog (ASCII TEXT)
___ 3 disk set = $3 or $1 per disk
___ 3CAT-01B - Disk 1
___ 3CAT-02B - Disk 2
___ 3CAT-03B - Disk 3

Disk Catalog (3 EZPC's)
___ 2 disk set = $2 or $1 per disk
___ 3CAT-04B - Disk 1
___ 3CAT-05B - Disk 2

Games
___ 5 disk set = $7.50
___ 3GAM-01
___ 3GAM-02
___ 3GAM-03A
___ 3GAM-04
___ 3GAM-05

Graphics
___ 43 disk set = $64.50
___ 3GRX-01
___ 3GRX-02
___ 3GRX-03
___ 3GRX-04
___ 3GRX-05
___ 3GRX-06
___ 3GRX-07
___ 3GRX-08
___ 3GRX-09
___ 3GRX-10
___ 3GRX-11
___ 3GRX-12
___ 3GRX-13
___ 3GRX-14
___ 3GRX-15
___ 3GRX-16
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___ 3GRX-19
___ 3GRX-20
___ 3GRX-21
___ 3GRX-22
___ 3GRX-23
___ 3GRX-24
___ 3GRX-25
___ 3GRX-26
___ 3GRX-27
___ 3GRX-28
___ 3GRX-29A
___ 3GRX-30
___ 3GRX-31
___ 3GRX-32
___ 3GRX-33
___ 3GRX-34
___ 3GRX-35
___ 3GRX-36
___ 3GRX-37
___ 3GRX-38
___ 3GRX-39
___ 3GRX-40
___ 3GRX-41
___ 3GRX-42
___ 3GRX-43

Information
___ 37 disk set = $55.50
___ 3INF-02E
___ 3INF-03
___ 3INF-04
___ 3INF-05
___ 3INF-06
___ 3INF-07
___ 3INF-08
___ 3INF-09
___ 3INF-10
___ 3INF-11
___ 3INF-12
___ 3INF-13
___ 3INF-14
___ 3INF-15
___ 3INF-16
___ 3INF-17
___ 3INF-18
___ 3INF-19
___ 3INF-20
___ 3INF-21
___ 3INF-22
___ 3INF-24
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___ 3INF-26
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___ 3INF-35
___ 3INF-36
___ 3INF-37
___ 3INF-38
___ 3INF-39

Membership Directory
___ 3MRD-01
___ 3MRD-02

Miscellaneous
___ 21 disk set = $31.50
___ 3MSC-01
___ 3MSC-02
___ 3MSC-03
___ 3MSC-04
___ 3MSC-05
___ 3MSC-06
___ 3MSC-07
___ 3MSC-08
___ 3MSC-09
___ 3MSC-10
___ 3MSC-11
___ 3MSC-12
___ 3MSC-13
___ 3MSC-14
___ 3MSC-15
___ 3MSC-16
___ 3MSC-17
___ 3MSC-18
___ 3MSC-19A
___ 3MSC-20
___ 3MSC-21

Pascal
___ 20 disk set = $30
___ 3PCL-01
___ 3PCL-02
___ 3PCL-03
___ 3PCL-04
___ 3PCL-05
___ 3PCL-06
___ 3PCL-07
___ 3PCL-08A
___ 3PCL-09
___ 3PCL-10
___ 3PCL-11
___ 3PCL-12
___ 3PCL-13
___ 3PCL-14
___ 3PCL-15
___ 3PCL-16
___ 3PCL-17
___ 3PCL-18
___ 3PCL-19
___ 3PCL-20

Repairs
___ 11 disk set = $16.50
___ 3REP-01
___ 3REP-02
___ 3REP-03
___ 3REP-04
___ 3REP-05
___ 3REP-06
___ 3REP-07
___ 3REP-08
___ 3REP-09
___ 3REP-10
___ 3REP-11

TeleCommunications
___ 13 disk set = $19.50
___ 3TEL-01
___ 3TEL-02
___ 3TEL-03
___ 3TEL-04
___ 3TEL-05
___ 3TEL-06
___ 3TEL-07
___ 3TEL-08
___ 3TEL-09
___ 3TEL-10
___ 3TEL-11
___ 3TEL-12
___ 3TEL-13

Utilities
___ 56 disk set = $84
___ 3UTL-01A
___ 3UTL-02
___ 3UTL-03
___ 3UTL-04B
___ 3UTL-05A
___ 3UTL-06
___ 3UTL-07
___ 3UTL-08
___ 3UTL-09
___ 3UTL-10
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___ 3UTL-43
___ 3UTL-44A
___ 3UTL-45
___ 3UTL-46
___ 3UTL-47
___ 3UTL-48
___ 3UTL-49
___ 3UTL-50
___ 3UTL-51
___ 3UTL-52A
___ 3UTL-53
___ 3UTL-54
___ 3UTL-55
___ 3UTL-56

Word Processing
___ 7 disk set = $10.50
___ 3WDP-01B
___ 3WDP-02
___ 3WDP-03
___ 3WDP-04
___ 3WDP-05
___ 3WDP-06
___ 3WDP-07

Note: Some disks may contain Shareware. Please remit to the author of the program the requested amount if you use that program.

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

# of disks	Member Price	Extended
3.5" Singles		
___ 4 or less @	$4.00	_____
___ 5 or more @	$3.50	_____
___ sets (as marked)	$(above)	_____
5.25" Singles		
___ 4 or less @	$2.00	_____
___ 5 or more @	$1.75	_____
___ sets (as marked)	$(above)	_____
+ postage $1.00/disk maximum $5.00		
TOTAL AMOUNT DUE		$_____

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.

Name _____

Box Number, Apt., Suite _____

Street Address _____

City _____ **State** _____ **Zip** _____

Day tele. _____ **Evening tele.** _____

Macintosh Disketeria

by Dave Weikert

New Disks

WE FEATURE 18 disks this month including an update of the Disketeria Catalog, an addition to the Desk Accessories series, revisions to the Graphics series, revised Internet Starter Kit placed in disk series, revisions to the Applications Updates series and two new Apple System Software disks.

We simplified our disk pricing—single Apple System Software disks are now priced the same as single Disketeria disks. There is still a discount for five or more disks and special prices for sets. System Software orders received after 1 March should include the higher price—you can save money by buying before the price increase. Individual disks are available for $4.00 each and $3.50 for five or more. See the Disk Order Form and following paragraphs for the prices for sets.

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).

Revised Internet Starter Kit

Washington Apple Pi, Ltd. has revised its set of essential tools to help you ride the surf onto the Internet. This collection of programs—carefully selected by Jon Thomason and Lawrence Charters—is now a four-disk set. It is available for $15 at the office or meeting; add $3 postage if you place your order by mail.

Revised programs in this series include Netscape Navigator (previously named .Netscape Mosaic), Eudora, JPEGView, NewsWatcher, Sparkle and TurboGopher. New material includes patchers for various versions of MacTCP and a tool useful for quoting Internet text. And there is some new information—how to perform ClarkNet PPP setup, a compendium of Internet Service Providers and a FAQ about the World Wide Web.

This collection includes everything you need to get started on the Internet except for MacTCP and an Internet Service Provider. And MacTCP is included with System 7.5 or on the disk that accompanies Adam C. Engst's excellent book about the Internet—*Internet Starter Kit for Macintosh*.—priced at about $30.

Desk Accessories

Desk Accessories (DAs) are usually small programs of limited functional scope that are nevertheless very useful or entertaining. DA suitcase icons are installed using the Font/DA Mover for System 6.0.8 or earlier and are available under the Apple menu. Under System 7, Desk Accessories may be used as independent programs by opening their suitcases, dragging their application icons to another folder or to the desktop and then double clicking the application icon. DAs may also be installed under the Apple menu by moving their application icons to the Apple Menu Items folder within the System 7 folder. There are also commercial Font and DA manager utilities such as Suitcase II and Master Juggler that may be used to install and manage desk accessories. If you use these, just follow the instructions in their respective manuals.

Revised Graphics Series

Graphics! Along with desktop publishing, the graphics capability provided by the Mac was the primary reason for the initial success of our beloved computers in the business-place. Graphics and color first appeared in our Mac Disketeria in the Mac II series of disks. The Mac II was the first machine capable of performing color graphics, other color functions such as games and monochrome and color plotting routines that required more powerful CPUs. (It seems odd referring to a Mac II 68020 CPU as a powerful CPU after looking over the most recent crop of 68040 and Power Macintosh models.) As time has passed, color and more capable CPU have been added to a variety of Macintosh models other than the II series and the Mac II disk series was revised last year to become this graphics series.

After its revision this month, the Graphics Disk series 8.XX now extends through Mac Disk #8.13A. New Disks #8.10B and #8.11B are dedicated to a revised version of NIH Image—an image processing and analysis program that can acquire, display, edit, enhance, ana-

lyze, print and animate images. Disk #8.12A adds some additional graphics applications to our previous collection. And Disk #8.13A—in 1.44M disk format—includes updated versions of JPEGView and Sparkle. Descriptions of the new files are included below.

The other disks in the series were not revised. The first three disks—#8.01A through #8.03A—include fractal applications. These display Mandelbrot sets with fantastic swirls of color for you with color Macs. Mac Disks #8.04A and #8.05A include applications and DAs for viewing and modifying graphic files in GIF, PICT and JPEG formats. The next four disks—#8.06A through #8.09A —include drawing and painting programs and general purpose graphic utility programs. Descriptions of the files on these disk are included in our Disketeria Catalog—Disk #00.01.

New Internet Series

With so much hoopla about the Internet these days, Internet related programs deserve their own disk series. We previously added the Internet Starter Kit (ISK) to the Telecommunications series. This month, we have revised the ISK as described above and moved it to new Disk Series #18.XX. And, in addition to the ISK, we have two additional disks in this series which feature HyperText Markup Language (HTML) related programs. The first of these disks include HTML editors that should serve as a starting point for anyone who wants to design World Wide Web (WWW) pages. The second includes other miscellaneous HTML information and translators and a HyperText document server that runs on your Mac. See the descriptions below for specific programs and disk content.

Application Updaters

This month we revised four disks in the Mac Disk #26.XX Updates series. This disk series—developed by Jon Hardis—has been a big hit with many of you. This collection includes 'patches' for many popular application and utility software packages.

New program updates to this series include **Canvas** 3.5.x to 3.5.3, **Now Utilities** 5.0 to 5.0.1 and **Quicken** Release 2 to Release 3. Check below for which disks include the changes that you need.

Apple System Software

There are two disks this month which include updates to Apple System Software.

Video Software Installer is a single 1.44M disk for use with series 630 Macs—and it also seems to work with Centris and Quadra 660AV and 840AV models within the limits of their capabilities. It installs an updated Apple Video Player.

Network Access is one 1.44M disk that contains a disk image with minimum software that will boot every Mac later than a Mac Plus. It also includes minimum network software to permit you to mount network assets such as servers. Use Disk Copy to create the boot disk from the disk image.

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 #2.08E — DAs 8
Desk Accessories

Conversion DA 2.0.5 *f*.sit: By Rick Johnson. Converts between linear measure, for example between inches, millimeters, points and picas. Also has fractions to decimal and the reverse, dry and liquid measure, volume, area, geographical, temperature, angles and model railroad scale conversions.

Font DA 1.01 *f*.sit By John V. Holder. Allows you to see every character of any font installed and find the key combinations to get a certain character. ***Shareware – $5.***

Remember? DA 2.3.7 *f*.sit: By Dave Warker. A Desk Accessory and an INIT to recall descriptions of important occasions, both one-time only (such as appointments) and repeating (like birthdays) entered into a file. The **Remember? Extension** reminds of impending events when the Mac is powered up or reset. ***Shareware – $20.***

ScrapIt Pro 3.11 *f*.sit By John V. Holder. A replacement Scrapbook that lets you create and access multiple files, import text, PICT, 'snd' (sound) and Paint files, export text, PICT, 'snd' and Paint files and perform other useful functions. It may also be used as a mini-word processor, can play sounds or QuickTime movies that it stores and lots more. ***Shareware – $15.***

ScrapIt][DA.sit: By John V. Holder. A replacement for Apple's Scrapbook DA; this abbreviated version lets you create and access multiple files, import text, PICT, 'snd' (sound) and Paint files, export text, PICT, 'snd' and Paint files and perform other useful functions. ***Shareware – $15.***

StateMap Info DA *f*.sit: Provides the telephone numbers to call to obtain free state road maps along with other travel information and various brochures.

VendorDA 1.44 (B&W) *f*.sit: By Bill Baldridge, one of Apple Pi's own. A very useful list of Macintosh computer product related vendors and their phone numbers. This version, no longer a DA, is in Postcard format. ***Shareware – $10, $15 for password to extract text.***

VendorDA 1.44 (Color) *f*.sit: By Bill Baldridge. A The color version of the preceding. ***Shareware – $10, $15 for password to extract text.***

WorldClock Lite 2.05 *f*.sit: By Leighton Paul. Shows the time and location on a

projected map of six major world cities including your home location. The map indicates where the sun is shining and where it is dark. ***Shareware – $15.***

Disk #8.10B — G 10
Graphics–NIH Image

GAUKER *f*: By Phil Toll. A set of Gaussian convolution kernels useful for MacPaint to gray scale PICT conversions; for use with the Image application. **About Conversion Kernels** is in text format.

NIH Image 1.55 *f*.sit: By Wayne Rasband. An image processing and analysis program for the Macintosh that can acquire, display, edit, enhance, analyze, print and animate images. It reads and writes TIFF, PICT, PICS and MacPaint files, providing compatibility with many other applications, including programs for scanning, processing, editing, publishing and analyzing images. It supports many standard image processing functions, including contrast enhancement, density profiling, smoothing, sharpening, edge detection, median filtering, and spatial convolution with user defined kernels. It also incorporates a Pascal-like macro programming language, providing the ability to automate complex, and frequently repetitive, processing tasks. Requires Mac with 8-bit video in color or gray scale and FPU.

NIH Image V1.55 Docs *f*.sit: About NIH Image (Word), By Wayne Rasband, is in MS Word format. **Inside NIH Image 1.55** is in Word format and was 'organized' by Mark Vivino.

Disk #8.11B — G 11
Graphics–NIH Image

GAUKER *f*: By Phil Toll. A set of Gaussian convolution kernels useful for MacPaint to gray scale PICT conversions; for use with the Image application. **About Conversion Kernels** is in text format.

NIH Image 1.55 (Non-FPU) *f*.sit: By Wayne Rasband. An image processing and analysis program for the Macintosh that can acquire, display, edit, enhance, analyze, print and animate images. It reads and writes TIFF, PICT, PICS and MacPaint files, providing compatibility with many other applications, including programs for scanning, processing, editing, publishing and analyzing images. It supports many standard image processing functions, including contrast enhancement, density profiling, smoothing, sharpening, edge detection, median filtering, and spatial convolution with user defined kernels. It also incorporates a Pascal-like macro programming language, providing the ability to automate complex, and frequently repetitive, processing tasks. Requires Mac with 8-bit video in color or gray scale.

NIH Image V1.55 Docs *f*.sit: About NIH Image (Word), By Wayne Rasband, is in MS Word format. **Inside NIH Image 1.55** is in Word format

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and was 'organized' by Mark Vivino.

Disk #8.12A — G 12
Graphics–Misc

AnimHelp 1 *f*.sit: By Brian Greenstone. A utility designed to help you draw sprite-based animations. A Compositor feature scans PICS files and creates a composite PICT to simplify cut and paste operations. ***Shareware – $10.***

CheapColor 2 v1.0 *f*.sit: By Jeff Skaistis. Converts full-color images in PICT or PixelPaint format into an image that uses the eight original QuickDraw colors and allows them to be printed in color on an ImageWriter printer. Requires a 68020 or 68030 processor, Color QuickDraw, and System 6.0.2 or greater. ***Shareware – $10.***

DesignerDraw 4.6.1 *f*.sit: By Paul Hyman. A drawing program for organization charts, flow charts, dataflow diagrams and other like diagrams. Very good for applications where there is a need for the interconnections between blocks to move as the block is moved. See the examples in sample diagrams.

GraphicConverter 2.0.6 (US).sit: 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. ***Shareware – $35.***

Imagery 1.9 *f*.sit: By Jeff Lewis. Converts Macintosh, Apple IIgs, Atari ST, Amiga, IBM PC and UNIX graphics files into Macintosh compatible monochrome or color TIFF, GIF and PICT2 files. The file formats that can be converted are too numerous to mention but seem to include many of the most popular and many obscure formats. You may also import raw image data and try to organize it in a way the Mac can display. ***Consider a donation to your local Society of Prevention of Cruelty to Animals.***

Rainbox 1.1 *f*.sit By Alex Rosen. A 'psychedelic' paint program that uses palette animation to make drawings appear as if they are moving.

Disk #8.13A — G 13
Graphics–Misc

JPEGView 3.3.1.sit: By Aaron Giles. View JFIF (JPEG File Interchange Format), JPEG (Joint Photographic Experts Group), GIF and PICT format files. Converts between QuickTime JPEG and JFIF formats. Supports 24-

and 16-bit JPEG images. Use drag and drop with **JPEGView AutoTyper** to change the file type. Requires System 7 and later and QuickTime. Supports Power Macintosh in native mode. ***Postcardware – $20 for bound, printed documentation.***

Sparkle 2.3.1 Fat *f*.sit: By Maynard Handley. Plays MPEGs and converts them to QuickTime movies. It uses the standard QuickTime movie controller as its interface. For System 7.0 and later; requires a 68020 CPU and QuickTime 1.6 or later.

Disk #18.01
Internet Starter Kit 1

•**Information *f***: This folder contains a number of useful text or Hyper Text Markup Language (HTML) files for your information. The information files include:

ClarkNet PPP Set-Up: How to set up your PPP connection if you have selected ClarkNet as your Internet Service Provider (ISP).

Frequently-Asked Questions *f*.sit: The most frequently asked questions about the Mac and the Internet, direct to you from the Internet Usenet newsgroup comp.sys.mac.comm.

How To Install MacTCP: A really great help file on getting set up and connected the first time. It was written by John Norstad, the Disinfectant guy.

inet.service.providers: A comprehensive (but incomplete) list of ISPs and their services and contact information.

wwwfaq0195.html: An HMTL based collection of Frequently Asked Questions (FAQs) about the World Wide Web (WWW) and HTML. HTML files may be read with a Web browser like Netscape Navigator or Mosaic.

Finger 1.5 *f*.sit: By Peter N. Lewis. Lets you look up information about a user on the Internet which that person or their host system has provided using the Finger protocol. ***Shareware – $10.***

InterSLIP 1.0.1 *f*.sit: By InterCon Systems Corporation. You will use SLIP (Serial Line Internet Protocol) to connect to your Internet service provider via modem. SLIP is an alternative to PPP. Requires MacTCP.

MacPPP 2.0.1 *f*.sit: By Merit Network University of Michigan. You will use PPP (Point-to-Point Protocol) to connect to your Internet service provider via modem. PPP is the preferred alternative to SLIP as it is a more robust protocol. Requires MacTCP.

Mac TCP Watcher 1.12 *f*.sit: By Peter N. Lewis. Helps you verify that your connection is working properly, and suggests corrections if not. Useful for people with MacTCP configuration problems, network problems, or the chronically curious. Requires MacTCP.

"We previously added the Internet Starter Kit (ISK) to the Telecommunications series. This month, we have revised the ISK as described above and moved it to new Disk Series #18.XX. And, in addition to the ISK, we have two additional disks in this series which feature HyperText Markup Language (HTML) related programs."

Disk #18.02
Internet Starter Kit 2

Anarchie 1.4.0 *f*.sit: By Peter N. Lewis. Allows you to locate and retrieve files using the FTP and Archie protocols. It is AppleScriptable and drag-and-drop and receives raves all around. Requires MacTCP. ***Shareware – $10.***

Eudora 1.4.3 stuff *f*.sit: Some of the goodies that were included in the first version of Eudora in this series but were missing from 1.5.1. They may still be useful.

Eudora 1.5.1 Fat *f*.sit: By Steven Dorner. Powerful E-mail tool, using the POP3 and SMTP protocols to communicate with your host E-mail system.

Disk #18.03
Internet Starter Kit 3

JPEGView 3.3.1.sit: By Aaron Giles. Display or convert the graphics retrieved from the Net. View JFIF (JPEG File Interchange Format), JPEG (Joint Photographic Experts Group), GIF and PICT format files. Converts between QuickTime JPEG and JFIF formats. Supports 24- and 16-bit JPEG images. Use drag and drop with **JPEGView AutoTyper** to change the file type. Requires System 7 and later and QuickTime. Supports Power Macintosh in native mode. ***Postcardware – $20 for bound, printed documentation.***

MacWAIS 1.29 *f*.sit: By Microelectronics and Computer Technology Corp. Information search and retrieval system for large quantities of information offered on the net in centralized databases. ***Shareware – $35.***

MacWeather 2.0.4 *f*.sit: By Chris Kidwell (a Univ. of MD student). Looks up current weather forecasts and displays them in a nice graphical way. ***Shareware – $10.***

Magic Bullets 1.0 *f*.sit: By Bill Karsh. Provides Internet-style quotes and DOS-UNIX-Mac text conversion—sort of like Quoter on steroids. For System 6.0.5 and later. ***Shareware – $5.***

NCSA Telnet 2.6 *f*.sit: Allows you to log into text-based services such as bulletin boards, menu-driven services and command-line shells.

Sound Machine 2.1 *f*.sit: By Rod Kennedy. Used to play back or convert sounds retrieved from the Net.

Disk #18.04
Internet Starter Kit 4

NewsWatcher 2.0b24*f*.sit: By John Norstad. Uses the NNTP protocol to let you browse, read and participate in group discussions on Usenet bulletin boards.

Sparkle 2.3.1 Fat *f*.sit: By Maynard

Handley. Playback or convert MPEGs, PICTs and QuickTime movies retrieved from the Net. It uses the standard QuickTime movie controller as its interface. For System 7.0 and later; requires a 68020 CPU and QuickTime 1.6 or later.

TurboGopher 2.0b1 *f*.sit: By the Minnesota Gopher Team. Provides an interface to the menu-based information retrieval protocol known as Gopher.

Disk #18.05 HTML Editors

Note: HTML files may be read with a Web browser like Netscape Navigator or Mosaic.

HTML Editor 1.0b2 *f*.sit. By Rick Giles. An editor for creating and modifying HTML files.

HTML SuperText 2.0.1 *f*.sit: By Robert C. Best III. Allows you to easily and quickly create HTML documents by allowing you to write your document and then edit in your tags via a select-and-tag method. Creates complex HTML tags such as linking to other network services (i.e.. gopher, ftp, WAIS and WWW sites) by using a simple information form format.

HTML.edit 1.1.2 *f*.sit By Murray M. Altheim. An HTML editor to create documents for the WWW. This is a standalone HyperCard 2.2 application which does not require HyperCard to run. The Help window has a comprehensive index and useful information. (Tom Witte reports that it did not do a particularly good job.)

Disk #18.06 HTML Miscellaneous

Hotlist2HTML 0.7.1 *f*.sit: By Lutz Weimann. Converts a NCSA-MacMosaic Hotlist or a EINet-MacWeb Hotlist (resource) file to a HTML-page, wherein each URL of the Hotlist is associated with its corresponding menuitem name. Not a very Mac-like user interface.

HTML folder.sit: By Tim Jones. Three documents with WWW information on Info-Mac mirror sites, Gruce Grbb's ftp list and University of Michigan mirror sites. in HTML format. Check the URLs for future updates of this information.

HTML Translator 1.0 *f*.sit. By Brian A. Sullivan and Jonathan Ryan Day. A translator for use in editing HTML documents in Macintosh applications that support the XTND System. Requires System 7.0 and later. (Tom Witte reports that it did not work well.)

HTMLLIST.sit: An HTML DTD reference arranged alphabetically.

MacHTTP 2.0.1 *f*.sit: By Chuck Shotton. A server that lets you serve hypertext documents to other WWW users from your Mac. It also supports AppleScript and interfaces with other applications that support AppleScript. ***Shareware – $50 to $100 (commercial use).***

rtftohtml 2.5 *f*.sit: By Chris Hector. Translates formatted text saved in rtf format into HTML text.

WebMap 1.0.7d *f*.sit: By Rowland D. Smith. An HTML Mapping tool that may be used with MacHTTP.

wwwfaq0195.html: An HMTL based collection of Frequently Asked Questions (FAQs) about the World Wide Web (WWW) and HMTL.

Disk #26.08C & 26.09C Deneba Canvas

Update Canvas 3.5.X to 3.5.3. Two disk set—1.44M.

Disk #26.34A Now Utilities

Update Now Utilities 5.0 to 5.0.1. Single 1.44M disk.

Disk #26.35A Quicken Updaters

Update Quicken 5 Release 2 to Release 3. Also includes earlier updater to update Quicken 4 to Release 6.

System Software Network Access Image

A 1.44M disk that contains documentation and a disk image with minimum software that will boot every Mac later than a Mac Plus on a network. Use Disk Copy to create the boot disk from the disk image.

System Software Video Software Installer

This disk installs an updated Apple Video Player for use series 630 Macs—and it also seems to work with Centris and Quadra 660AV and 840AV models within the limits of their capabilities.

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 _____

Street Address _____

City **State** **Zip** _____

Day tele. **Evening tele.** _____

Macintosh Library Order Form

Pi Library
- ___ 0.01 - C 01 Catalog
- ___ 0.02 - C 02 Sampler

Anti-Virus Utilities
- ___ 1.01G - AV 1
- ___ 1.02L - AV 2
- ___ 1.03L - AV 3

Desk Accessories
- ___ 7 disk set; $21
- ___ 2.01E - DAs 1
- ___ 2.02E - DAs 2
- ___ 2.03E - DAs 3
- ___ 2.04E - DAs 4
- ___ 2.05E - DAs 5
- ___ 2.06E - DAs 6
- ___ 2.07E - DAs 7
- ___ 2.08E - DAs 8

F Keys (Function Keys)
- ___ 4.01A - FKs 1
- ___ 4.02A - FKs 2

ImageWriter Fonts
- ___ 5.01A - IW 1
- ___ 5.02A - IW 2
- ___ 5.03A - IW 3
- ___ 5.04A - IW 4

PostScript Fonts
- ___ 6.01B - PS 1
- ___ 6.02B - PS 2
- ___ 6.03B - PS 3
- ___ 6.04B - PS 4
- ___ 6.05B - PS 5
- ___ 6.06B - PS 6
- ___ 6.07B - PS 7
- ___ 6.08B - PS 8
- ___ 6.09B - PS 9
- ___ 6.10B - PS 10
- ___ 6.11B - PS 11
- ___ 6.12B - PS 12
- ___ 6.13B - PS 13
- ___ 6.14B - PS 14
- ___ 6.15B - PS 15
- ___ 6.16B - PS 16
- ___ 6.17B - PS 17
- ___ 6.18B - PS 18
- ___ 6.19B - PS 19

TrueType Fonts
- ___ 7.01A -TT 1
- ___ 7.02A -TT 2
- ___ 7.03A -TT 3
- ___ 7.04A -TT 4
- ___ 7.05A -TT 5
- ___ 7.06A -TT 6
- ___ 7.07A -TT 7
- ___ 7.08A -TT 8
- ___ 7.09A -TT 9
- ___ 7.10A -TT 10
- ___ 7.11A -TT 11
- ___ 7.12A -TT 12
- ___ 7.13A -TT 13

Graphics
- ___ 11 disk set; $33
- ___ 8.01A - G 1
- ___ 8.02A - G 2
- ___ 8.03A - G 3
- ___ 8.04A - G 4
- ___ 8.05A - G 5
- ___ 8.06A - G 6
- ___ 8.07A - G 7
- ___ 8.08A - G 8
- ___ 8.09A - G 9
- ___ 8.10B - G 10
- ___ 8.11B - G 11
- ___ 8.12A - G 12
- ___ 8.13A - G 13 (‡)

INITs & cdevs
- ___ 9.01C - I/C 1
- ___ 9.02C - I/C 2
- ___ 9.03C - I/C 3
- ___ 9.04C - I/C 4
- ___ 9.05C - I/C 5
- ___ 9.06C - I/C 6
- ___ 9.07C - I/C 7
- ___ 9.08C - I/C 8
- ___ 9.09C - I/C 9
- ___ 9.10C - I/C 10
- ___ 9.11C - I/C 11
- ___ 9.12C - I/C 12
- ___ 9.13C - I/C 13
- ___ 9.14C - I/C 14
- ___ 9.15C - I/C 15
- ___ 9.16C - I/C 16

Paintings (MacPnt)
- ___ 5 disk set; $15
- ___ 11.01 - P 1
- ___ 11.02 - P 2
- ___ 11.03 - P 3
- ___ 11.04 - P 4
- ___ 11.05 - P 5

Digitized Sounds
- ___ 9 disk set; $27
- ___ 12.01B - S 1
- ___ 12.02B - S 2
- ___ 12.03B - S 3
- ___ 12.04B - S 4
- ___ 12.05B - S 5
- ___ 12.06B - S 6
- ___ 12.07B - S 7
- ___ 12.08B - S 8
- ___ 12.09B - S 9

Telecommunications
- ___ 13.01C - T 1
- ___ 13.02C - T 2
- ___ 13.03C - T 3
- ___ 13.04C - T 4
- ___ 13.05C - T 5
- ___ 13.06C - T 6

Programmer/Hacker
- ___ 14.01C - PH 1
- ___ 14.02B - PH 2

Miscellaneous Utils
- ___ 15.01C - MU 1
- ___ 15.02C - MU 2
- ___ 15.03C - MU 3
- ___ 15.04C - MU 4
- ___ 15.05C - MU 5
- ___ 15.06C - MU 6
- ___ 15.07C - MU 7
- ___ 15.08C - MU 8
- ___ 15.09C - MU 9
- ___ 15.10C - MU 10
- ___ 15.11C - MU 11
- ___ 15.12C - MU 12
- ___ 15.13C - MU 13
- ___ 15.14C - MU 14
- ___ 15.15C - MU 15

System Utilities
- ___ 16.01E - SU 1
- ___ 16.02E - SU 2
- ___ 16.03E - SU 3
- ___ 16.04E - SU 4
- ___ 16.05E - SU 5
- ___ 16.06E - SU 6
- ___ 16.07E - SU 7
- ___ 16.08E - SU 8
- ___ 16.09E - SU 9
- ___ 16.10E - SU 10
- ___ 16.11E - SU 11
- ___ 16.12E - SU 12
- ___ 16.13E - SU 13
- ___ 16.14E - SU 14
- ___ 16.15E - SU 15
- ___ 16.16E - SU 16
- ___ 16.17E - SU 17
- ___ 16.18E - SU 18
- ___ 16.19E - SU 19
- ___ 16.20E - SU 20

Word Processing Utils
- ___ 7 disk set; $21
- ___ 17.01C - WP 1
- ___ 17.02C - WP 2
- ___ 17.03C - WP 3
- ___ 17.04C - WP 4
- ___ 17.05C - WP 5
- ___ 17.06C - WP 6
- ___ 17.07C - WP 7

Internet Series
- ___ 18.01 - I 1 (‡)
- ___ 18.02 - I 2 (‡)
- ___ 18.03 - I 3 (‡)
- ___ 18.04 - I 4 (‡)
- ___ 18.05 - I 5 (‡)
- ___ 18.06 - I 6 (‡)

Mac Troubleshooting
- ___ 4 disk set; $12
- ___ 20.01 - TS 1
- ___ 20.02 - TS 2
- ___ 20.03 - TS 3
- ___ 20.04 - TS 4

Fun & Games Series
- ___ 22.01 - F/G 1
- ___ 22.02 - F/G 2
- ___ 22.03 - F/G 3
- ___ 22.04 - F/G 4
- ___ 22.05 - F/G 5
- ___ 22.06 - F/G 6
- ___ 22.07 - F/G 7
- ___ 22.08 - F/G 8
- ___ 22.09 - F/G 9
- ___ 22.10 - F/G 10
- ___ 22.11 - F/G 11 (‡)
- ___ 22.12 - F/G 12 (‡)
- ___ 22.13 - F/G 13 (‡)
- ___ 22.14 - F/G 14 (‡)
- ___ 22.15 - F/G 15 (‡)
- ___ 22.16 - F/G 16 (‡)
- ___ 22.17 - F/G 17 (‡)
- ___ 22.18 - F/G 18 (‡)
- ___ 22.19 - F/G 19 (‡)
- ___ 22.20 - F/G 20 (‡)

PowerBook/Duo Series
- ___ 4 disk set; $12
- ___ 23.01 - PB 1
- ___ 23.02 - PB 2
- ___ 23.03 - PB 3
- ___ 23.04 - PB 4

Update Series
- ___ 26.01/02A - Photoshop, 2 disks; $8
- ___ 26.03A - Photoshop Plug Ins, 1 disk; $4
- ___ 26.04A - Desktop Publishing, 1 disk; $4
- ___ 26.05A - QuarkXPress, 1 disk; $4
- ___ 26.07B - HP DeskWriter 6.0, 1 disk; $4
- ___ 26.08/09C - Denaba Canvas, 2 disks; $8 (‡)
- ___ 26.10A - Word Processor 1, 1 disk; $4
- ___ 26.11C - Word Processor 2, 1 disk; $4
- ___ 26.12C - Database, 1 disk; $4
- ___ 26.13B - ClarisWorks/Quicken 4, 1 disk; $4
- ___ 26.14A - Word, 1 disk; $4
- ___ 26.15A - Word Enhancements, 1 disk; $4
- ___ 26.16A - Excel Enhancements, 1 disk; $4
- ___ 26.17A - Anti-Virus, 1 disk; $4
- ___ 26.18A - After Dark & Modules, 1 disk; $4
- ___ 26.18–23A - After Dark Set, 6 disk; $15
- ___ 26.25–27B - CP MacTools, 3 disk; $12
- ___ 26.29A - Now Utilities 4, 1 disk; $4
- ___ 26.30D - Miscel. Utilities, 1 disk; $4
- ___ 26.31/32A - Stuffit Deluxe, 2 disks; $8
- ___ 26.33A - DrawPro, Impact, Frontier, 1 disk; $4
- ___ 26.34A - Now Utilities 5, 1 disk; $4 (‡)
- ___ 26.35A - Quicken 4 & 5, 1 disk; $4

Online Bible
- ___ 24 disk set; $50
- ___ Set 1, 6 disks; $15
- ___ Set 2, 7 disks; $15
- ___ Set 3, 6 disks; $15
- ___ Set 4, 5 disks; $15

Disketeria ValuPaks (†)
- ___ Best of Pi, 15 disks; $30
- ___ PostScript Fonts 1, 14 disks; $30
- ___ PostScript Fonts 2, 5 disks; $10
- ___ TrueType Fonts 1, 9 disks; $20
- ___ TrueType Fonts 2, 4 disks; $10
- ___ Internet Starter Kit, 4 disks; $15 (‡)
- ___ Calc/Clock Utils 1, 5 disks; $15
- ___ Pers Mgt Utils 2, 5 disks; $15
- ___ System Utils 4, 5 disks; $15
- ___ Fun/Games 1, 10 disks; $25
- ___ Fun/Games 2, 10 disks; $25 (‡)

Apple System Software
- ___ HyperCard 2.0 - 5 disk set; $15
- ___ 6.0.3 - 4 disks; $15
- ___ 6.0.5 - 4 disks; $15
- ___ 6.0.8 - 4 disks; $15
- ___ 7.0 - 8 disks; $20
- ___ 7.0.1 - 6 disks; $20 (‡)
- ___ 7/7.0.1 Tune-Up $4
- ___ 7.1 Sys Updater 3.0 - 2 disks; $8 (‡)
- ___ 7.1 Sys Updater 3.0 (800K); $4
- ___ QuickTime 1.6.2; $4 (‡)
- ___ LaserWriter 8.2; $4
- ___ Network Installer $4
- ___ TrueType; $6
- ___ Basic Con Set 1.1.1; $4
- ___ Express Modem; $4 (‡)
- ___ GeoPort; $4 (‡)
- ___ Display Software; $4
- ___ CD ROM Setup; $4
- ___ Comm 1 (CTB); $4
- ___ AppleShare 4 Tune-Up; $4
- ___ AtEase Updater 2.01 $4
- ___ StyleWriter II; 4 disks; $15
- ___ IIe Installer; $4
- ___ Monitor Energy Star; $4
- ___ LW Pro Tune-Up; $4
- ___ Network Access; $4 (‡)
- ___ Video Software Installer; $4 (‡)

(†) all files compressed
(‡) on 1.44 Meg diskette

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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(202) 638-2300

—Replacement generic ADB mouse $49.00 + $5.00 S&H. Hard to find accessories and out of print software for Apple II and Macintosh. For a listing send us a 52 cent stamped. salf-addressed envelope to: B&R Computer Services, PO Box 7195, San Diego, CA 92167-0195

For Sale

—MacLC///, 160MB, Apple 14" Color Display, Fax/Modem, lots of S/W. $1100. Bob 703-360-1844

—Laserwriter IINT, etc. for sale; 300 dpi laser printer in excellent condition, less than 20,000 pages run. Has 2 paper cartridges (reg./ legal), new toner cartridge. Best offer. Call Dana Martin 301-292-2119

— 105 MB HD (Quantum), Used 12" NEC color monitor/screen out of focus, may be OK for a fix-it person. Call Dana Martin 301-292-2119

—Claris Impact 1.0 new $85; ClarisWorks 3.0 new $85.00. Mac Lightning Scan 400 hand scanner, 400 dpi; Thunderworks and "Read it" OCR software $75 call 301-898-3427

Donations Wanted

—Image Writer II Printer needed for use with Apple IIE by a deaf-blind special needs student at Benjamin Foulois School. Please contact: M. Pearson 301-817-0300

Macintosh Software for Sale

—HyperCard FRT Shopping Stack which compares air & grnd FRT pkg costs. It will provide fast, accurate, and easy bottom line FRT costs, with discounts and other calculations for many carriers. Fly it for less! Save big bucks!!! For more info and demo, please leave your name and phone number on my answering machine. Call "Ed" 410-437-0609 or 410-332-4540 extension 280.

Wanted

—Version 1.0 of Claris Cad must include manuals. Call Ron Collect at 804-493-8205 anytime after 6pm

—Capital Area Community Food Bank—largest nonprofit food distribution program in Metro-area seeks 4D users to program & maintain our 4D inventory system. Interested? Call Shawn 202-526-5344

Help Wanted

—Translators, WP all languages especially non-Roman scripts Center for Applied Linguistics call Jim Stone 703-527-9575 ■

Washington Apple Pi, Ltd. 12022 Parklawn Drive, Rockville, MD 20852

Membership Application

Please print or type:

Name _____ Phone # (H) _____ Phone # (W) _____

Company _____ Address _____

Occupation _____ Sponsor's Name _____

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

AppleWorks SIG____
Apple II GS SIG____
Apple III SIG____
Art SIG____
CAD SIG____
Database SIG____
Disabled SIG____
Desktop Publishing SIG____
Disk Library____
EdSIG (education)____
Excel SIG____
Federal SIG____
Game SIG____
HOTLINE____
HypterTalk SIG____
Mac Programmers SIG____
Music 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 $39
- ☐ 2 years $67
- ☐ 3 years $92
- ☐ Student rate* for 1 year $32

For other options please add correct amounts

- ☐ WAP Bulletin Board System (TCS)** **$15**
- ☐ 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

Photo CD will change the way you capture and store color images.

Forever.

Good

Our Kodak Photo CD scanner can scan about 100 images from 35mm slides or negatives onto a single Photo CD. Each image is stored at five resolutions. The highest resolution can produce a 7″ × 10″ color separation on a PostScript® imagesetter at 150 lpi. The cost per image is about $1.75 plus the price of the disc (under $10).

Better

Our Kodak Pro Photo CD scanner can scan about 25 images from 35mm slides or negatives or 2″ × 2″ and 4″ × 5″ transparencies onto a single Pro Photo CD. The highest resolution can produce a 14″ × 20″ color separation on a PostScript® imagesetter at 150 lpi. The cost per image is less than $15 plus the price of the disc (under $10).

The Publishers Service Bureau
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Washington Apple Pi, Ltd.
12022 Parklawn Drive
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March/April 1995

Second Class
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