

July / August 1996

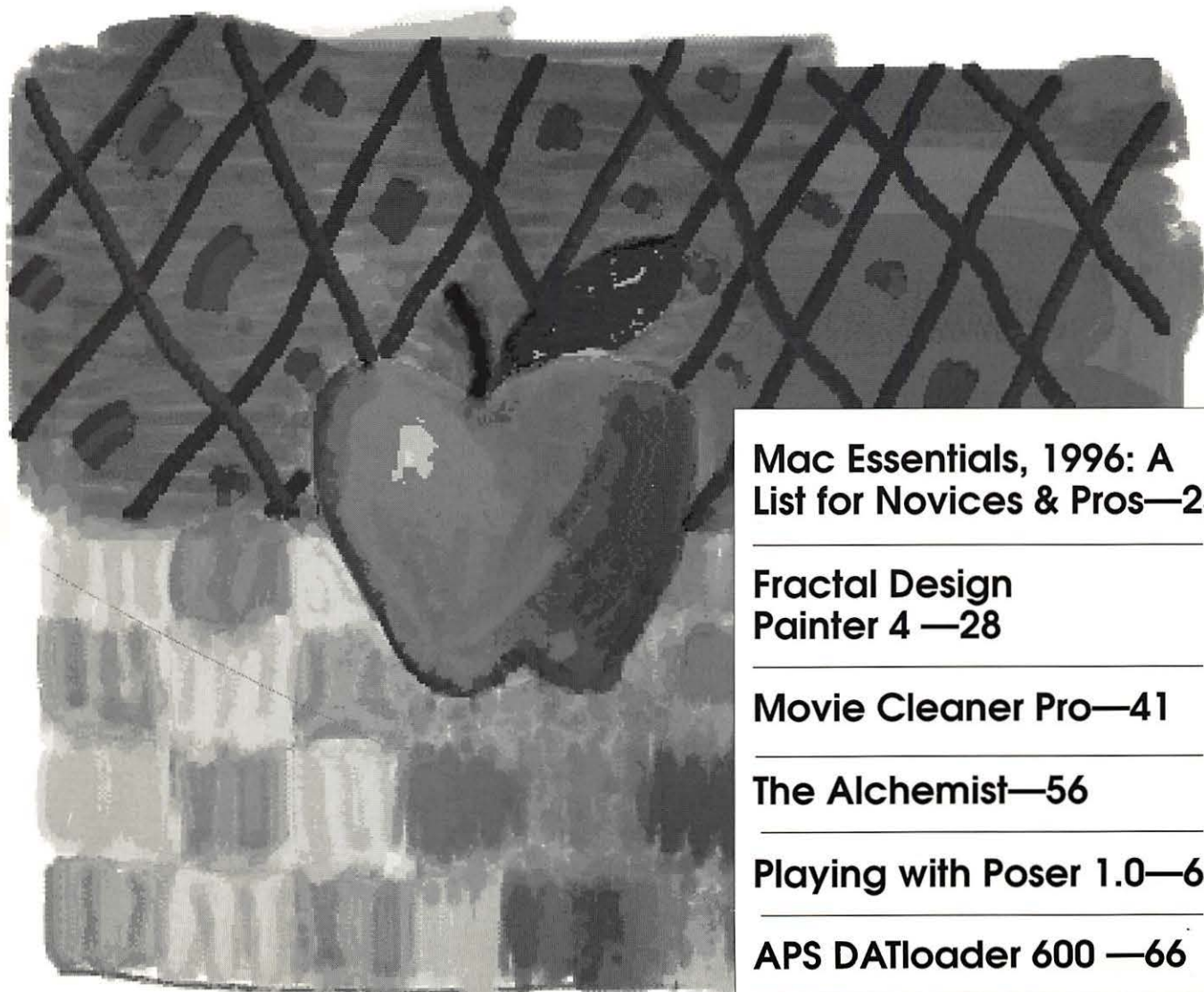
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The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI



Volume 18, Number 4



**Mac Essentials, 1996: A
List for Novices & Pros—23**

**Fractal Design
Painter 4 —28**

Movie Cleaner Pro—41

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Playing with Poser 1.0—64

APS DATloader 600 —66

washington general meetings

July 27, 1996
9 a.m.-11 a.m.

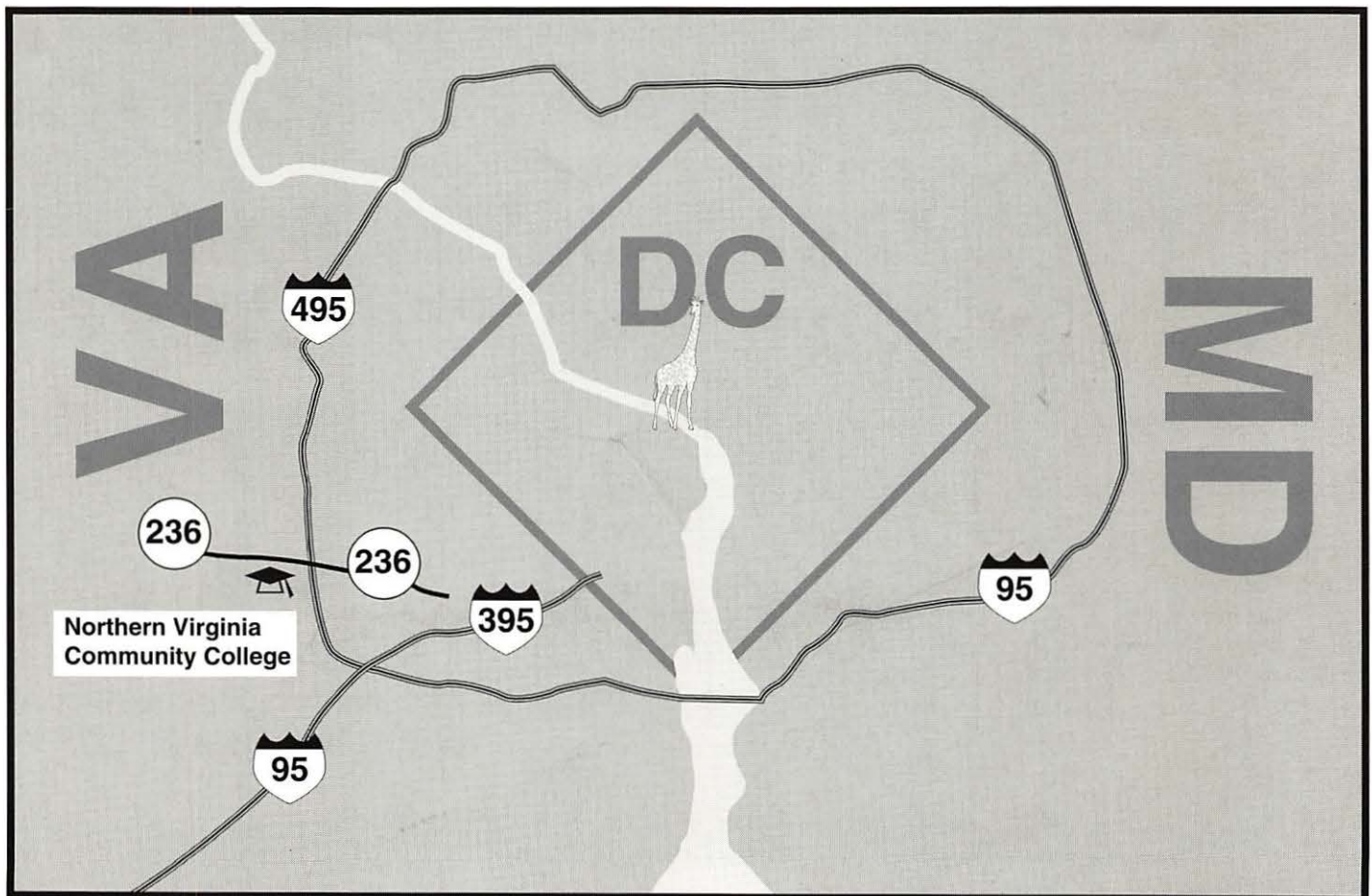
Northern Virginia Comm. College
Community & Cultural Center Aud.
8333 Little River Turnpike
Annandale, VA

August 24, 1996
9 a.m.-11 a.m.

September 28, 1996
9 a.m.-11 a.m.

October 26, 1996
9 a.m.-11 a.m.

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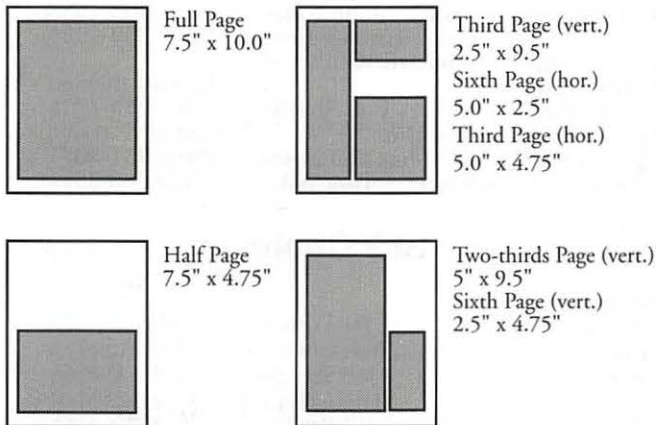
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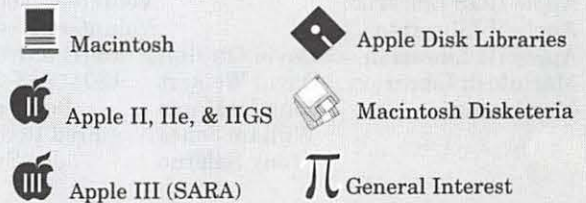
Washington Apple Pi

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From the President

WASHINGTON Apple Pi begins its 18th year on June 1. Not bad for an organization that started life as an Apple II users group. Cooperation and a common desire to make that very expensive stuff work were the strong motivations that brought members together back then. They came to wire cables, write and exchange software patches, and assemble the myriad components that made an Apple II the tool for its times.

Today, we find you are applications driven. The hardware and its interconnectivity are a given. Extracting performance, getting different pieces of software, each designed to do a different job, to work for you is what drives most of you. You take

your hardware almost for granted. The Macintosh, and the Apple series before it, come from a tradition of solid hardware design and reliable operation. Try asking a Packard Bell owner or dealer how often one of those machines is returned within days of its acquisition because it stopped functioning. Of course Macs do malfunction.

Usually it's a software problem rather than hardware. When that happens, your membership in the Pi allows you to access a full range of support from members who, like you, wanted to stretch the performance of their computer to its limits. They succeeded and are happy to help you do the same.

Your membership in Washington Apple Pi is an investment. It is

measured in the collective good we marshal when you call upon us for assistance. You use your computer and gain knowledge. A day comes when you can help others because you have been there and done that. You may not have needed us yesterday and may not today. But there is a tomorrow when you will need help—and the same folks who came forward to rescue another member are ready to bring their experiences to address your dilemma. It is that collaborative environment that gives a users group like Washington Apple Pi the clout that is waiting to help you.

Change subjects for a minute; we just came through another election. Almost 4,000 ballots were sent out in the last Journal. One hundred twenty-eight were filled in and mailed back to us. I would like to believe that thousands more were completed, but I also believe that if I could only find the three people who did not vote for me, I could convince them to reconsider. Oh well

Lorin



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April General Meeting

**Lawrence I. Charters,
Vice President, Macintosh**

USER GROUPS are communities. Sometimes they are communities of computers (they get together when we aren't looking and plot ways to make us look silly) and sometimes they are communities of people (General Meetings and the Pi's bulletin board, the TCS, are prime examples). And like all communities, they have odd, eerie events.

For example, at the April General meeting, I managed to acquire a U.S. Department of Justice, Federal Bureau of Prisons tablet of paper. Quite nice, complete with an entire 1996 calendar running down the left margin. I don't remember ever seeing it before — yet several pages are covered with my handwriting, with notes on the meeting. (Strange music starts to build...)

I also managed to acquire a very nice letter from the U.S. Air Force thanking me for providing aid, over the telephone, while they were having severe network difficulties. Except I don't remember anyone giving me the letter, and I don't remember, specifically, any such event. (Strange music grows stronger...)

Finally, I arrived home from the meeting with a drawing prize I didn't take: a *Windows 3.1 Bible*. Normally, I take prizes to the meetings, and return without them; returning with one I didn't take was a new experience. Yet on the cover is a yellow sticky with what appears to be a Samurai Teddy Bear and a hand-written note, "Give away for

drawing." A Washington Apple Pi drawing? (Strange music gets really out of hand...) (And where are these parenthetical remarks coming from, anyway?)

The Vision Thing

One of the more challenging problems of the Microcomputer Revolution has been "how do you display things?" In the real early days, "displays" were either TeleType machines or modified IBM Selectrics, and you could have anything you wanted displayed as long as it consisted of upper-case-only characters printed 80 columns per line on cheap, usually yellow, paper. "Interactive displays" meant that you waved the printout around in the air while yelling and screaming.

Video monitors changed all that: you could display upper *and* lower case characters, plus graphics, and even color! But your audience was limited to those few who could crowd around a monitor. On the plus side, this often encouraged good personal hygiene.

About six or seven years ago Computer Accessories brought out something which changed all that: the Proxima Ovation LCD panel. This panel was hugely expensive — \$10,000 — since it required the largest active-matrix color LCD panels ever made. Yet it revolutionized the computer field: when combined with a high-intensity overhead projector, you could project full-color, rapid motion computer video signals. The

computer, the projector, and the panel could all be set up by a single individual in minutes.

These panels were so successful that Computer Accessories changed their name to Proxima (<http://www.prxm.com>), and under this new name they've dominated the market. The Pi has borrowed various Proxima panels and projectors over the years, and in April the Washington area sales manager, Bonnie Allen (301-565-9330), stopped by to demonstrate their latest, brightest projector, the Desktop Projector 5100.

An "all in one" design, the 5100 can be used with a Mac, an MS-DOS computer, and a video tape player — all at the same time — with "instantaneous" switching between the three sources. It also supports stereo sound input, and plays it back via a built-in amplifier and speaker. Since the display system is solid-state, you never have to spend time "converging" the image (as with traditional video projectors) and the image is crisp even in the corners. Because it is much brighter than using a separate overhead projector and display panel, you can operate the 5100 in something closer to "normal" conditions, meaning the lights can be left on — a boon for note takers, and a way of keeping the droopy from falling asleep. Topping everything off is a motorized zoom lens: the perfect extra touch for push-button freaks.

Proxima still makes flat panel displays for use with overhead projectors, but they are now much more sophisticated, and much less expensive. The improved technology, steep decline in prices, and advent of laptop computers has made computer-based presentations an almost routine sight in education and training, business briefings and sales presentations.

Without Proxima's innovative projection systems, user group

meetings would have to resort to hand puppets and imagination: "Now imagine that you see the screen in front of you, and at the top left corner you see an apple..."

The Other Monopoly

Microsoft gets all the press these days about being the Evil Empire, slowly sucking the entire computer world into a black hole. But in the Macintosh field, in particular, there is another near-monopoly: Adobe Systems.

Once known for little more than the PostScript language built-in to most Apple laser printers, Adobe has blossomed out to consume vast chunks of the desktop publishing and graphics world: *Adobe Illustrator* is the top professional drawing and illustrating package, *Adobe Photoshop* is the top professional image editing package, *Adobe* (formerly Aldus) *PageMaker* is the top page layout package, and *Adobe Premiere* is the top desktop video package. *Adobe Type Manager* (ATM) has even managed to carve a niche for itself as a critical part of Apple's System 7.5 (MacOS) operating system.

This, however, isn't all. Jon Dellaria (jdellaria@adobe.com), an Adobe systems engineer working out of MacLean, VA, talked about the role of *Adobe Acrobat* as a cross-platform medium for exchanging information. With free *Acrobat* readers available for Macs (new Macs ship with them installed on the hard drive), Windows, and various flavors of UNIX, and even bundled with forthcoming versions of Netscape Navigator, virtually everything either can or will be able to read *Acrobat* files. *Acrobat* files look and print *exactly* like the original files, even if you don't happen to have copies of the applications or fonts which produced the document. All the fonts, text and design elements appear right where they were placed in the original document.

Unfortunately, Jon never said this. His talk seemed more of an unfocused brief on *Adobe Acrobat 3.0* (which doesn't exist yet) and a philosophical overview of how *Acrobat* files can change both the Internet and organizations. Many people left with the impression that *Acrobat* was some sort of universal "viewer" capable of reading PICTs and JPEGs and GIFs and formatted text and — which it is not.

David Helmlly (dhelmlly@adobe.com), an Adobe account manager for the local area (and a Pi member?), gave much more complete — yet succinct — presentations on *Adobe PageMill* and *SiteMill*. *PageMill*, a surprise consumer hit (are there really that many Web editors?), is essentially a page layout package for Web pages, with a highly graphical interface and a built-in preview mode. Pages are constructed, for the most part, by just dragging desired elements to where you want them on the page. Save the page, and you're done. Linking pages is as difficult as dragging one page onto another — not difficult at all. *PageMill* is also cheap: under \$100.

SiteMill, a much more recent addition (and also more expensive), goes one step beyond *PageMill*, but it is a major step: site management. You can open an entire Web site with *SiteMill*, and it will then scan every link and report back which links are "broken." It will also allow you to massively restructure a site, moving entire directories of pages from one location to another, without breaking links. Instead, each link is automatically adjusted for the new location.

Another "consumer" goodie is *Adobe Photo Deluxe*. Designed to offer the most popular features of *Photoshop* at a greatly reduced price, *Photo Deluxe* adds a few new tricks, too. Rather than have the user guess at how to do certain

things, or even guess what a certain function might be called, *Photo Deluxe* prompts for information and then guides the user, step by step, through whatever image editing task they have in mind. Very slick.

Adobe closed with a brief, and unsuccessful, demonstration of the tight links between the new *PageMaker 6.0* and *Photoshop*. In theory, both packages now share information on color management, and an update of an image with one will be passed on to the other. But installation glitches caused the demo to fail. Just the same, there were many thoughtful looks as the page designers in the audience looked ahead to trying this for themselves.

Drawing Winners

Adobe brought an unknown number of CD-ROMs filled with sampler material. I'm not certain exactly what they brought since, by the time I discovered they were being given away, they were — given away. "Oh, there were lots of them, didn't you get one?" was as much information as I was able to glean. Other prizes:

- Adobe Photo Deluxe* CD-ROM (Adobe): Robert Fetterhoff
- Adobe PageMill* (Adobe): Tom Bryan
- Adobe Acrobat Exchange* CD-ROM (Adobe): Darla Lee

In addition to the drawing prizes, Adobe donated several packages which the Pi will use for brochures, newsletters, signs, pretty pictures, tutorials, demonstrations and such.

Last Call

The April General Meeting was my last meeting as Vice President, Macintosh, for Washington Apple Pi. While my term extended through May, I was 3,000 miles away during the May meeting. Apple Remote

Access is a great piece of software, but it doesn't allow you to run a large meeting from that distance.

Any successes I may have had over the past several years were not mine so much as those of Pi members who offered aid and assistance:

Beth Medlin, Pi Office Manager. She says she works for us, but things wouldn't work at all unless she reminded us what we were doing, and steered us away from things that won't work;

Lorin Evans, Pi President, subtle counselor, and frequent stand-in when other matters kept me from my duties;

Tom Witte, Pi Director, long-time contributor to the General Meeting Question and Answer sessions, and master of ceremonies during meetings when I was away;

Dave Weikert, Pi Director and software librarian, a careful, thoughtful critic ("That was a terrible meeting") with a wicked wit;

The TCS Crew: Bill Beavers, Jon Hardis, Lou Pastura, Paul Schlosser, Nancy Seferian, Dale Smith, Jon Thomason, Lauri Zeman, and Rick Zeman. Collectively, they manage the electronic communications infrastructure that makes the job of Mac Vice President a pleasure rather than a chore;

Bill Wydro; his setup and breakdown of equipment for meetings is crucial, and without his name tags I'd never know who I was;

Kathryn Murray, managing editor of the *Washington Apple Pi Journal*, and someone with the rare knack for panicking quietly ("Please don't rush; things shouldn't fall apart too badly as long as I have it by morning").

Hundreds of others have made substantial contributions to planning, organizing, setting up, and cleaning up General Meetings, as well as contacting vendors, sending out promotional material, and otherwise helping get our message across.

And what is our message? Individually, we are isolated computer users, lost in a rapidly accelerating technological plunge into the unknown.

Collectively, we are Washington

Apple Pi, and we can do almost anything. ■

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

May General Meeting Report

by Don Essick

THE MAY GENERAL Meeting was held on May 11, 1996 at the Northern Virginia Community College. The date was changed to accommodate the Memorial Day weekend but the date was not all that changed! Due to the absence of Lawrence Charters, I volunteered to conduct the meeting. As a candidate for Mac VP, I thought it would be a good chance to get my feet wet. If only I had known then what I know now!

Lawrence has a talent for making running the monthly meeting look easy. It's not. There are a thousand little details that he does automatically that a newbie like me has to think about. Least of your worries is coordination with the presenters. They do this stuff all the time and know what they need. It is the mundane little details like spare cords, connectors and little details that makes you crazy.

I arrived at NOVA early for the meeting to find Beth, the office manager, making signs with a magic marker. It seems we had been bumped from our normal meeting location due to a community fair of some kind. This was news to all of us and the people running the show

at NOVA were, quite frankly, not very apologetic about the problem. They offered us a classroom in the Nursing school or nothing. We accepted the classroom. The second problem was that left us with no backup A/V capability and, of course, due to a communications mixup between Lorin Evans, Proxima and myself, the Proxima projector failed to arrive for the meeting. Talk about

"They knew their product inside and out and also took the less-than-optimal situation in stride. I hope they come back in a few months when applications are shipping...."

baptism by fire! I was now faced with explaining to the vendor why we were not able to provide them with the facilities they were promised for their demo. Fortunately, they were more than gracious and even understanding. Add to this

that we had invited members of the local Be User Group, Amiga User Group and Pentagon User group to the meeting, we had little or no air conditioning and you can understand why I was becoming damp in the armpits.

We appropriated somebody's 14-inch PC monitor for the demo and placed it on top of the large screen TV that NOVA had provided. It made a great monitor stand, but without computer connectors, that's all it was good for. With repeated and sincere apologies to those assembled and especially to the presenters, we turned the meeting over to Be, Inc.

Be, Inc. of Menlo Park, California, is the manufacturer of the Be Box computer. Be's CEO is Jean-Louis Gasse (formerly CEO of Apple Computer.) It contains dual Power PC 601/66 processors and lots of fantastic new software. In fact, even though they are currently manufacturing and selling the BeBox, they consider themselves primarily a software company. In fact, they fully intend to support the PPCP or CHRP or whatever the Apple/IBM/Motorola consortium is currently calling the box that will run the MacOS and Windows NT and maybe OS/2 and now, Be.

For now, however, they are manufacturing developer units, under license, at a facility that used to be a Mac factory in Fremont, California. The BeBox contains 2 Power PC 601 CPUs running at 66MHZ. It supports up to 256MB of memory and uses standard PC IDE or SCSI drives and other hardware. It uses PCI SuperVGA controllers for video and also supports ISA standard Ethernet. It has 3 full-length PCI slots and 5 full-length ISA slots for expansion as well as a PCI SCSI II controller and IDE controller for storage devices. It uses PC-style keyboard and mouse, has a parallel and 4 serial ports, 2 MIDI ports, 2

joystick ports, 3 infrared controller ports and a "GeekPort", Be's general purpose, connect-just-about-anything I/O port with A/D and D/A conversion. It also features a 16-bit sound system with RCA line in/out jacks and stereo microphone and headphone jacks. It has TCP/IP built in. In fact the back of the machine is packed with connectors of just about every flavor except one — no Mac video-out, hence the requirement to use the PC monitor for the demo. It also ships, for now, with a complete application development suite including an Object-Oriented C++ development suite, Metrowerks CodeWarrior development environment and set of code libraries and documentation.

Speaking of the demo... Considering the curves we threw at them, what with a cramped facility for the 200+ people who attended and doing the demo on a 14-inch PC monitor, they were fantastic! Mark Gonzalez and Dominic Giampaolo of Be were certainly among the best presenters I have seen lately. Mark gave most of the presentation while Dominic was the "designated mouser" and fountain of technical knowledge. They knew their product inside and out and also took the less-than-optimal situation in stride. I hope they come back in a few months when applications are shipping, and show us what they and their development partners have been up to.

It is the Be operating system that supplies the magic to the BeBox. It is a real-time, preemptive multitasking, multi threading operating system with a built-in database. Quite frankly, it blew my socks off! Fast, agile and powerful are words that come to mind. Some of

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this is because they don't have 10 years of "legacy compatibility" code, (you know, the code that lets today's Mac run the original MacWrite), but there are lots of super innovations that make this system unique. My personal favorite was the "active window dragging" feature. When you click on a window and drag it, the program in the window just keeps on running. There is none of that "clear and redraw" stuff that happens on the Mac. The 3-D rendering of the Be logo just kept twirling away and the Dominic moved the window around the screen.

The demo continued showing innovation after innovation in the system. The file system as well as application data can be stored in the system database. This means that "live" queries can be written so that

when a value changes in the database, they are automatically and instantly available to the running applications. This type of message passing capability is the wave of the future, but it is available now from Be.

Following the demo, the presenters invited everyone down for a look at BeBox and further discussions. Many of the developers in the audience cornered Dominic on the arcana while the more general questions were handled by Mark. Everyone seemed quite impressed and despite the problems with the meeting site and equipment, many people had glowing praise for the demo.

The meeting concluded, as usual with giveaways. Be had "We Be geeks" pocket protectors and data sheets for all. The following won Be T-shirts: Wilmer Whetzel, Jr., John McDowell, Jay Hill, Beth Cobb, John Maslin, Jacob Freedman, Tom Bryan, John Henry, Atilla Horvath, Clifton Bailey, Dave Weikert, Pat Garvey, Rich McCall, S. Marney, Gayle Liles, Victoria Stauby, Christopher Cobb, Vince Wolodkin, Mike Murphy, Frank Zappacosta and Robert Pagelsen. Apple User Group Connection Mousepads went to Leon Chan, Fabian Jimenez and James Dempsey. Photoshop 4 Book was won by Jim Kast. Mac Draw Pro book was won by Myron Harrison. Pagemaker 5 book won by Andrew Lipinski, Word 6 book by Larry Ichter, Pagemaker books won by Dr. Paula Botstein, and Harold Crumley, Photoshop Book won by Edward Kelty, Freehand Bible by Dr. William McBeath, Design Studio book by Toru Kawate. I sure hope this list is accurate. Considering the chaos, we did our best to keep track. If it's wrong, please accept my apology. I'm still in the learning curve and will try to get up to speed as quickly as possible. Hopefully, meetings will soon be humming along smoothly as before. ■

June General Meeting

Lawrence I. Charters,
Vice President, Macintosh

SINCE THIS IS an election year it probably won't surprise you that the title is misleading: there was no June General Meeting. But on Saturday, June 1, there was the summer edition of the Washington Apple Pi Computer Show and Sale, better known as The Garage Sale. It was also the first really warm weekend of the year, and the date of the WHFS rock festival at RFK Stadium. Over 50,000 attended the rock festival; a somewhat smaller number attended the Garage Sale at the Northern Virginia Community College (Annandale) gymnasium.

I have no idea what most of the people did at the Garage Sale. I never had a chance to wander around and see what was being sold, or talk to the tire kickers, or even find the restrooms. From before the doors officially opened, until minutes after we started shutting everything down, I was trapped at the Computer Checkout Table.

Our motto: If You Bring It, We'll Check It. Fortunately, people limited themselves to computers; we would have had trouble with, say, scrawny kittens or cranky Model-T Fords. We had only one failure: someone brought in a Power Mac 7100 with multiple problems, and we couldn't get it to even display an image on the monitor. While it had many minor problems, this allegedly wasn't one of them — "I don't know why it is doing this; at least this part works at home."

The Checkout Table boasted a turn-away crowd. Even with assis-

tance from Pi President Lorin Evans and, on a couple occasions, Tom Witte (who spent the rest of his time managing the show), there were people constantly lined up. Some drifted away, unwilling to wait, or unwilling to hold their equipment while standing in line. They brought old Macs, new Macs, and really new

"Our motto: If You Bring It, We'll Check It. Fortunately, people limited themselves to computers; we would have had trouble with, say, scrawny kittens or cranky Model-T Fords."

Macs ("Gee, this is the first time I've seen one of these!" "Well, maybe you shouldn't be checking it, then." "Are you kidding? I'd love to take a look at it!"). Significantly, the oldest machine we saw was a Mac Plus, and we saw only one of those. It was in working condition, if somewhat confused about the hard drive someone was trying to attach to it. A few minutes of quiet counseling, plus installation of a compatible

operating system, turned this into a happy, functional machine again.

The most common problem, aside from general disorganization (“Why can’t I have 7,600 files in the System Folder?”) was: dead batteries. We saw Mac LC, LC II, and LC III machines with dead batteries, Mac Iisi machines with dead batteries, and a PowerBook 100 with multiple dead batteries. In at least a couple cases, people must have suspected this was the problem because they “just happened to have” whatever exceedingly uncommon lithium battery was used in their particular Mac.

Another common theme: clutter. Several people explained that “I was told to add this update file to my computer, so I did,” but instead of an installed update, or patching a program, the compressed update archive was dropped in the System Folder, or the patching program was placed on the machine and the application it patched was thrown away, or some variation. One person had carefully placed eight successive updates, decompressed, of a program in the program’s folder; all told, these came to 1,100 files. Yet none of the patches had actually been applied. In every case, without exception, the user admitted that they hadn’t bothered to read the instructions which came with the patch.

This illustrates an interesting dilemma: people want less expensive software, and they want rapid updates to software; this clearly implies electronic distribution, with users applying the updates themselves. But many users don’t seem to understand how to update their own software. Purchasing updates from the vendors directly would probably work better for many people, but would also be slower and more expensive. Help with the inexpensive

“do it yourself” approach is a Pi specialty — users helping users. But for many of these people (several of them members), it had never occurred to them to attend a Pi meeting or tutorial, or call to ask questions on the TCS, the Pi’s computer bulletin board. Perhaps we need periodic articles in the *Journal* on “How to use a user group?”


Several people suggested we sell tickets: as I checked the machines, I’d explain what I was doing, and this attracted a crowd. Even bigger crowds gathered if the cover was taken off a machine, and a tour was given (“This is a hard drive, that is a floppy, these are memory chips, that is a *giant* dust bunny...”) Lorin incited a small mob scene when he

disassembled a PowerBook 100; offering ice cream snacks in a kindergarten probably couldn’t attract so many excited, eager faces.

Suggestions, and volunteers to staff those suggestions, are being actively sought for the next Garage Sale, in December. The Checkout Table is an obvious success; what else would be of value? Tutorials? Classes in Internet surfing? (Bring your own beach towel.) Send suggestions to the E-mail address at the bottom of the article.

Drawing Winners

What would a Pi Garage Sale be without door prizes? Several Pi members (and the entire staff) have suggested we give away items from



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the second tutorial room at the Pi office. While some of this stuff probably has something to do with the kind of computers we know and love, other items are so ancient or obscure that they look to be not only pre-microprocessor, but pre-light bulb. It would have gone like this:

"Welcome to the Washington Apple Pi Garage Sale! Oh, look — you are a drawing winner! Have this!"

"What is it?"

"We have no idea! But we'll help you put it in your car right now!"

But nooooo — boring traditionalist insisted we give away something (usually) more identifiable, such as:

America Online T-shirt (AOL):

Luke Short

What's On the Internet (Peachpit Press): Michelle Robb

Art Studio 2 (Micrografx): Marcie Calcagno

Apple tote bag (Apple): C. Richard Goodman

Now Utilities (Now Software): Harvey Cohen

WordPerfect QuickStart (Peachpit Press): Harley Nygren

America Online T-shirt (AOL): Amy Triplett

Amazing Animation (Claris): Eileen Powers

User Group Connection mouse pad (UGC): Jay Miller

PlusWare keypad (PlusWare): Dale Rivers

Internet Yellow Pages (Osborne-McGraw-Hill): Carol O'Connor

Webhead (Peachpit Press): Teague Clare

America Online T-shirt (AOL): Michael Weagley

User Group Connection mouse pad (UGC): Charlie Stancil

America Online T-shirt (AOL): Paul Simon

PageMaker QuickStart (Peachpit Press): Milton Goldsamt

Abacus keypad (Keytronic): Michael Mattie

Wiz Tools (ASP Software): Marianne Teague

Web Arranger 2.0 (CE Software): Elmer Keene

The drawing prize form has a space in which the lucky winner gets to say what kind of computer, or computers, they own. There was the expected mix of Apple II, Mac and PC machines, but one person listed an Amdahl mainframe. They must have a most impressive air conditioning bill. ■

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

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Late Breaking News

submitted by Lorin Evans

APPLE COMPUTER has just released a two disk set of software refinements for System 7.5.3 users that improves the stability, reliability and performance of certain Macintosh and Mac OS-compatible computers using the current system software.

You are interested in this updater if you have a Macintosh PowerBook using Connectix RAM Doubler; PowerBook 5300 and PowerBook Duo 2300 systems; all PowerBook 200 or 500 Series systems which have been upgraded with the Macintosh PowerBook Processor Card Upgrade Kit with PowerPC (or upgraded with similar third-party products); and all Macintosh 7200, 7500, 7600, 8500 and 9500 systems. In addition, to

benefit from Revision 2, these systems must be running System 7.5 Version 7.5.3, or specific versions of System 7.5.2 for PowerBook products.

You can order the two disk set from the Pi office for \$8.00 (plus \$2 s/h). They can be downloaded from the TCS for free or you obtain them from the following Internet sites: <ftp://info.apple.com>, <ftp://support.apple.com>, <http://www.info.apple.com>, <http://www.support.info.com>. In the United States you may also order the update directly from Apple on two floppy disks for \$13 by calling 1-800-293-6617, ext. 1198. Canadian members may order the update on two floppy disks for \$20 by calling 1-800-361-6075, ext. 1198. Aren't we a bargain.

System 8 Teaser

Would you like to find out more about Mac OS 8? Apple has just produced a new CD called The Mac OS 8 Tour CD. It provides demos and detailed information on what Mac OS 8 will do and why you should be excited about it. This CD highlights the many user interface enhancements and performance improvements of Mac OS 8 and describes how it will integrate the Internet and multimedia into the Mac OS.

This and other products (listed below) are available free from StartingLine. Individuals can order up to 5 of any item. Each is really free. Here are the items that are available free from StartingLine:

- Mac OS 8 Tour (part #L01865A)
- "Personal Computer Satisfaction" Mac vs. Windows dual-user study from Evans Research (part #L01856A)
- "Macintosh or Windows?" video (part L01760A)
- "Why Do People Prefer Macintosh?" brochure (part L01749A)
- "50 Macintosh Advantages" brochure (part L00440C)
- "Why Macintosh?" color brochure (part L01667A)

To contact StartingLine, call 800-825-2145 or 303-297-8070. International customers can send orders to e-mail address <s.line.order@applelink.apple.com>

Remember Them?

by Lorin Evans

IN 1990 OUTBOUND Systems introduced a "Macintosh-Compatible" Laptop and then a notebook model. In December 1992, due to tremendous price pressure and diminished margins in the personal computer marketplace, Outbound Systems ceased manufacturing operations. Some of you may still have their products.

For a while, a group of ex-Outbound technical support specialists serviced those machines under the name PerFit. That too ceased in mid-1995.

Outbound support can now be found on the Internet through a special interest group of the Colorado Macintosh User Group (COMUG). You can find the COMUG home page at <<http://www.cris.com/~comug/>> and the Outbound pages at <<http://www.cris.com/~comug/outbound>>

How To Make Your User Group Work For You

by Jon C. Thomason

THE PI NEEDS your help. Electing directors is one part of the process, as is working with those directors to provide programs, services, and activities which interest you.

We as a club are very lucky to have what few user groups still have: a "clubhouse" out of which work is done, decisions are made, questions are answered, and friendships are fostered. I urge you to visit that office during business hours, take a tour of the place, and watch what goes on. Someone might stop by, desperate with a computer-related question you might be able to answer. If you can answer that question, or even help that person identify someone who can, you'll have made that person's Pi membership worthwhile. Some of the most rewarding experiences in this organization are when one has a moment to sit down, observe, help stuff envelopes perhaps, and meet other users with similar or complementary questions to your own.

We are also lucky to have a home-grown telecommunications infrastructure. While the TCS shows its limitations in some areas, it shows unique strengths in others. I urge you to get online, participate, ask your questions, and share your knowledge.

Lastly, I encourage you to attend a Board meeting. Listen to what challenges the club faces, consider where your skills can apply to them, and vote your interests. Your vote is important. Your participation is key. Become involved in the Pi, and the Pi's rewards will open up to you. Thanks. ■

(Previously run in the May/June issue of the journal.)

We are looking for volunteers who are fluent in American Sign Language to provide help at the General Meetings.

If you are interested, or know someone who might be, please contact the office at 301-984-0300 or via e-mail at beth.medlin@tcs.wap.org

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Election Results:

Following provisions of Article IX of the By-Laws of Washington Apple Pi, an election was held in May 1996 for all offices of the Board of Directors. After counting the ballots, the following individuals were elected to the 1996-97 Board of Directors:

| | |
|-------------------------------|-------------------|
| President: | Lorin Evans |
| Vice Pres., Apple II: | Ron Evry |
| Vice Pres., Macintosh: | Don Essick |
| Secretary: | Lawrence Charters |
| Treasurer: | Charles Froehlich |
| Board Members: | |
| Lou Dunham | Dale Smith |
| Blake Lange | Jon C. Thomason |
| David Mudd | Dave Weikert |
| Dave Ottalini | Tom Witte |
| Jim Ritz | |

Congratulations! Please help the members of the Board and other volunteers make the next year a grand success!

Tuesday Nights

by Lorin Evans

DEAR KAREN,

Congratulations. From high school to college to unemployed in eight years. Your life reads like a standard work cycle these days. It was nice of your folks to buy you a new Mac as a sendoff to the real world or grad school, whichever comes first. However, there are a few things you need to do to that 7200 before it can perform as it was designed to. Add these three things, which you may be able to squeeze from the relatives as graduation presents, and watch your Mac fly. First, get one of them to buy you eight or 12 megs of RAM.

The eight megs that came with the machine just won't do. Have Uncle Henry treat you to the 256k, Level 2 cache you need so that your computer can look further ahead as it tries to help you. Those little chippies are good for an additional 10 to 15 percent increase in speed. Be sure Henry gets you the real thing; don't buy other than Apple L2. Finally, get someone to throw in additional video RAM. With an additional meg, the video data path will double, eliminating a real chokepoint in that machine.

Do you realize that you and I have nursed the Mac SE your folks gave you to use in school for almost eight years. I filled it with RAM -- a whole 4 megs. When the hard drive died, we got your data off it and onto a new one. You always insisted on stuffing it with every bell and whistle you could find. When you were rewarded with a hung machine

— usually just before a paper was due — we always managed, somehow, to get it restarted.

Why is it that I now have a feeling you are about to give that little putt-putt to your folks as a 'present'? If I am right (and I think I am), do me a favor. Please trash all those "neat" bells-and-whistles you insisted on having. Return your SE to a nice middle-of-the-road computer with software for which you have original disks.

Why? Because your folks are not as appreciative of the pleasures that come from undoing crashes and freezes as you are [wait till you start playing with your 7200!]. MacroPicker, IconTwirler, and FontFlogger are more than they need to start with. They really haven't a clue as to what those things do. They just want the computer to work. I get to bail them out on Tuesday nights, while you collect unemployment checks and surf the net. Parents bring those 'gifts' to the Pi office on Tuesday evenings for help as they find themselves hopelessly tangled in the neat tricks their kids installed for some long forgotten reason. For example, it was just last Tuesday evening when

Ersatz Mac

A post graduation mom and dad walked in holding a Macintosh LC II as if it was an alien baby. Seems their son entrusted his Mac to them for safekeeping. As they described it, the graduate gave them a tour of the Mac and split. When later they

tried to start it, a question mark on the screen was all they could manage. No son, no computer.

I got it started with a System Tools disk. I found a 4meg RAM/40meg hard drive with System 7.5 installed. Fear not, said the father, our son installed RAM Doubler while in school and added Disk Doubler so that we would have lots of room for any files we add. Where to begin.

First, Ram Doubler should not be installed in a machine with only four megs of RAM: eight is the minimum in that machine. Ersatz RAM is fine in a machine that has some real RAM in it. If this computer is headed to grad school, more real RAM is called for. Ten megs is all an LC II can see, so two four meg SIMMS are needed (four soldered to the motherboard, plus two four meggers is twelve). They can be procured from a local vendor who deals in used RAM. Don't sneer at used RAM—the 32-pin SIMMS used in the LC series, and lots of ther Macs are a low cost alternative to new ones.

Now, to Disk Doubler. DD can be a useful program. But, unless you tell it what to compress, how often to compress and, most importantly, what not to compress, it will run along behind you compressing everything it can find, including the System Folder. It is happy doing what it was trained to do; but, you won't be, shortly! Sure enough, DD had compressed the System Folder along with everything else in sight. The first thing I did was to undouble the System. Then I showed the folks how to tame DD. An alternative is to add a larger hard drive. The cost of a new drive, or a used one from one of our members upgrading a Mac makes suffering with a tiny drive unnecessary.

The installation of new(er) SIMMS and another hard drive will bring them back next Tuesday.

More RAM, More Storage

Two questions get raised almost every Tuesday evening: how much RAM is enough and how to gain more storage. Look at this typical set-up.

A family has a Macintosh Performa 578, (LC040/33mhz), 8MB RAM [4meg on logic board and one 72-pin SIMM], a 320 MB Hard drive and a CR-ROM drive. What should they do?

The computer is a good unit. The motherboard is a derivative of the Quadra 605. It can be updated by adding RAM and some combination of improved storage. To start, replace the 4-meg SIMM with either an 8 or 12 meg. SIMM prices are very reasonable. Buy from a national vendor and install it yourself, have a local dealer do it, or come in on a Tuesday night.

Hard drive storage is a many option story. An obvious one is to clean out the existing drive. Archive to disk things you want to keep. Still want more storage? New internal one gigabyte drives are under \$300.00. Consider an external drive. Leave the 350 megger in the computer. An external box adds around \$100 to the price of a drive and can be used with a newer machine when one is purchased. There are other external options.

Iomega ZIP drives are now available under the Epson and Kodak brand name and are sold (for now) in the \$150.00 range. The 100 meg cartridges are \$20ish. Iomega promised a 25 meg version, but I have not seen any. The ZIP drive allows you to create a back-up as well as enables the kids to put their programs and data on their own cartridge. The crossover comes at about the eighth cartridge; that's a lot of stuff. An ability to back-up programs and data is a plus that does not come with a new internal drive. ZIP drives have proved to be reliable little boxes. Don't forget to pull the

plug when you are finished. There is a 'sleep' mode, but no on/off switch. Unless mom or dad is into serious graphics or writing a sequel to Primary Colors, the JAZ drive is a bit much for this family.

If One Is Good, Two . . .

The complaint was that the family IIsi kept trying to format a disk, when none was in the drive. Tell the computer to eject the disk and it was ready to format another, and another, until frustrated, you turned the computer off.

The conventional wisdom that evening was either to zap the Parameter RAM or reinstall the System. I opted for an easier test. If it wants to format disks, why not disconnect the drive and see what happens. Sure enough, with no disk drive attached, the computer was happy to compute. So, what gives?

In the lower front of a disk drive are two (800k) or three (1.44meg) micro switches. One tells the computer whether the disk is locked or unlocked. Another tells the computer if there is a second notch, indicating the disk is a high density disk. The third tells the computer if a disk is in the drive. Hmm. Well it seems one of the resident miscreants tried to insert something extra into the drive along with a disk, such that the tab that makes contact with the third switch was bent downward and pressed against the third micro switch. A realignment of the three tabs solved this family's problem. We will zap some PRAMs another time.

If you have a question or topic you would like the Tuesday Evening crew to address, sent it via e-mail to info@tcs.wap.org; via AppleLink to UG0026; or snail mail to the WAP office (attention Editor). ■



Women's SIG Notes

by Nancy Seferian

THE MAY 23RD Women's SIG meeting was filled to capacity with our members who shared one of Grace's delicious dinners, lots of computer talk before the meeting started, and a rewarding demo by Chuck James (co-sysop of the Retired SIG) on Netscape and the Internet.

It was a real treat to have someone with Chuck's many qualifications and skilled teaching ability to lead our meeting. Chuck, as some of you know, is a retired Foreign Service Officer and was Ambassador to Niger. He was graduated from Yale Law School and became an Assistant Attorney General in L.A. He is an escapee from the world of law now, and has dedicated himself to work on the Internet for some years.

Chuck's very able presentation was added to by handouts that he brought which he had downloaded for us from CNet. The handouts were pages printed directly from Netscape and included information about the Netscape Home Page and its options, Internet statistics, Help Getting Started from Netscape's Web pages, and information about several WWW browsers. Additional information included general Internet navigation, "refused connections", and downloading files. We do thank Chuck (alias Chazza) for such a great evening.

Bring your favorite URLs to the next meeting to share with us.

Our Women's SIG meetings will continue to be every other month on

the fourth Thursday of the month. The next meeting on July 25th will include a demo of ClarisWorks. Our September 26th will feature FileMaker Pro. The meeting in November will be on the third Thursday instead of the fourth because of Thanksgiving and will feature a discussion and information about how to write a Web page.

If you will be attending a meeting please R.S.V.P. Grace Gallager (703) 222-4570 (Metro) so we can plan for dinner. They're still only \$2.00 folks; can you believe it? Call Chairperson Tayloe Ross (202) 293-7444 if you would like to be on the mailing list, if you have any ideas for meetings, or if you want to help in any way. ■

StockSIG May Meeting

by Morris Pelham

THERE ARE TWO opinions on what the stock market might do for the rest of 1996. Up or down.

My 1996 *Stock Trader's Almanac* says that "Election years are traditionally up-years...a very positive picture can be seen for the last seven or eight months of election years." It shows no losses in election years from May to December from 1952 to 1992, and an average gain of 8.0%.

My collection of *BusinessWeek* magazines originally published in 1987 reports the things that happened in the stockmarket before the crash that October. The May 11, 1987 issue: "How worried should you be?" The July 6, 1987 issue: "The Dow shot up 500 points in the first quarter alone, backed down almost 200 in a few weeks, and then proceeded to bound to new heights. Fresh cash kept pouring in. Gold funds led...bond funds wiped out six months' worth of interest payments

with capital losses."

In 1996 so far the Dow is way up, gold funds are up, bond funds down, and money keeps pouring in.

I brought both the 1996 *Almanac* and the 1987 *BusinessWeek* to our May meeting and we talked about the choice. None of us has sold yet, but none of us wants to see our profits become losses if the market turns down. Someday it will.

Bob Lee brought us a chart and formula calculating stop loss orders and draw downs. He showed us how a stop loss order that accepts a larger loss is less likely to be triggered, and how the probability can be calculated.

Mark Pankin showed us his latest results for the Dow stocks and Fidelity mutual funds. Both are continuing profitable. Mark's calculations show how well several Dow portfolios are doing including this year's, last year's, a two-year combined, the 10 highest-yield Dow stocks, and others. The two best performing so far this year are last year's beating the Dow at 19.9% and the two-year combined at 17.1%.

Now that I've given up Quicken again I am putting some old portfolios into Excel and bringing those to hand out. My version of the beating the Dow portfolio for last year is now up 37.32%, but over a different time period than Mark uses.

Thanks to all!

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

Columbia Apple Slice

by Tim Childers

THE APRIL meeting of the Columbia Apple Slice was an educational extravaganza thanks to the fine folks from MECC, the Minnesota Educational Computer

Company. They are best known as the publishers of such classic educational games as 'Math Munchers' and 'The Oregon Trail'. Marketing Representative Jennifer C. Grossman came to our meeting and put on much more than the usual fine presentation by a vendor. Before her presentation she loaded the full version of 8 different CD-ROM based games on 12 different computers. (Now there is a testament to how easy these games were to install! Most presenters come with a carefully prepared demo already installed on a machine they know very well.)

After her description of the 20 or so educational games published by MECC, everyone got to try out each of the 8 games she brought. There are games for ages from 6 to 16 in 4 general areas: Basic Math and Reading skills; Creative Learning tools; Discovery Learning; and Learning Adventures. Math Munchers is one of the original games and still popular as a math drill program using cute characters which 'munch' the answers. Oregon Trail is a role playing adventure where you play a settler setting out on the Oregon Trail to seek your fortune and maybe a piece of land to call your own. In the course of your month's-long adventure you inevitably learn a great deal about the skills of surviving on the Oregon Trail in the time of the Old West, even if it is by trial and (mostly) error! In Storybook Weaver you are assisted in creating an original story, complete with illustrations. The other games were also very interesting and in every one you really are guaranteed to learn a lot about that particular subject, and have fun doing it. For more information, visit the MECC World Wide Web site at :

<http://www.mecc.com/>

After the demonstrations Jennifer put the icing on the cake

by giving away all 8 games as door prizes! Here is the list of prize winners: Ellen Baniszewski, Bridget Beavers, David Childers, Bill Beavers, Jackie Hall, Ramesh Sardana, Sheri German, and Bill Waring. Many thanks to MECC for a memorable presentation and for their outstanding generosity.

We were also fortunate to have a special guest in the audience. Bill Waring, the new president of the Annapolis Apple Slice, talked to all of the CAS officers and we shared many ideas on ways to operate a Slice of the Pi. Thanks Bill, we found it very interesting and we were flattered that you came all the way out here to learn how we operate.

We also sold two copies of the System 7.5 CD ROM at a special price of only \$35. If you haven't already upgraded to system 7.5 from system 7.x this is a bargain price now that the upgrade from 7.5 to 7.5.3 is available from the Pi or direct from Claris at 800-544-8554 x311.

The next meeting will be Thursday 2 May, when Ellen Baniszewski will give a musical demonstration with Band-in-a-Box MIDI music software. She may even demonstrate it running on her new PowerBook 5300 (if she can get the darn thing to work! :-)

QuickTime SIG Meeting

by Stuart Bonwit

THE REGULAR second Tuesday meeting of the QuickTime (QT) SIG was held on May 14, 1996 in the Pi office tutorial room. Principal speaker Ellen Baniszewski gave an excellent overview of MIDI. Bruce O'Leary showed his latest version of Hal Crumly's "snake movie." Jacob Freedman showed and discussed parts of his video, "Remember a Child." Stuart Bonwit demo-ed the principle he planned to use to sync

a MIDI track to an animation. It later turned out to be NG! Tom Witte showed a short video he made in Infini-3D and gave a short demo of TechTool Pro.

Ellen explained that MIDI is really only a set of instructions (a text file) for an external instrument (synth = synthesizer) or the internal QuickTime Musical Instruments to play the music. Therefore the MIDI file is very much smaller than the sound file corresponding to its output.

Ellen demo-ed "The Pianist," a \$50 software package from PG Music, that contains many MIDI files that can be played in a variety of ways. One can search the files for categories, mood, etc. A good source of MIDI info is the OPCODE Web site. OPCODE makes Open Music System, a software MIDI driver, which does what Apple's MIDI manager used to try to do.

Ellen also demo-ed "Band-in-a-Box," a \$99 software package from PG Music, that is a professional musician's best friend. Like The Pianist, Band-in-a-Box has many MIDI files and many additional features. One can change the musical style, kill the melody, type in chords as a base for a new composition. Ellen mentioned that while it is relatively easy to convert a MIDI file to QuickTime, it is more difficult to incorporate MIDI/QT files into a bigger production. [Ed. note: Subsequent to this meeting there was vigorous discussion on the TCS MIDI board C3B21 about joining MIDI and video QT files and synchronizing them.]

Bruce showed "What's That in the Back Yard," an augmentation of Hal's video of the found "twig" made to resemble a serpent's head. Bruce added a fancy title and animated the serpent's red forked tongue to flash, move, and withdraw.

Jacob showed parts of his video "Remember a Child" on the theme of the Holocaust. He used still pho-

tos and captured live video. He worked on a Power Macintosh 8500, using Adobe Photoshop for the titles, CreditMaker, a shareware program for creating scrolling titles, and two borrowed video cameras plus his own.

Tom showed a short video created with Infini-3D depicting a shiny sphere, 3D text floating around in space. Reflections of the 3D text, the camera, and two lights could be seen in the shiny surface. Tom said that it was easy to do and took little time. Tom also showed TechTool Pro which will be reviewed in the next Journal. It is the commercial big brother of the freeware program TECHTOOL. TechTool Pro tests hardware as opposed to Disk First Aid and Nortons Utilities which test software.

Chocolate chip cookies were served. ■

Retired SIG Meeting, 5/22

by Phil Shapiro

A FESTIVE and rambunctious group of people showed up for the May 22 Retired SIG meeting, held at the WAP office in Rockville. We started off the meeting by introducing ourselves and telling the different ways that people are using their computers. Harold Bullis described how he takes delight in using his Mac to write fiction. Don Meyer told about how he uses his Mac to maintain the books of the office building he manages, and how he finds the club's electronic bulletin board, the TCS, a veritable treasure trove of information, advice, and guidance.

Martha Ross shared with us her experiences with all the various Macs she has owned in her life, starting way back in 1984 with the Mac 512. She told us of how her husband first became reconciled to the computer when using a tax



preparation program.

Herbert Block, a very skilled Mac user, told us about how he likes to dabble with lots of different Mac programs. Someone who walked into our meeting accidentally asked a pretty tough Mac telecommunications question, and Herb gave a detailed answer without batting an eyelid. Bill Geiger took the opportunity to thank Herb for answering several of the questions he posted on the TCS.

Bill then went on to tell us about his work as a "Performa representative," where he was employed by Apple to drive around to stores to help them with the Performa computers they sell. It was fascinating hearing the kinds of things Bill was able to help the stores with.

We then launched into an energetic discussion of genealogy and family history projects. Martha Ross, who spent an entire career as an oral history professor, had lots of interesting things to share with us. When Martha mentioned that she's interested in now getting online, Don Meyer unhesitatingly offered to pay her a visit to help her learn some of the ropes of the online world.

All in all the meeting was just plain fun. Retired SIG meetings take place on the 4th Wednesday of every month from 11 AM to 2 PM. The meetings are very informal, so if you have to come late or leave early, that's fine. For further info about Retired SIG meetings contact Phil Shapiro at (202) 686-5465, pshapiro@his.com

Incidentally, it's become a tradition at Retired SIG meetings for someone to bring Pepperidge Farm macadamia nut/chocolate chip cookies to the meetings. This long-standing tradition (twice) could be enshrined in perpetuity if anyone brings such cookies to the next meeting.

SIG news continued on page 61

Into that Long Good Night at e-World

Apple's Online Service Gave Up Digital Ghost March 31

by Dennis R. Dimick

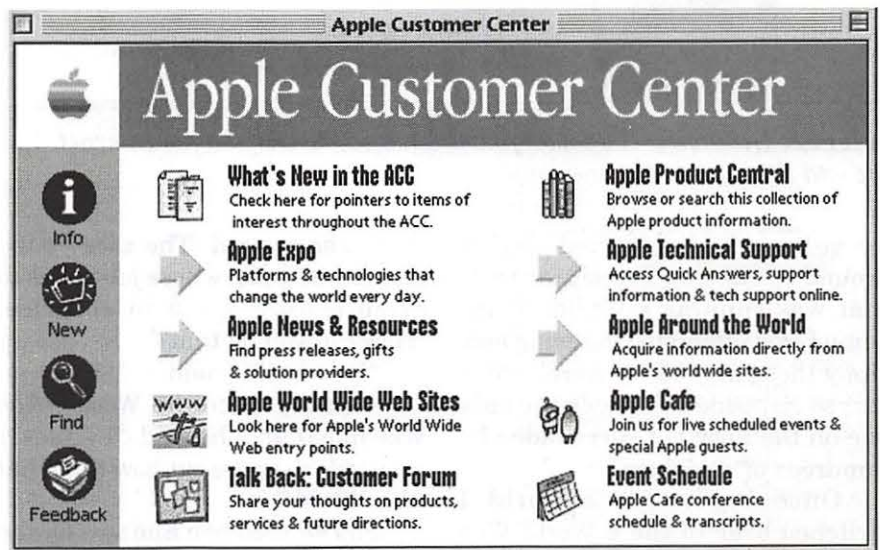
APPLE'S E-WORLD online village rolled up its sidewalks at midnight Pacific time the last day of March. I thought a last visit might be in order so to grab a few screen shots of this little ghost town during the waning hours. You know, a last trip to say I'd been there just before a final shuttering of the electronic doors.

e-World appealed in the beginning because I wanted to support Apple Computer, plain and simple. e-World was a lot like America Online, mostly because Apple licensed the client software from AOL for use at e-World. The look and feel of both were quite similar, there wasn't much "market differentiation," as the financial types like to say.

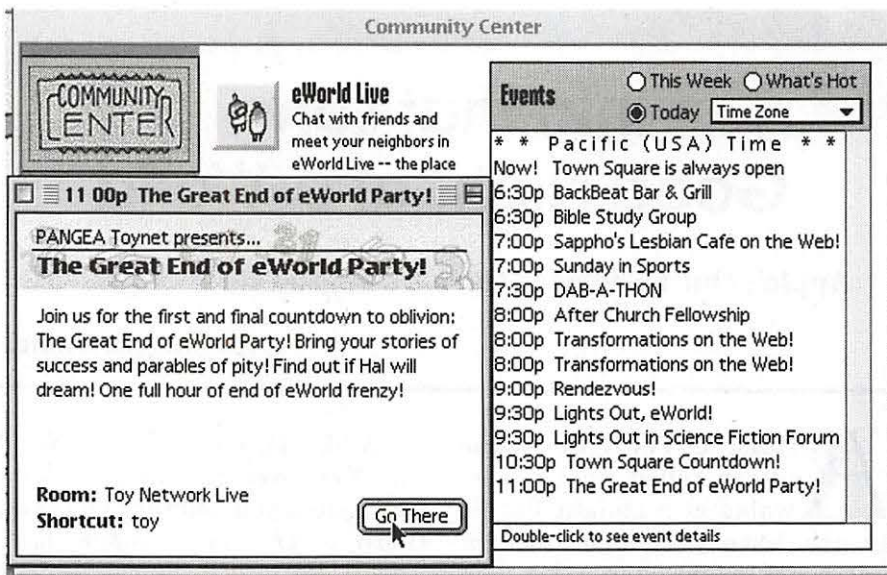
A likable, quiet place e-World was. You never had to worry about traffic jams, you could always get in, there never was a waiting line. Apple's e-World technical support section was great, it was easy to grab software updates from the Apple new files section.

Admittedly, the main reason I liked e-World was that I could get the electronic edition of next week's MacWeek articles each Friday night. And if I was really hard up, I could even read Spencer Katt's column from the next week's issue of PC Week.

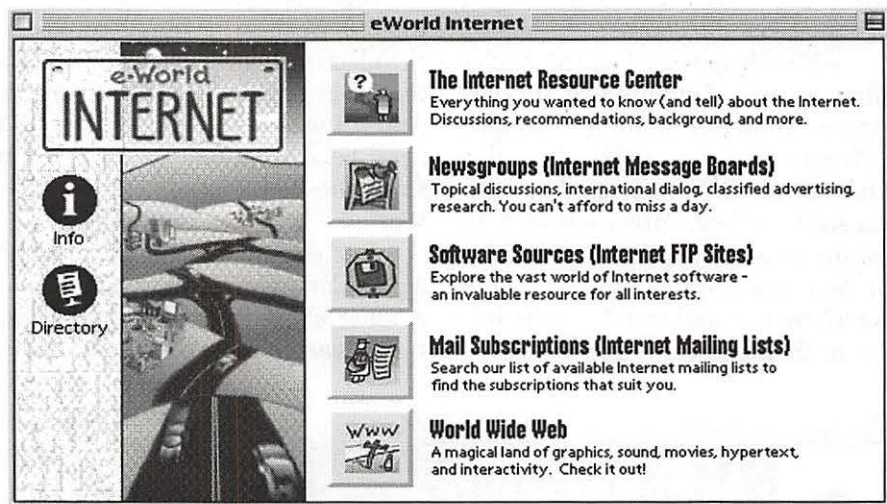
But e-World was a bit like the Apple Computer employee I met last August at MacWorld Expo in Boston. I was visiting the Apple Pavil-



Apple Customer Support: A great place to get technical information and system software updates and fixes.



Community Center: This is where the action was happening on last night. A big "End of the e-World" party was waiting to start in the last hour before darkness.



Internet Gateway: Here was your license to the world wide Internet. In the end they closed the on-ramp.

ion at Bayside, and started playing around on the new PowerMac 8500 that was running e-World. Truth being I was interested in seeing how zippy these new 8500s were, and it just so happened this was the only one on the floor not surrounded by hundreds of onlookers.

Once I got into e-World I switched over to the e-World Web Browser, as clunky a piece of software (other than Microsoft Word 6)

that ever existed. The nice young lady from Apple, whose job it was to demo e-World, said in surprise, "How did you do that?"

"Do what?" I said.

"Get access to the World Wide Web like that," she said. "I've never been able to figure out how to do that on e-World."

So I showed her. She saw for the first time Apple's e-World Web Pages. And she wrote down on a

piece of paper just how I switched to the Web so she could show others if any one asked.

But she seemed a little lonely. Not many people were hanging around her little booth waiting to find out.

Maybe that was the problem. Apple came a little too late to the online show, they put up a tent, and there just weren't enough circus-goers left to fill the stands. Other circus bigtops were already wooing fans just down the dial-up road.

And like the woman I met in the e-World booth, maybe Apple just wasn't quite sure what to do with the e-World circus or how to fill the bleachers once they set up their electronic tent.

The end was near when Ziff-Davis pulled MacWeek news off e-World in late February. "We're re-defining to an Internet strategy," or some such. "Come on over to our Web site and get the hot news." e-World was such a nice little cul-de-sac, now they wanted me to get out on the Interstate. I liked staying off the big wide highway.

That last Sunday night on e-World I logged in to say good-bye to someone, anyone who could be found. Seems like there were more people dialed in then than I'd ever

"A likable, quiet place e-World was. You never had to worry about traffic jams, you could always get in, there never was a waiting line. Apple's e-World technical support section was great, it was easy to grab software updates from the Apple new files section."

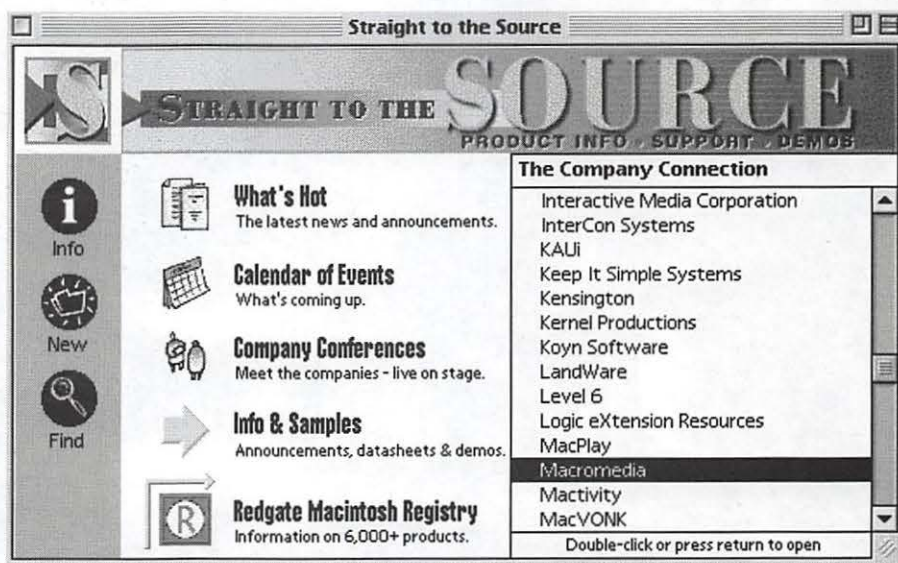
seen. A couple of chat rooms had good-bye parties ongoing, e-Worlders were weeping digital tears over the loss of their cyber-friends and outpost. e-World hosts were enthusiastically hawking 20 free hours on America Online if you signed up as an e-World émigré.

I wanted to hang out until the digital darkness arrived, but the end for me would have been 3 a.m. from my east coast basement interface place. I poked around a few minutes, grabbed a little cyber-nostalgia and some screen shots from the waning hours. I was gone to bed with three hours of life left in e-World.

The next day on AOL (in the new ALOHA zone for e-World exiles,) anguished reports recounted that the end arrived and it was like someone turned out the lights while people were still home. e-Worlders were in the middle of typing bye-bye and their screens went blank at the witching hour. Poof! The genie was back in the bottle.

Here for you are a few views of what e-World was like on that last night. For the record, for posterity. Let's hope Apple Computer's other endeavors last longer. ■

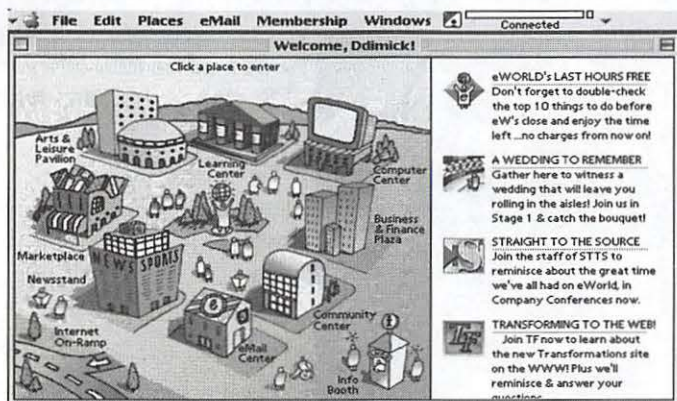
Pi Member Dennis Dimick first started supporting Apple Computer when he bought an Apple IIc, a portable Apple II introduced shortly after the original Macintosh in 1984. He could barely afford that \$13100 powerhouse complete with its one floppy drive and 128k RAM. He thinks it's just amazing what the same money buys now.



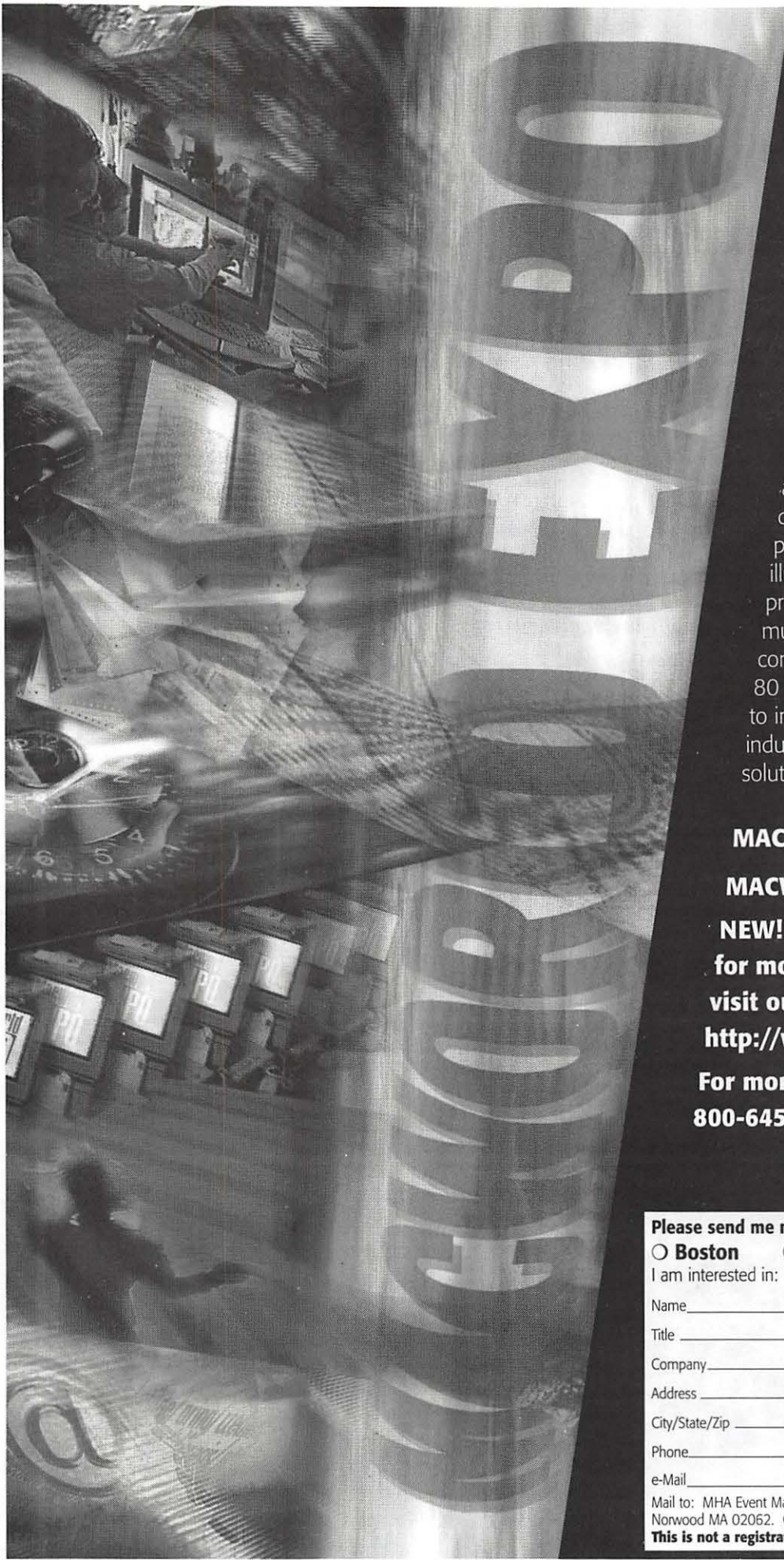
Fix My Program: A wide variety of companies offered technical support and software updates here.



Weekly News: e-World's weekly news area was always humorous interesting. This is the way they said good-bye.



Hello e-Worlders: The welcome screen was appealing, perhaps the most attractive of any online service.



It's about business-to-business, home-to-office, artist-to-client, teacher-to-child.

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This is not a registration application.



Mac Essentials, 1996: A List for Novices and Pros

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lcharters@tcs.wap.org

THERE ARE FEW things in life that we all agree are essential. My list includes a warm shower every morning, cold Coke (never that other brand), and fresh-baked chocolate chip cookies when someone wants to bribe me, all hallmarks of an advanced civilization. Your list might differ somewhat. Or maybe you are from a less advanced civilization.

But what are the essentials for your Macintosh? Computers live faster lives than people, faster lives than even dogs and cats. What was an essential six months ago, in the world of computers, may be obsolete today. So what do you really need for your Mac, circa 1996?

Basic Mac

First, you need to define "the basic Macintosh." "Macintosh" can mean either an Apple Macintosh or an Apple Performa. But it can also mean a Mac-compatible from Power Computing, DayStar Digital or Radius (and maybe some others by the time this appears in print). As of 1996, the basic Macintosh should include:

- color capability. This doesn't necessarily mean a color monitor, but the Mac itself should be capable of running color programs. By this criteria, a PowerBook 230 with a grayscale LCD screen is "color capable," as is a Macintosh SE/30, but a

Macintosh SE is not. And yes, an actual color monitor is ideal. Note that all Macs currently produced, including Mac clones, are "color capable."

- 8 megabytes of real RAM. Virtual memory can be nice at times, and various "doubler" products have legions of enthusiastic owners, but there is no substitute for real

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"But what are the essentials for your Macintosh? Computers live faster lives than people, faster lives than even dogs and cats. What was an essential six months ago, in the world of computers, may be obsolete today. So what do you really need for your Mac, circa 1996?"

—————

memory. As a bonus, memory prices in 1996 are the lowest they have ever been. If you can put 200 megabytes of RAM into your Mac, and you can afford it, do so. But make

sure you have at least 8 megabytes. Apple has recently said they will ship all new Macs with a minimum of 12 MB of RAM.

- at least 200 megabytes of hard disk space. Thanks to the SCSI port on the back of all Macs it is very easy to add extra disk space: just plug in an external drive. So if your Macintosh LC has nothing beyond the 40 megabyte drive it came with, plug in another drive. Hard disk drive prices in 1996 are absurdly low, and it is virtually impossible to buy a new drive smaller than 800 MB.

- System 7.5.1 or better. Yes, System 7.0 was the last "free" version of the Mac operating system, which means that if your machine didn't come with System 7.5, you'll have to buy it. But so much of the current software requires features of System 7.5 that this is now an absolute essential. True, it may be possible to browse the Internet or run a late-model graphics or word processing package without System 7.5 — but it will be more trouble than it is worth. The updates to bring System 7.5 to either 7.5.1 or 7.5.3 are free, through your friendly local user group.

- a properly installed modem, 14,400 bps (bits per second) or faster, appropriate software (properly installed), and a subscription to a user group bulletin board, Internet Service Provider, or commercial provider (such as AOL, America Online). Computers are communications tools, so if you aren't set up to communicate, you are needlessly crippled.

- electricity. The infamous might prefer to live in rural Montana shacks without utilities, but your Mac, at least, does nothing useful without electricity. If you live in an area prone to thunderstorms, you might also want to invest in a UPS



(uninterruptable power supply), since too much electricity can ruin your Mac's day — forever. If a UPS seems too elaborate for your needs, consider getting a PowerKey Pro power strip (*Washington Apple Pi Journal*, Jan.-Feb 1996, pp. 59-60). While not as cheap as this week's special down at the hardware store, the PowerKey Pro is tailor-made for your Mac, and knows exactly how to treat your peripherals, including modems.

Does this mean that your Macintosh Plus, PowerBook 100, or Macintosh SE is worthless? Not at all. If you have one of these machines, and it is in working order, and does something useful for you, then continue to use it. But keep in mind that, compared to machines with the characteristics listed above, these older Macs can't take full advantage of the rich variety of digital life available in 1996.

Note, too, that the list of basics does not include a requirement to have a PowerPC processor. Yes, Power Mac computers are really spiffy. Yes, they really are better, in almost every sense, than non-Power Macs. But in 1996 you can get along just fine with an old, obsolete, creaking Macintosh II, for example, provided it has adequate memory, disk space, and System 7.5.

Note, as well, that the list does not include a printer. While most people print things from their computers, few know exactly what *kind* of printer they need (ink jet, laser, color, portable) until they've used their computer for several months. Until you decide on your needs, your local copy store, user group office, library, or Mac-owning friend might be all you need, provided your needs are modest. Spend the money you might spend on a printer, if you knew what to buy, on memory and disk space; you'll definitely need those.

The Hard Part

Assembling a decent computer system is easy. Doing something useful with it requires something quite difficult: learning. This seems especially difficult for Mac users, famous the world over for never reading their manuals, never following instructions, or deciding that the few instructions they may actually read are restrictive — so they ignore them. Literacy isn't *really* dead, but it is often overlooked as an essential.

These books cover the essentials on how to do something useful, even brilliant, with your Mac. They are listed in order of importance, starting with "extremely critical." The list is also occupation neutral: these books are invaluable to programmers, professors, painters, poets, and priests.

The Little Mac Book

The Little Mac Book, 4th edition, by Robin Williams (Peachpit Press, 1995). One quote on the back cover calls an earlier edition of this the "best book ever written about the Macintosh," which is no longer true: *this* edition is easily the best.* *The Little Mac Book* starts with basic terminology, covers setting up a machine, how to use the mouse, desktop, Finder, menus, keyboard (a skill overlooked by most Mac users), icons, folders, basic typing skills — everything.

Loading documents, saving documents, throwing away documents, and printing documents each have their own heavily illustrated, tightly written chapter. Managing the System Folder, fonts, control panels, desk accessories, the Apple Menu and aliases also get their own chapters, concentrating exclusively on "hands-on" skills with nothing else thrown in but a wickedly dry sense of humor.

Some of the chapters appear to focus on the obvious, such as Chap-

ter 26, Find File. Yet the Find command is one of the great blessings of the Mac world, without equal on those "other" personal computers, though few people ever take the time to learn how to use it effectively. Robin shows how, in 10 pages. Another under-appreciated and under-utilized Mac feature, file sharing, is covered in, again, just 10 pages. (Trivia question for people who think they are detail fanatics: in the file sharing chapter, who is "Shannon" and what is Shannon's relation to Robin?)

Over the years, *The Little Mac Book* has grown from 104 pages (\$12.95 in 1990) to 393 pages (\$17.95 in 1996). What hasn't changed is the extraordinary attention to detail, the very sneaky sense of humor and fun, the great index and table of contents (perfect for looking up something in a hurry), and the highly readable layout and design. The Fourth Edition covers all things Mac, including pre-System 7 details, but the emphasis is on System 7 and 7.5 (with a special section on the unique Performa software). Also welcome are the great cartoons and illustrations by John Grimes; you can spend quite a bit of time just flipping through the pages, laughing at the illustrations (provided you read the book first so you know why they are funny).

As for how a "little" book can grow to almost four times its original size, Robin wrote, designed, and laid out the first edition on her Mac SE with a 20 megabyte drive. For the current version, she used her Power Mac 8100/100 with a 20-inch color monitor. Little books grow for the same reason little computers get replaced with bigger computers: things change.

I like to give books as gifts, and *The Little Mac Book* is my second most favorite gift, surpassed only by William Goldman's *Princess Bride* (Ballantine, 1973). True, *Princess*



Bride is a novel, and has nothing to do with Macs, but you should probably read it, too.

Computer Manuals

Though it violates the Mac work ethic ("If I wanted to work, I wouldn't have purchased a Mac"), read the hardware manuals that came with your computer. In particular, your machine probably came with one manual called something like "Read Me first" or "Installation Guide" or "Introduction;" read this in its entirety. Also read all the "Read Me" files lurking around, pre-installed, on your computer, plus any "Read Me" files installed by any software you add. The answers to something like 89.7% of all questions asked at user group meetings are found in either the introductory manuals or the "Read Me" files.

As for the rest of the documentation that comes with your computer, don't read it unless you need to — yes, you do have a Mac, and there isn't any reason why you should spend your time reading manuals when you could be playing with your computer. But *do* glance through the Table of Contents and Index of all your manuals. That way, when you do have questions you'll know in advance how the documentation is organized and how to quickly find an answer.

And if the documentation lacks a Table of Contents or Index, complain. Macs are powerful communications tools, so communicate!

The Mac is not a typewriter

The Mac is not a typewriter, by Robin Williams (Peachpit Press, 1990) and *Beyond The Mac is not a typewriter*, by Robin Williams (Peachpit Press, 1996). These really are two different books, and the second is *not* a replacement for the first. As for what they are...

The Mac is not a typewriter has a title that splendidly summarizes

the book: the Mac isn't a typewriter, so don't pretend that it is! Don't space twice after periods and terminal punctuation, use tabs to line works up, not spaces, use real quotation marks, use real apostrophes, avoid underlining in almost every circumstance — in all, over 40 suggestions how to use your Mac properly, with splendid "wrong way" and "right way" illustrations of every rule. Read, and re-read, this slim 72 page volume, apply what you learn,

"Assembling a decent computer system is easy. Doing something useful with it requires something quite difficult: learning. This seems especially difficult for Mac users, famous the world over for never reading their manuals, never following instructions, or deciding that the few instructions they may actually read are restrictive — so they ignore them. Literacy isn't *really* dead, but it is often overlooked as an essential."

and nobody will ever accuse you of composing things on a 1938 Underwood manual typewriter.

Beyond the Mac is not a typewriter is a much more detailed (222

pages) and complex book, venturing beyond the basics to attack some fundamental problems in page design and use of type. Unlike a typewriter, the Mac allows you to use something much more creative than a monospaced typeface. Unlike almost anything, including most other computers, the Mac also allows you to churn out monstrously horrid "ransom notes" with misaligned text, clashing typefaces, and other examples of terrorist typography.

The latter volume ranges from issues in basic readability and punctuation to how to properly use initial caps, pull quotes and decorative type. Examples of bad type, good type, and better type illustrate every topic. Pay close attention to the examples and you will find some added treats, such as the words to the famous Western song, "Hormone Derange:"

O gummier hum warder buffer-lore rum
Enter dar enter envelopes ply,
Ware soiled'em assured
adage cur-itching ward...

Both these books should be required reading for all government clerks, secretaries, managers, and other producers of bureaucratic paper. In fact, they should be summarily declared the official successors to the *GPO Manual of Style*, forever banning double-spaced memos written in Courier 12. Fat chance of this ever happening, but it *should* happen.

Non-Designer's Design Book

The Non-Designer's Design Book: Design and Typographic Principles for the Visual Novice, by Robin Williams (Peachpit Press, 1994). Probably my favorite Mac book — certainly the only one I've read more than once — *The Non-Designer's Design Book* addresses a critical cultural problem: by putting Macs into the hands of ordinary people, Apple has turned even simple, in-



expensive word processors into powerful publishing tools, capable of producing materials the equal of major publishing houses. Unfortunately, “ordinary people” lack any background in design or typography. Robin attempts to steer budding publishers away from desktop publishing horrors and towards mastery of some simple principles. (And no, she doesn’t address spelling or grammar at all.

Simple, perhaps, but subtle: contrast, repetition, alignment and proximity. Which deserves a quote: When culling these principles from the vast morass of design theory, I thought there must be some appropriate and memorable acronym within these conceptual ideas that would help people remember them. Well, uh, there is a memorable — but very inappropriate — acronym Sorry.

As in the previous books, each concept is richly and imaginatively illustrated, often with very funny examples of bad typography. Many of the examples will prove painful as you nod sadly and say, “yes, I’ve done that.” But you’ll immediately brighten, warmed by the knowledge that you now know what is wrong, and, even better, how to correct it.

Along the way, Robin covers the basic characteristics of type, and offers simple, memorable, useful tutorials in how to identify typefaces. Don’t know a slab serif typeface from sans serif? Do Modern and Old Style seem the same? Can you tell the difference between a decorative font and a script font? A slim, 11 page chapter will give you a solid understanding of these basic typeface categories, and with any luck at all you’ll quickly appreciate why the entire world doesn’t stick to just Times, Helvetica, Courier and Zapf Chancery.

The examples, as always, are delightful. Also diverting: it

wasn’t that difficult to figure out the “Furry Tells” of “Ladle Rat Rotten Hut” and “Guilty Looks,” but the “Fay-Mouse Tells” of “Casing Adder Bet” and “Violate Huskings” consumed way too much thought.

The best parts, however, are the Table of Contents and Index. Not only are they quite functional in their own right, but both are exquisite, unheralded examples of contrast, repetition, alignment and proximity. It is sobering to be in awe of a Table of Contents; this is a work of art.

Why is *The Non-Designer’s Design Book* so far down in the list if it is so wonderful? Quite simply: you can’t appreciate the beauty of typography and design until you’ve first mastered the basics of getting your Mac to do the mundane.

Macintosh Product Registry

One complaint often levied at the Mac is that it lacks the wide range of software available for “other” computers. This is actually a silly argument; how many word processors, spreadsheets, database programs, address books and such do you really need? On the other hand, sometimes you really do need to do the extraordinary, and for that you need the *Macintosh Multimedia & Product Registry*.

Published quarterly by Redgate, the *Registry* averages around 450 pages, virtually all of it indexed listings of hardware and software products. You can search for items by product name or company name, or scan through the category listings. Each product includes a brief description, hardware requirements, retail price, the company name, address, and phone number, and in many cases an Internet E-mail address. If you need a program to do gene sequencing, or designing steel beams, or managing a horse farm, you can probably find it in the *Registry*.

On the bad side: finding the *Registry* is sometimes difficult. When it is first issued each quarter, you can usually find copies at large newsstands and computer stores. After that — it vanishes. If you don’t subscribe (using the tear-out cards in each issue), getting a new copy is often difficult.

The *Registry* also features some articles in the front, before the listings. For the most part, these are forgettable; I’d use the guides for years before I even noticed them.

Once upon a time, Redgate also published a CD-ROM version of the *Registry*, perfect for computer professionals who want to use their computers to do complex searches. Repeated calls to Redgate failed to discover if this is still being produced; nobody seemed to know.

Despite these limitations, the *Registry* is the best single-source for information on what is available at any given time. Don’t rely on mail-order catalogs (which promote what *they* want you to buy, not what *you* need) or computer store shelves (which, let’s face it, only have in stock what they haven’t been able to sell). The Mac is well supplied with hardware and software, and the *Registry* is an excellent guide to this wealth.

No Bookcase Bestsellers

Once upon a time, after completing graduate school, I managed a large bookstore. While working there, I came up with the concept of the “bookcase bestseller,” a book widely proclaimed to be important, so important people would buy it and put it on their bookshelves. They’d never read it — the book was to be seen, not read.

Don’t let any of these “essentials” become bookcase bestsellers. With the exception of the *Registry*, all the books are quite short, to the point, and exceedingly well written and illustrated. Similarly, under the

"Basic Mac" section, don't do what many people do and buy a modem — and then never use it. A modem that you *use* will rapidly become one of your favorite peripherals, and if you have one with blinking lights on the front it also is great for impressing friends and relatives. To state the obvious, if you don't use the modem — or read the books — you'll find they won't do you much good.

* I confess, I'm quoting myself. Peachpit Press has reprinted, on the back cover of many of Williams' books, part of my review of the first edition of *The Little Mac Book*. The review is from *Resources* (the magazine of the San Diego Macintosh User Group), October 1990, p. 18. However, lest you think something

is amiss, I've never requested, received, or expected any kind of kick-back from Peachpit Press, though Robin Williams did send me a signed copy of *The Little Mac Book*, 3rd Ed.

Sources

PowerKey Pro, approx. \$100. Sophisticated Circuits, Inc., 19017 120th Ave. NE, Suite 106, Bothell, WA 98011, (206) 485-7979, sales@sophisticated.com or <http://www.sophisticated.com>

Computer manuals, yours. Look in that big box your computer came in. Another place to look: under your monitor, or under your desk.

Robin Williams, *The Little Mac Book*, 4th Edition. Peachpit Press, 1995. 395 pages, \$17.95. ISBN 1-56609-149-7. sales@peachpit.com or <http://www.peachpit.com>

William Goldman, *The Princess Bride*. Ballantine Del Rey, 1977. 288 pages, \$5.99. ISBN 0-345-34803-6. <http://www.randomhouse.com>

Robin Williams, *The Mac is not a typewriter*. Peachpit Press, 1990. 72 pages, \$9.95. ISBN 0-938151-31-2.

Robin Williams, *Beyond The Mac is not a typewriter*. Peachpit Press, 1996. 222 pages, \$16.95. ISBN 0-201-88598-0.

Robin Williams, *The Non-Designer's Design Book: Design and Typographic Principles for the Visual Novice*. Peachpit Press, 1994. 144 pages, \$14.95. ISBN 1-56609-159-4.

Macintosh Multimedia & Product Registry (quarterly), approx. \$15. Redgate Communications Corp., 660 Beachland Blvd., Vero Beach, CA 32963 800-333-8760 ■

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Fractal Design Painter 4—A Review

by Nancy Seferian

FRACTAL DESIGN Painter is a most amazing program. Incredible, in fact. This application simulates traditional artists' tools and materials including felt pens, charcoal, colored pencils, water color, oils and even various paper textures. It also features image editing tools which allow you to sharpen and soften scanned photographs and even make an image appear transparent. You can make photos look like pencil drawings or oil paintings. It includes Bézier drawing tools which can create and modify PostScript art.

It supports RIFF (Painter's own format), TIFF, PICT, GIF, JPEG, PCX, BMP and Targa formats and integrates with Adobe Photoshop, Adobe Illustrator and Macromedia FreeHand.

But, Mac users, forget it if you think you can learn this program without reading the manual. You have to read the manual just to get through the tutorial! It's definitely worth doing it though. This is a very special program. Let me tell you a little bit about it.

It comes with a CD which includes the installer for the Painter 4 software, and CD Central, which is the interactive guide to the content from which you can also install. There are patterns and nozzles, more about them later, a very impressive collection of digital artwork, 100 royalty-free photographs from PhotoDisc and more. After installing the software, I decided to check

out CD Central for an overview and a guided tour.

The tour opens with piano music playing in the background and a colored oil pastel drawing of hands playing a piano. However, it wasn't just a drawing; it was a movie of an *evolving* drawing, as if you were watching the strokes and gestures the artist was making with the pastels as the drawing progressed. When this first sequence finished and the drawing was completed the composition appeared to become liquid, a flowing segue to the next evolving drawing which was a portrait you could also watch being drawn.

I'm describing this introduction of the CD tour because everything I saw on the screen you can do with Painter, including recording transparently as a script in Painter every action you make when creating a drawing. Each action can then be

played back as a QuickTime movie. You can even edit the script! In fact, the artwork for the tutorial was captured for the tutorial booklet from a script that was recorded. Kind of embarrassing when you're first learning, but loads of fun and a great tool.

The Tutorials

The first tutorial lesson was a good introduction to the variety of art materials available. The lesson included a tracing exercise using a "pencil" and some "chalk". There are a variety of pencils available, just as in my real pencil box, although I don't happen to have a 500 lb. pencil. The strokes can be made darker or lighter if you're using a pressure-

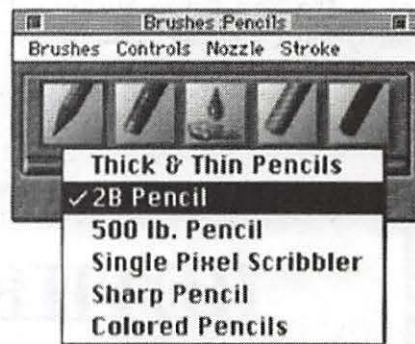


Figure 2. Variety of pencils

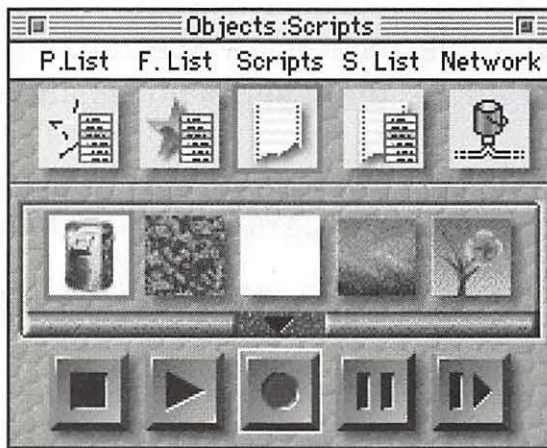


Figure 1. Script palette controls look like those on a video or CD player.

sensitive tablet, but it's possible to use a mouse too, which I did. You can compensate by adjusting the brush controls.

The second tutorial lesson was perfect for setting the tone for working in this media. It was quite like creating a drawing/painting with regular materials: sketch in the composition with a 2B pencil; block in the colors with oils; create some depth with light and dark; and

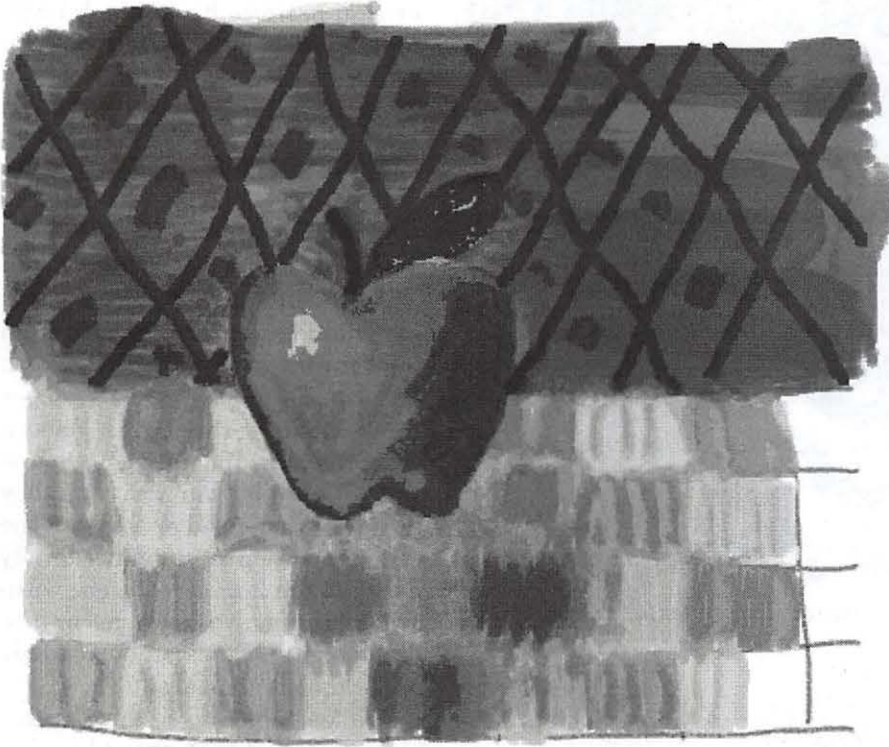


Figure 3. You can work in much the same way you would with traditional materials.

finish by adding some details.

Something was becoming very apparent: there were a lot of options for everything. The palettes have icon options, pull down menus, sliders, and check boxes. The menu items in the palette have options and submenus. There are choices in places where you wouldn't even expect to find them.

There were so many new ideas and places to hunt for what was required in the first few lessons of the tutorial that it was a relief to get to the lesson about image retouching. If you've worked in this area of Photoshop it's very similar. You'll find it easy to adjust the black and white points, make color corrections, and use dodge and burn techniques to selectively lighten and darken areas of an image.

"Image Hose"

One of the most entertaining and interesting tools is the Image

Hose. This tool works like a brush, but instead of producing colored strokes the Image hose lays down a series of images. With the use of this tool you can take bits and pieces of photographs or drawings and create new images. For instance, in one of the image libraries there is a series of 14 different trees. You can stroke across the screen, using trees of varying size, and the Image Hose will paint the trees in the direction of your stroke. In a few minutes you have a wonderful forest. You can even create your own nozzles for the Image Hose. This section of the tutorial demonstrated how to make a nozzle of piggies by duplicating, resizing and then grouping them, then making them into a nozzle with which you can paint. Very cute, and it led me to fantasizing about the nozzles I could create.

The way this application works with textures is remarkable and easy to accomplish. To begin to learn about adding surface texture to an image I was directed to use a clone of a color photo of an artichoke. The type of strokes you would find in a Van Gogh painting were applied to the upper left quadrant of the com-

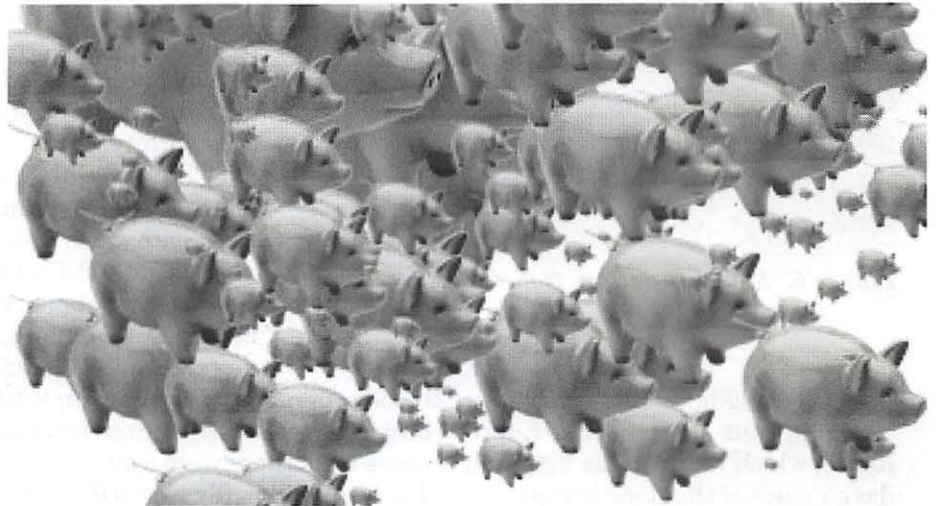


Figure 4. My piggy nozzle created this pig gathering.



Figure 5. A Van Gogh style stroke, embossing, surface textures and text

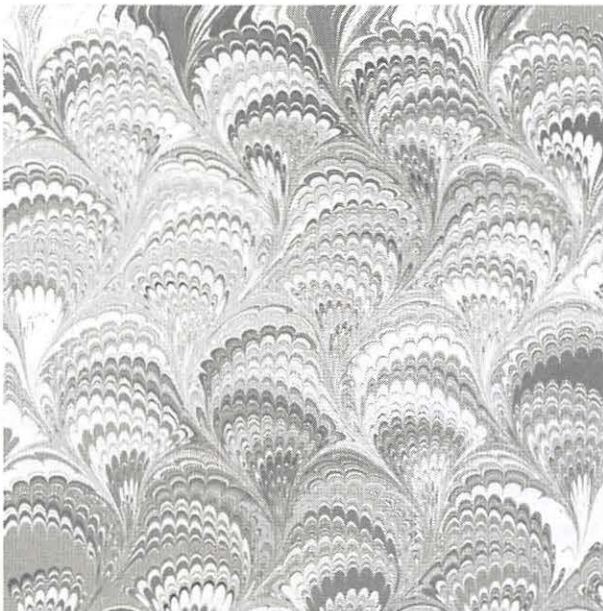


Figure 6. Marbled pattern from blobs

position (see Figure 5). In the lower left quadrant the Original Luminance, which refers to the light and dark values of the clone image, was used to apply a surface texture to a gradation. In the upper right quadrant the Image Luminance was used

blobs ranging in size from small to large. I repeated these steps several times until there were a lot of blobs. Then while this file was still open I chose Effects, Esoterica, and Apply Marbling to get a wonderful marbled pattern (see Figure 6).

to apply Surface Texture to get an embossed effect. For the lower right quadrant the Apply Surface Texture dialog using Image Luminance was used with a reflection map. This is done by creating a reflection of the current clone source on the surface. Finally, a reflection map was used to create unusual effects with type.

The special effects this program can create are fantastic. I used the Effects menu, then submenu Esoterica, then Blobs, to create multicolored

It was even easier to create a Fractal pattern. From the Art Materials Palette I chose the Pattern menu, then Make Fractal Pattern. Color gradation was added then from the Grad Palette (gradation) and this file became a great background pattern for a design.

"Floaters"—Another Special Effect

One last favorite feature from the tutorial was the floaters which are images or portions of images that float above the canvas. You can move them around until you get just the composition you want and they do not become fixed or a part of the composition until you have finally decided. You can edit each one without changing the canvas or the other floaters. You can even easily make them transparent.

To learn how to create a transparent image I first opened an image of a face. Then I placed a reference floater, which was an image of sky and clouds, on the face. A reference floater is a temporary low-resolution version of an image floater which allows you to make transformations quickly. When you've finished you can convert it to an image floater.

The sky and cloud image was rotated and resized. Then from the Controls Palette Multiply was selected from the Compositing Method pop-up menu and the floater became transparent. Compositing combined the information in the sky and clouds floater with the image of the face on the canvas and you could see through the sky and clouds to the face. Very neat. Later, a gradation was added and image of an eclipse.

Conclusion

This program is complicated and wonderful and I'm going to love getting more acquainted with it. The tutorial and the manual are loaded with color graphics that include



screen shots of palettes and menus showing suggested settings where appropriate, and artwork where that makes a point more clear. Sometimes the small numbers or text in the Tutorial was very small and it helped having a magnifying glass handy. The Index is good, but the Table of Contents is very good. You can even register by modem. ■

Fractal Design Painter 4
 Fractal Design Corporation
 P.O. Box 2380, Aptos
 CA 95001-2380
www: <http://www.fractal.com>
AOL: Keyword "Fractal"
CompuServe: "GO GUGPRA"
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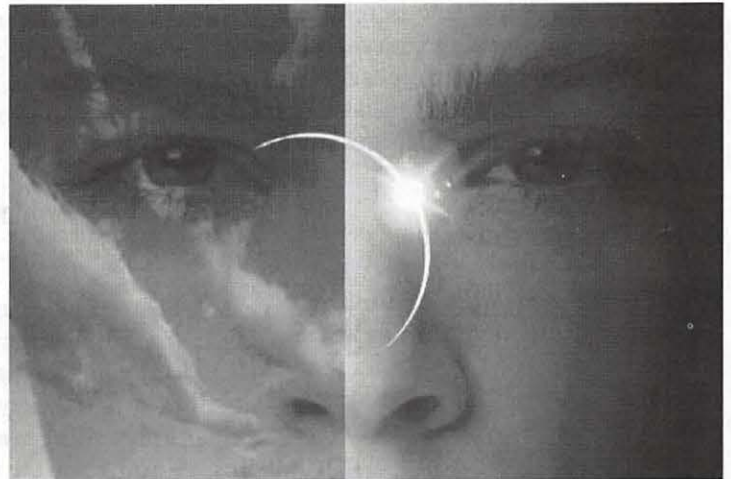


Figure 7. Floaters let you experiment and make composing collages easy.

An Interview with Eliot Cohen

by Carol O'Connor

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The beautiful graphic on page 33 is from a Photoshop image created by Eliot Cohen. Eliot is a photographer and computer artist who heads the Photography department at Northern Virginia Community College at Loudoun Campus.

The photographic image shown here is reproduced for this magazine in the conventional manner, but the original is much more wonderful to behold. It is large, 24" by 34" and is printed on heavy artist's paper. You can see it at the Troyer, Fitzpatrick, Lassman Gallery in Washington. More information about the print process appears later in this interview.

Carol: I have known and admired your photographic work for many years. You have only recently turned to the computer. How do you like working with the computer and how does it affect your own production of fine photographic images?

Eliot: I have embraced the computer and discovered that I love

"Tell me how you output your work so that it is a genuine fine art object. What kind of paper do you use? How permanent is the ink?"



it! What I am doing now is related to my previous work, of course, but I find I can look at more possibilities with the computer to assist me. My level of control is also greater than before.

Carol: Can you elaborate?

Eliot: From my work with multiple exposures, I am very interested in chance. I also enjoy the unplanned results of some computer operations. I like surprise. The computer offers very sophisticated control over relationships within the picture. I love, also, the relatively rapid response Photoshop allows. It's very playful to use Photoshop. It is like Nintendo for adults.

Carol: Do you prefer color or black and white?

Eliot: I work in grayscale despite the millions of colors available to me on the computer. Actually, I print using the CMYK Mode in Photoshop, rather than the Grayscale Mode, because I can use millions of colors to create grays, rather than the 256 levels of gray in the Grayscale Mode. This results in more subtle grays.

I find that the relationships that interest me are described elegantly with tone. My work has come in part from an interest in Eastern or Oriental landscape painting where the use of brush and ink conveys a feeling for light and surface that is very complete.

I also want to hold on to a sense of delicacy and the light of traditional photographic prints. I am interested in ways that the computer can enhance those qualities.

Carol: Have you any objections to using the computer for your art?

Eliot: I dislike staring at screens. The screens are too small and too inaccurate. There is no feeling for scale or space, so proofs are essential.

Carol: How did you get started using Photoshop?

Eliot: I came in kicking and screaming. I was uninterested until 1993. Up to that point the prints I saw had no subtlety or delicacy. Then a friend said: "You might want to look at this..." and showed me small dye

"I came in kicking and screaming. I was uninterested until 1993. Up to that point the prints I saw had no subtlety or delicacy. Then a friend said: 'You might want to look at this...' and showed me small dye sublimation prints with true photographic character."

sublimation prints with true photographic character.

Carol: I can testify from my personal experience that you are an excellent teacher in the photo lab! How is it that you came to introduce your students to the computer?

Eliot: I think of a statement by Lazlo Moholy-Nagy: "...a knowledge of photography is just as important as that of the alphabet. The illiter-

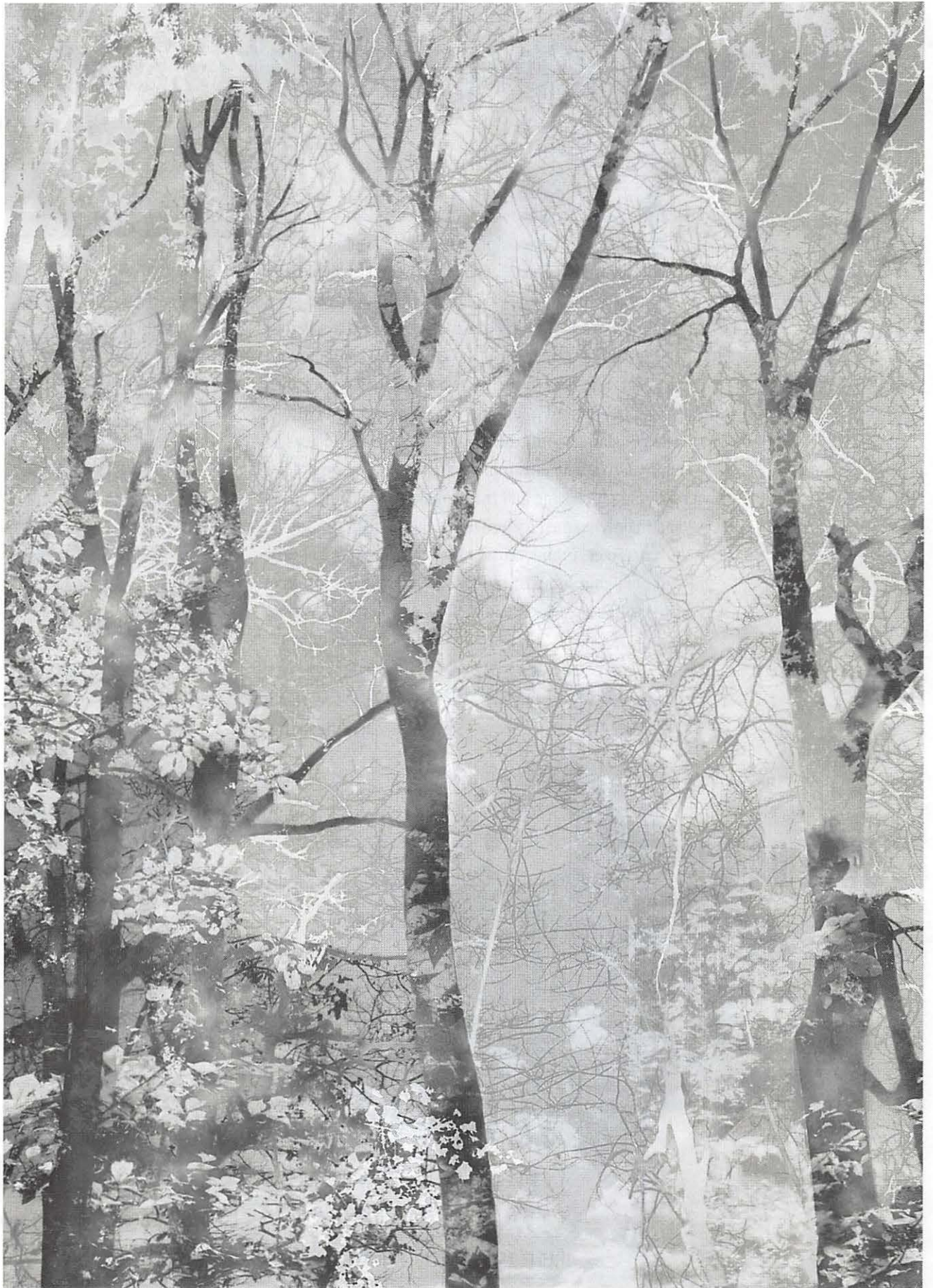
ate of the future will be ignorant of the use of the camera and pen alike." He said that in 1936. The same relationship now exists between culture and the computer which, no doubt, Moholy-Nagy would add if he were writing today.

Carol: Tell me how you output your work so that it is a genuine fine art object. What kind of paper do you use? How permanent is the ink?

Eliot: The work is printed by David Adamson using his IRIS ink jet printer. He can wrap very beautiful papers over the drum. The ink is sprayed many times finer than a human hair. The prints are extremely detailed in appearance and long in tonal scale. The inks currently in use are estimated at 35 years permanence, with newer ones coming very soon estimated at 50 years. This compares very well with traditional photographic materials. David is a printmaker himself and very in tune with artistic creation and rendering.

Carol: Do you have any final remarks of value to artists and photographers who hesitate to use the computer?

Eliot: I would encourage people who are curious about the potential of the computer to jump in. One can learn to use a Macintosh in about four hours and begin making images soon thereafter. Although image manipulation software is complex, it follows a logic that can be understood. Sometimes it is best to have a little help, but eventually the control will come. The images that result can be as natural or as supernatural as you want. It's really about possibilities and what can be imagined. ■

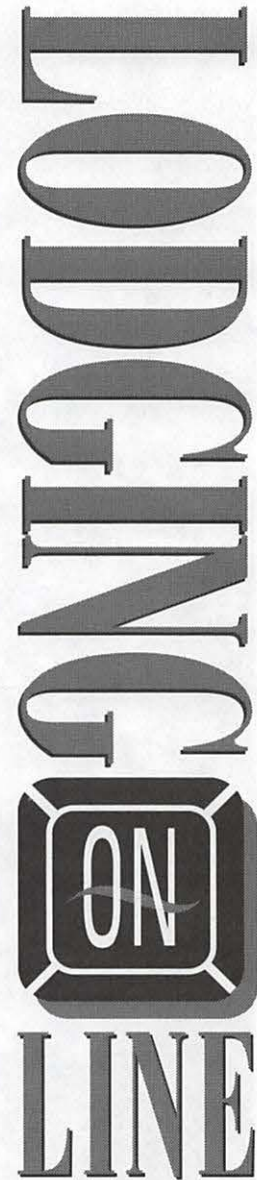


Artists on exhibit

by Ann Aiken

Artist Info: Laurel Vaughan is currently the Senior Graphic Designer for Marriott International's Graphic Design Services Division. She began her career by studying Fine Art at Montgomery College. She left when she got a job offer to do fashion illustration for Beyda's Petites clothing stores where she ran Beyda's in-house art department. She has worked at various agencies since then and also free-lanced a little for more flexible family time. She got started on the Mac when she convinced her last employer to set up electronic design stations. She did her own research, purchasing and maintenance on their machines and mainly learned the programs on her own. "With the computer, I think artists lose some looseness in their artwork, but gain some flexibility when trying out different colors, etc. These days I feel like less of an artist and more of a technician"

Tools: Power Mac 6100, Quark XPress, FreeHand, and Illustrator.



The *Lodging On-Line* logo was developed for Marriott's Intranet. It also was produced in a horizontal format. The *Gateway* logo was produced totally on the computer except for the bridge which was drawn by hand and then used as a template.

The *Award of Excellence Poster* announces the call for entries for the J. Willard Marriott Award of Excellence, an annual award which recognizes Marriott associates for their outstanding service. The poster is distributed to Marriott associates worldwide. The art was done in FreeHand, the layout in Quark.

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Animation and 3D Modeling on the Mac

by Don and Melora Foley

book review by Stuart Bonwit

ANIMATION *and 3D Modeling on the Mac* is a beautifully illustrated and clearly written book by husband and wife team Don and Melora Foley of Vienna, Virginia. The Foleys are both professional graphic artists with considerable experience with publishing firms and freelance work.

The Table of Contents immediately sets the tone of the book. The first section is called "Front-of-the-book Stuff!" It contains acknowledgements, introduction, etc. The last section is called (surprise!)

"Back-of-the-book Stuff." It has appendices, glossary, and index.

The book opens talking to the completely inexperienced animator, but before the end, advice is being addressed to the very experienced. The reader is repeatedly reminded that getting started in 3D (three-dimensional) animation can be intimidating. The best advice it gives is to open a modeling program and go through the tutorial actually doing what it says. This is counter to the usual Macintosh user's "I-don't-need-to-read-the-manual" mentality! (The author of this review most definitely agrees with the Foleys.)

The first of the Animator's 10 Commandments is "Save Often."

The main part of the book is divided into six chapters:

1) "3D Showcase," the gee-whiz department, a gallery of spectacular 3D images. The wide variety of images from a number of artists shows a spectrum of techniques.

All the remaining images in the book except a few scanned and Photo CD images were created by the authors on a Macintosh Quadra 950

with a PowerPC upgrade board.

2) "Tools of the Trade," hardware and software. A large array of software current to the 1995 publication is shown in a spread sheet style depicting what 3D animation functions each one can do.

3) "3D Modeling" takes the reader through all the basics methods of creating shapes through (among many others) shading, textures, lighting, and staging.

4) "Animation" covers motion theory, key frames, tweening, and rendering.

5) "Editing" tells about (surprise!) putting your production together. The process is followed through (briefly in each case) for Macromedia's Director, Adobe's After Effects, Adobe's Premiere, and Adobe's Photoshop. Finally, it discusses morphing and distortion.

6) "Output" explains: digital and analog output and the reasons for, and the applications of, each; preparation for QuickTime; and preparing images for print. It concludes with an explanation of the broadcast video signal and how Macs fit into the broadcast environment.

The book is an excellent *guide* for someone entering or advancing in the field encompassed by the book's title. It is not a tutorial. However, I found the book fascinating and instructive and I would highly recommend it. ■

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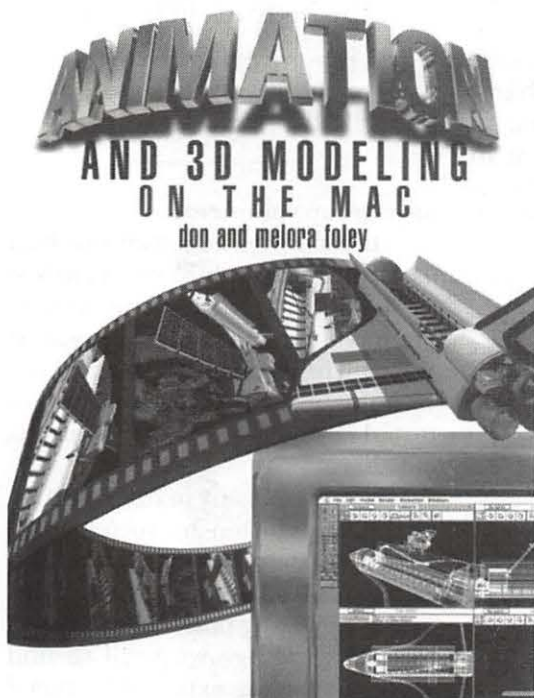
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Considering the Possibility of External Financial Support for Computer User Groups

by Phil Shapiro

COMPUTER USER groups serve both private and public functions. Their private function is to serve the needs of their members. Their public function is to do what they can to serve the needs of the general public.

In most user groups, the private purpose of the group far outshadows the public purpose of the group. This is only to be expected, as it would not be fair to the paying members of user groups to devote a lot of attention (and financial resources) to assisting the public in general.

Yet a tension exists. About the only way for user groups to increase their membership numbers is to devote time and money to helping those in the general community. User groups, by definition, don't have advertising budgets. So prac-

tically the only way they can maintain a public profile is to allocate part of their limited resources to helping the public in general.

The interesting phenomenon to note is that while computer ownership continues to climb at ever-increasing rates, user group membership numbers tend to stay relatively flat. Why is this so? Is it that user groups are not serving their function? Far from it. User groups, by and large, perform extremely well given the fixed financial resources in their operating budgets. In my view, user groups are the bedrock of the entire microcomputer industry. Without them, software and hardware companies would have to spend billions of dollars more in technical support services. Not millions of dollars more: billions of dollars more.

Any way you measure it, user groups are hugely successful at the work they do. Why is it, then, that membership numbers in user groups tend to remain flat?

Here is my view on the subject. Membership numbers tend to remain flat because a lot of newcomers to computers don't find their needs being met by user groups. A lot of novice computer users choose to not renew their membership because they don't feel that user groups are giving them what they need.

This is the fundamental paradox of user group existence. For user groups to grow, the needs of computer novices need to be given a lot of attention. But if a lot of attention (in time and financial resources) is devoted to novices, this reduces the quantity and quality of services given to the more experienced computer users in the group.

User group supporters universally agree that newcomers to computers deserve greater attention and assistance than people who are more experienced with computers. But providing that extra attention and assistance is far beyond what can be achieved by the goodwill of a few

“User groups, by and large, perform extremely well given the fixed financial resources in their operating budgets. In my view, user groups are the bedrock of the entire microcomputer industry.”

user group volunteers.

Anyone who has been involved as a user group volunteer can attest to the fact that the patience of user group volunteers can get frayed at times. The most patient and kind volunteers can have their patience tested by the quantity of the needs out there.

What is missing in this equation is the recognition by society that user groups are performing a vital function. If we are to move forward into the exciting possibilities of this technological age we need to find ways of bringing external financial



support into the operations of user groups.

Where might such support come from? Several sources come to mind. Foundations are one source. Local, state, and federal government is another source. And the media is a

“What is missing in this equation is the recognition by society that user groups are performing a vital function.”

third source.

Each one of these entities could play an important role in supporting the work of user groups. If all three of these entities supported user groups, the resulting benefits to society as a whole could be incalculable.

Foundation Support

Philanthropic foundations are in the business of supporting initiatives in which people help others to help themselves. It makes plain sense for philanthropic foundations to support the work being done by user groups.

Supplemental funding for user groups can help them support the existing work they are doing and allow them to provide new and better services for their local communities. Foundation funding could work wonders in helping to unleash the energies of dedicated, caring user group volunteers.

Governmental Support

Governmental support of user groups sounds far-fetched at first.

But the government is already engaged in several initiatives to increase the knowledge and technological expertise of the general public. Governmental support of user groups is entirely within the realm of possibility.

What existing initiatives is the government involved in to expand the general public's skill in using technology?

National Telecommunications Infrastructure Administration (NTIA)

NTIA is a newly-created office in the U.S. Department of Commerce. Its mission is to support grassroots community, business, and medical initiatives that help develop the National Information Infrastructure (NII).

In 1995, NTIA awarded \$26 million in grants. While this is a small sum to be distributed to initiatives nationwide, it does signal a stronger interest by the Federal government in the benefits of developing the non-technological, human side of the National Information Infrastructure.

CTCNet support from National Science Foundation

In October of 1995, the National Science Foundation awarded the Community Technology Centers' Network (CTCNet) a \$2 million, five year grant to help further support the building of free-to-use and almost-free-to-use community technology centers around the country. Currently CTCNet has over 60 affiliates, and is rapidly adding new affiliates with each passing month. The mission of CTCNet is to help bring technology tools (and knowledge of how to those tools) into the hands of people who might otherwise be unable to afford them.

Media Support

The media can help support user

Federal Financing of Education

The United States government spends approximately \$70 billion per year on kindergarten through 12th grade education. While school and other education expenditures are indeed important, consider the idea expressed in the following table.

Federal Support of Schools

| | |
|-------|---------------|
| 1991 | \$70 billion |
| 1992 | \$70 billion |
| 1993 | \$70 billion |
| 1994 | \$70 billion |
| 1995 | \$70 billion |
| ----- | ----- |
| Total | \$350 billion |

Federal Support of User Groups

| | |
|-------|-------|
| 1991 | \$0 |
| 1992 | \$0 |
| 1993 | \$0 |
| 1994 | \$0 |
| 1995 | \$0 |
| ----- | ----- |
| Total | 0 |

Do computer user groups merit \$350 billion less support than schools? Do user groups not perform a public education function? If so, what public moneys do they deserve to receive?

groups in several ways. One way is to simply give greater media coverage of the goings-on in user groups. People who are not members of user groups have little idea of how user groups function and of the services they offer. The press could help change this.

Another way the press could help support user groups is to give them free or low-cost publicity space. User groups are not in the business

Another Analogy—Volunteer Fire Departments

In some respects user groups are like volunteer fire departments. Both entities are composed of individuals who place a high value on "shared assistance in times of need." Some might say that both types of organizations excel at "putting out fires." Both survive on the feelings of camaraderie that members have, knowing that in times of need there will be someone to turn to.

Both user groups and volunteer fire departments are very good at fire suppression, emergency medical assistance (to ailing CPU's), and the mitigation of other natural disasters (resulting from not performing regular backups).

Likewise, user groups and volunteer fire departments protect life and property from harm by continuous education efforts. Both stress the need for advance planning of escape (key) routes, and for making vital life decisions armed with the most complete information available at that time.

(This insightful analogy was suggested by WAP Journal editor Jed Duvall.)

Organizations Mentioned in the Article:

Community Technology Centers' Network

(CTCNet)
Education Development Center
55 Chapel St.
Newton, MA 02158
(617) 969-7101, ext. 2727
ctcnet@ctcnet.org

Washington Apple Pi

12022 Parklawn Dr.
Rockville, MD 20852
(301) 984-0300
(Office hours: Mon., Wed., Fri. 10 AM to 6 PM.
Tuesday evenings, 7 PM to 9 PM.
Saturdays, 10 AM to 2 PM.)
<http://www.wap.org>
info@tcs.wap.org

National Telecommunications Infrastructure Administration (NTIA)

U.S. Department of Commerce
14th & Constitution Ave., N.W.
Washington, DC 20230
Phone: (202) 482-0516
nii@ntia.doc.gov
<http://www.ntia.doc.gov>

Also, very interesting work is taking place by the Benton Foundation, whose web page can be found at <http://www.benton.org/>

For those persons without web access, Benton Foundation essays and other publications can be retrieved via their automated email "info-bot". To get instructions on how to use this info-bot, send an email message to: infobenton@cdinet.com with "info" in the message. You can also use the Benton Foundation fax-on-demand services (1-800-254-1671).

Finally, the U.S. Dept. of Education has a very nicely done web page. However hard you look, though, you will find no mention of computer user groups on this page. Before the end of 1996 that will change. <http://www.ed.gov/>

of making money, so it would be a responsible and beneficial thing to do to charge them lower advertising rates. (Or offer user groups free public service announcements (PSA's)).

Conclusion

The sharing spirit that lies at the core of the user group experience is in some ways a model of human interaction. In user groups people help one another for no other reason than the fact that it seems like the right thing to do. Another way of saying this is? If the Amish used technology, they'd feel right at home at any user group gathering.

In user groups people pull together to help one another, instinctively appreciating the fact that the progress of the whole depends entirely upon the progress of the parts. People who are new to user groups are often surprised when user group veterans go out of their way to be of help. This should come as no surprise. This is how things should be, both inside and outside of user groups.

User groups speak to the best of who we are as human beings. With greater external financial support, the sharing ethic that comes forth from within user groups could emanate from user groups, as well. This would be a good thing for all of us. ■

The author has been an active volunteer in the Washington Apple Pi user group for the past ten years. Along with teaching introductory computer classes for the club he has written about a hundred articles for the club's newsletter, the Washington Apple Pi Journal.

He currently works as an educational technology consultant and freelance writer.

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Personal home page at <http://www.his.com/~pshapiro/>



Movie Cleaner Pro: Essential QuickTime Tool

Compression Program from Terran Interactive Simplifies Creating Movies with High Quality, Small File Size, and Smooth Playback

by Dennis R. Dimick

PERHAPS YOU'VE been trying your hand at making some QuickTime movies. Maybe you got an editing program like Avid VideoShop in the box with a recently acquired PowerMac, or you've been using Apple's own Movie Player to assemble pictures, graphics, and some music from a compact disk.

Ah, but your movies don't play back so well. They seem jerky, especially when you give them to a friend with an older, slower Mac, or a colleague who has a Windows machine with QuickTime installed.

Or, maybe you're planning to put some downloadable movies on your personal Web page, and you want to make sure they are the smallest file size possible and play back smoothly on 68030 Macs or 80386 Intel computers.

What you need is Movie Cleaner Pro, a recently released QuickTime compression program from Terran Interactive of San Jose, CA. You could call Movie Cleaner a QuickTime movie "optimizer."

Movie Cleaner Pro will rebuild existing movies that don't play smoothly or take too much disk space. It does this by redesigning internal structures and recompressing movies so they play back smoothly on even the slowest of QuickTime-capable computers, and those with single-speed CD-

ROM drives.

Compression: QuickTime Holy Grail

At the heart of QuickTime lies data compression—the various "codecs" or "compressor-decompressors" that come built into this system extension. Cinepak, Video, Photo-JPEG, Graphics, Animation, and Component (YUV) are the main software codecs used to make movies with different content or end uses. Typically the popular Cinepak and sometimes Intel's Indeo codec are used to compress movies for CD-ROM and online use.

Source: girls.mov.11.05.video.5.key1

Movie: duration 1m21s, 128.8 M total, 1.6 Mps avg.

| | |
|---------------------|-----------------------|
| Video: | Audio: |
| 320x240 pixels | 16 bit stereo samples |
| 30.0 frames per sec | 44.100 kHz |
| Video | No compression |
| 1.4 M per sec | 172.3 K per sec |

At the Source: When you open a movie into Cleaner Pro, you will first see this window. All the details of movie screen size, frame rate, file size and codec of source movie appear here, along with a movie controller bar.



Three goals of QuickTime compression are to make movies with highest quality, smallest space on disk, and smoothest playback. All three goals aren't easily achieved simultaneously, and success often results from extensive trial-and-error, great patience, and a bit of luck. Movie Cleaner Pro does a great job of meeting and balancing these challenges.

Seeking Smooth Playback: The Tricky Part

In technical terms, smooth playback means flattening the data rate. Every movie has a data rate, and it's easy to figure a movie's average rate by dividing file size by length of the movie in seconds.

A movie designed to run smoothly on a double-speed CD-ROM should have an average rate of about no higher than 220kb/second. If you have a ten-second movie with file size 2.2 megs, the average data rate will be 220kb/second (in this hypothetical example.) That's fine if the data rate always stays below 220kb/second, but dropped frames and jerky playback result when you get what's called "data spikes" in an otherwise average data rate.

Data spikes come from any number of things, mostly transitions between movie scenes, frequency of key frames (special reference frames in a movie,) changes in content or scene type, changes in audio, any number of things. CD-ROM drives and slow hard drives can't cope with rapid changes in data rate, and jerky playback results.

From MovieShop to Movie Cleaner

How to smooth the data rate? This is where a program like Movie Cleaner Pro shines. For years MovieShop, an unsupported program by George Cossey of Apple Computer, was the main tool for

Output: girls.mov.11.05.video.5.k•Work

before
after

1m26s elapsed
20m49s remain

Output movie: 869.0 K written, approx. 12.7 M remain
 Processed 5s of source, approx. 1m16s remain

▼ Avg. total data rate: 167.1 K per sec (587.5 M per hr)
 Video data rate avg.: 142.3 K per sec (500.2 M per hr)
 Audio data rate: 21.5 K per sec
 Current video frame= 7.5 K

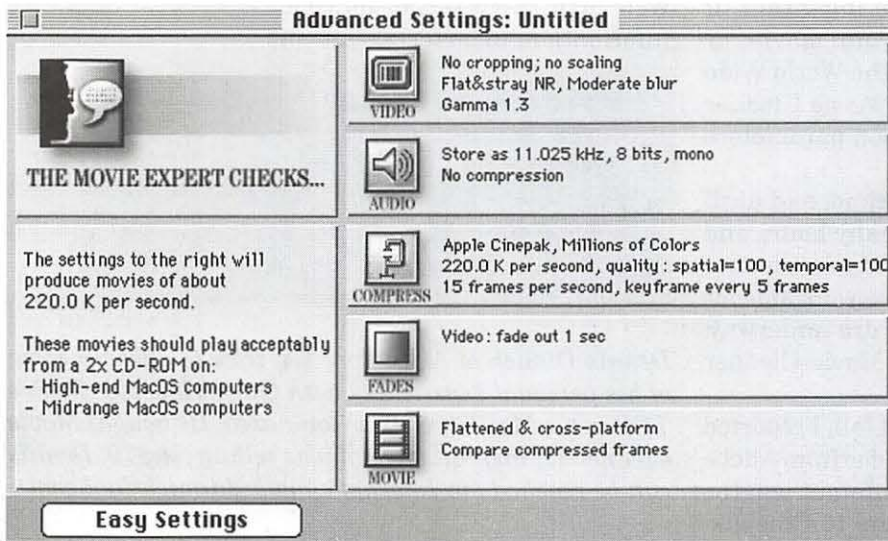
▼ Compressing 1 min at this rate will take 16m41s
 Compressing one frame takes 1.10s:

| | | |
|--------------|-------|---------------------------------|
| Read/Decomp. | 0.06s | <div style="width: 6%;"></div> |
| Filter | 0.09s | <div style="width: 9%;"></div> |
| Compress | 0.84s | <div style="width: 84%;"></div> |
| Write | 0.01s | <div style="width: 1%;"></div> |
| Audio | 0.03s | <div style="width: 3%;"></div> |
| Display | 0.06s | <div style="width: 6%;"></div> |
| Other | 0.00s | <div style="width: 0%;"></div> |

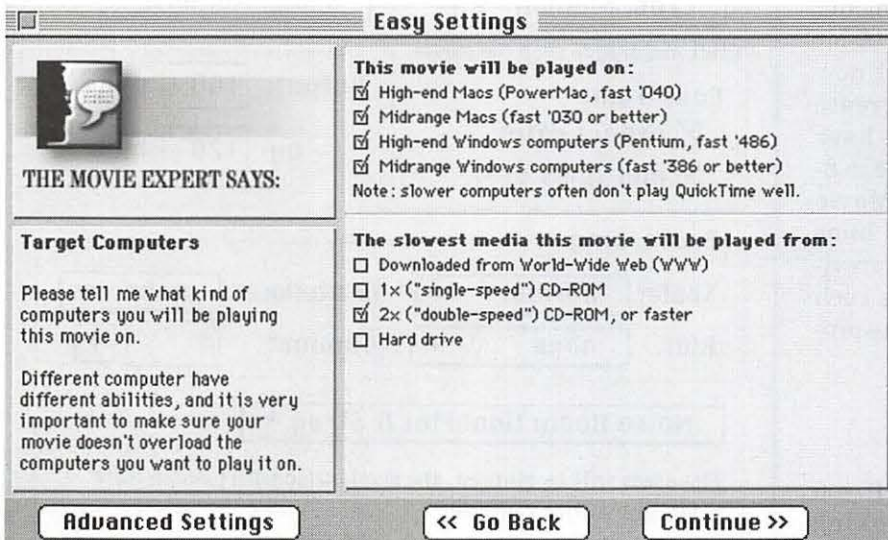
Compression in Detail: Movie Cleaner Pro provides a detailed screen about the progress of a movie compression, how long it will take, and how long each frame takes to compress. One interesting feature is a slider along the lower side of the movie window that compares image quality of the final compression to source movie.

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Advanced Options: *Movie Cleaner Pro* offers a highly customizable set of options for configuring your own movie parameters. This advanced set of options works hand-in-hand with an easy interview procedure for those of us seeking assistance in selecting movie compression options.



Easy Does It: *Movie Cleaner Pro* offer a series of five interview screens such as this one showing destination computer types and speeds. After you complete the interview, *Cleaner Pro* will suggest a set of compression options for your QuickTime movies.

meeting this challenge. *MovieShop*, like *Cleaner Pro*, creates Cinepak movies with constant data rates that play smoothly from CD-ROMs or slow Macs.

But *MovieShop* is showing its age: Apple doesn't support it and hasn't updated it for a couple of

years. *MovieShop* has a tendency to crash at inopportune times (usually just before finishing a long movie compression,) and *MovieShop* can't make movies with 16-bit audio.

To the rescue came *Terran Interactive*, which originally produced *Movie Cleaner Pro* as a *MovieShop*

replacement for internal use on their own Cinepak projects. Lucky for us, *Terran* released the program. Simply put, *Movie Cleaner* compresses the cleanest, smoothest playing QuickTime Cinepak movies I've seen.

Editing: From Content to Cinepak

When making movies, one needs to create content first, then assemble video, audio, pictures, graphics and animations into a movie. You can do this with one of many editing programs around. Examples include *Adobe Premiere*, *Radius Edit* and *VideoFusion*, and (formerly *Avid*, now *Strata*) *VideoShop*. They all allow you to make a QuickTime Cinepak movie, so why should we need *Cleaner Pro*?

Any QuickTime editing program lets you limit "data rate" when creating Cinepak movies, since this is a feature of QuickTime itself. In reality, if you later measure actual rates using *MovieShop* or Apple's *Movie Analyzer* utility, you may see great upward variation from the limit.

No editing program (other than *Adobe's* recently released *Premiere 4.2 CD-ROM Movie Maker Plug-In*.) allows you to "tweak" appearance of video or to apply special compression to audio to get best looking and sounding movies in a "low data rate" environment like CD-ROM playback.

What's Special About *Movie Cleaner*?

It's easy to configure and use, you can set up to 2,000 movies for automatic batch compression, the program is very stable, technical support is responsive, and the program is being constantly upgraded and improved.

Movie Cleaner offers an interview process to help create optimal movies. For example, you will be asked whether you want the movie to play on both Macs and Windows,



whether audio or video quality is more important, if you have lots of pans and zooms in your movie, or whether you plan to post your movie on the World Wide Web. Once you complete the interview, Movie Cleaner will suggest a combination of compression parameters that you can override if you wish.

Movie compression can take a long time, and until now you could lock up a computer for many hours and days making just one Cinepak movie. Movie Cleaner offers an interrupt option, so you can use your Mac for other tasks while compression projects are underway. When you complete your other tasks, Movie Cleaner resumes its work.

Shortly after version 1.1 shipped last fall, I reported a problem with movies in Component codec from Adobe Premiere that had video and audio at different lengths after using Movie Cleaner to recompress to Cinepak. In a day or so, in my electronic mail box appeared a bug fix version 1.1.1 that solved the problem.

In the spring of 1996, Terran further upgraded the program to 1.2 to add additional features for optimizing video quality and taking advantage of the Interactive Multimedia Association's IMA 4:1 compression for 16-bit audio. For audio buffs, this means that now under Sound Manager 3.2, you can create movies with 16-bit 44.1KHz audio that have the same file size as previously available in 8-bit 22KHz audio. For video buffs, Movie Cleaner now offers a variety of special blurring, deinterlacing, and gamma tools previously available only by using programs such as After Effects, an expensive QuickTime production program from Adobe.

Simple Solution to a Compressing Problem

Anyway, enough of the hyperbole. If you need a program to create great looking Cinepak (or Indeo) QuickTime movies that play smoothly on just about any destination platform you require, Terran Interactive's Movie Cleaner Pro is what you need.

If you want to give the program a test drive, Terran has been offering a 680x0 non-batch version of Movie Cleaner on their Web site. Other than being non-PowerMac native, and unable to batch-compress, this \$15 shareware version is fully capable of producing beautiful Cinepak movies. Give it a try and see, and hear, what you think.

Web: <http://www.terran-int.com/>
Information: info@terran-int.com

Movie Cleaner Pro 1.2
Terran Interactive Inc.
2 North First Street, Suite 215
San Jose, CA 95113
Phone (800) 577-3443
Current street price (5/96) approx. \$190

Dennis Dimick of Arlington, VA, tries to offer up some of his personal experiences with QuickTime via the Pi's TCS in the Mac QuickTime topic area. He bought Movie Cleaner 1.1 last fall when it was selling for \$79. Dennis can be reached via Internet e-mail: ddimick@aol.com

Video:

Crop: Manual (dropdown) **Scale: Numeric** (dropdown)

Click and drag to crop the movie.

Constrain: **Output:** wide
 aspect ratio by high
 multiples of 4

Processing

Scale: (dropdown) **Deinterlace:** (dropdown)
Blur: (dropdown) **Gamma:** (dropdown)

Noise Reduction: Flat & Stray (dropdown)

Flat areas will be blurred, and pixels which don't match their neighbors will be removed.

'Talking Heads' Mask **High-quality frames**

 first last

Video Options: This window shows options available in Movie Cleaner Pro 1.2 for customizing video qualities during a movie compression. You reach this window from the advanced options selection window when selecting compression parameters.



Brushin' Up My Russian

a review of the Rosetta Stone Language Library, (Russian level 1A)

by Jennifer Elsea

I WON'T SAY how long ago I took my two semesters of college Russian, but to give you an idea, well, my 128k Macintosh was state-of-the-art. Back in those days, we didn't have any of the really cool language tutor applications available today. We had to trudge a mile uphill through deep snow to get to the university's language lab to practice listening to Russian. We heard scratchy cassette tapes and tried to follow along in the booklet, rewinding and fast-forwarding endlessly as we tried to coax the tape player to repeat what we had missed. It was brutal.

Today's language students have it easy. All you need is a Macintosh (preferably with a CD-ROM drive) and the right software, and it's as if you have your own personal language tutor willing to work day and night for as long as you want. College kids today should be required to learn at least five new languages, if you want my opinion.

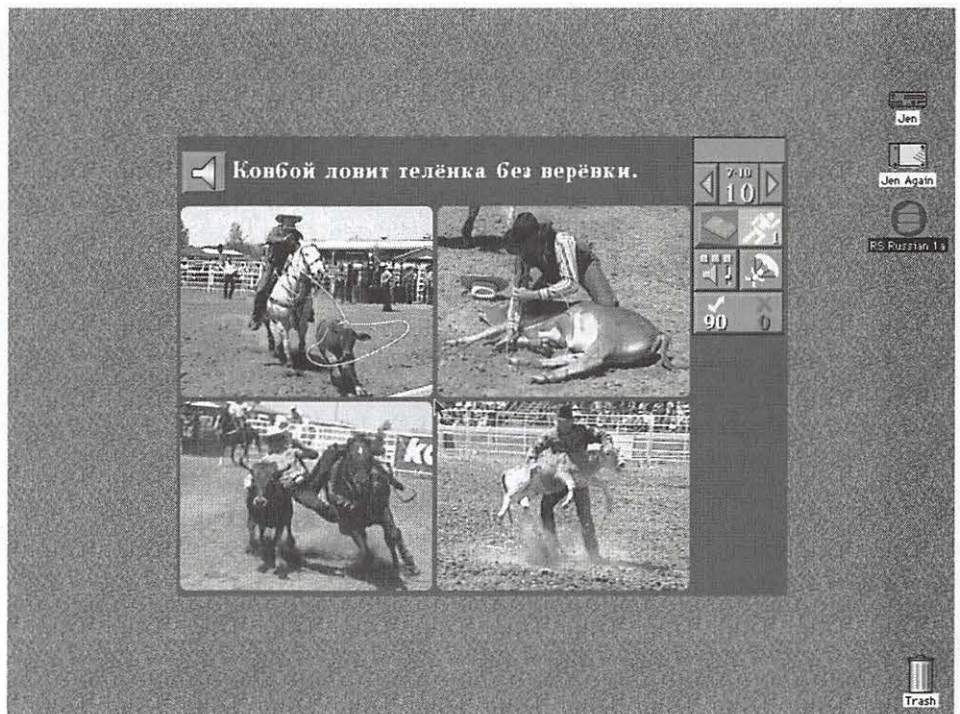
In order to brush up on my Russian, I have been using the wonderful Rosetta Stone Language library by Fairfield Language Technologies (also available in Spanish, French, German, and English as a second language. Also available is a \$99 sampler CD containing the first two units of each language.) The

neat thing about this CD is that it teaches in only one language, that is, the one you are trying to learn. You get used to associating Russian words and sentences with pictures, rather than trying to translate to and from English. This is a much more natural way to learn, it seems to me. After all, that's how you learned your native language, right? You develop a "feel" for the language, rather than learning to apply memorized rules and their many exceptions (which make absolutely no

sense in **any** foreign language). You learn to think in Russian (that's the theory, anyway. I haven't had many thoughts in Russian yet; my brain trips up over all the consonants just like my tongue does. This is a language where saying "hello" involves at least seven consonants.)

Anyone who has studied languages realizes the key to learning a foreign language is repetition, repetition, and more repetition. The Rosetta Stone lets the user choose various styles of drills to go over the material as much as he or she needs in order to learn it thoroughly; some drills use sound and pictures, some use written words and sounds and/or pictures, or you can get a mix of different drills. Beginners can start out without any knowledge of the Russian alphabet, and then go back to learn to read and spell later using those same drills.

This is how it works: The student sees a photo and listens to a description in Russian. The photos are presented in a logical order so





it's fairly easy to understand the meaning and figure out what grammatical rule it is trying to convey. Then the student hears a phrase and clicks on one of four pictures. If the answer is correct, the student is rewarded with a triumphant sound and a gold check mark. If not, it buzzes and gives the student another chance. It keeps track of scores and returns to sections where the student has difficulties. The same concepts are drilled using various methods, for example, showing a picture first and having the student choose between sounds. When it wants to be especially tricky, it hides the questions and answers alternately to force the student to rely on memory.

If you have a sound input device, you can practice pronunciation by comparing your voice to that of the native speaker. It doesn't analyze your voice or show a wave comparison as some other programs advertise, but I wonder how much help that would be in practice (particularly for young children. Comparing wave forms doesn't strike me as a natural method for learning pronunciation, but then I haven't tried it.)

The user interface is very simple and intuitive, although not quite Mac-like. My niece (age 8) picked up on it immediately and enjoyed the program a lot, despite her avowed reluctance toward learning Russian. I don't like the way the application makes the menu bar disappear (although standard command-key functions work as usual), and you can't move or resize the window, either. This makes it hard to use Key Caps or a similar accessory to help figure out how to type Cyrillic. They don't provide you with the font they use, either, which is mapped out like an actual Russian keyboard and does not correspond phonetically to the QWERTY layout (like many other Cyrillic fonts available.) Since the application doesn't provide any

on-line keyboard help, users are forced to rely on the instruction booklet (I scanned mine to make a quick reference chart). This either forces students to learn to type on a real Russian-style keyboard or it dissuades them from learning to spell at all, which is a difficult enough task without any unnecessary burdens!

The Rosetta Stone doesn't provide any insight about the people who speak Russian or the countries where they speak it. In fact, the same multi-ethnic photos are used for all of the different languages in the Rosetta Stone series. This is a plus in a way, since many language courses emphasize cultural differences and tourist phrases at the expense of every day communication skills. The Rosetta Stone teaches the basics a la Sesame Street, which is plenty challenging, trust me. The words in Russian for 'rectangle' and 'triangle' are BIG words. Some attention to culture, however, is necessary in any language course.

For the price (\$400), I really think the CD could include more material. A drill to learn the Cyrillic alphabet would very beneficial. Perhaps they could add a mini-pictorial dictionary of some sort to help the student who forgets vocabulary or can't figure out from the picture what the sentence is really saying. Also, the sequence could stand to be varied a bit. The drills are arranged into groups of four phrase-picture pairs which are always drilled together, in order. It is quite possible to learn to distinguish between phrases (by the difference of one or two words or even the length of the phrase, for example) without necessarily understanding what the sentence means.

I am skeptical that beginners can figure out the grammar without any outside help. Children probably have an advantage in this respect

over adults, since grown-ups tend to try to relate new languages to the language structure we know. This leads to mistakes which make your nationality immediately identifiable to native speakers. Verb tenses and noun cases are particularly tricky for Yankees learning Russian. Word endings seem random. And they put some consonants next to each other that should never be allowed in the same mouthful!

The Rosetta Stone is probably best used as a very effective and fun addition to a more comprehensive language course. I found it to be a great review of what I learned in college and excellent training for my ear. I am now better able to understand the Russian I listen to on my short-wave radio; I can even identify which numbers are being spoken, which is a major breakthrough. The important thing is I am learning to understand what is being said without translating it into English first. Those native speakers talk **much** too fast to allow for any of that. ■

System Requirements: Color Macintosh (8-bit minimum), hard disk drive, CD-ROM drive, 2MB RAM for System 6.x, 4MB RAM for System 7.x, sound input device.

The Rosetta Stone Language Library

Fairfield Language Technologies
122 South Main Street-Suite 400
Harrisonburg, VA 22801

<http://www.trstone.com/>

Apple II/III

Apple II

General

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

—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

—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

Hard Disks

—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

—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

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

—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*

David Wood ((301) 827-8805

—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

—Multiscribe GS

Ray Settle (301) 647-9192

Telecommunications (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

—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

July 1996

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| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------|--------|----------------------------------------------------|
| | 1 | 2 <i>Intro to Mac Publishing</i> | 3 <i>Mac Programmers' SIG</i> | 4 <i>Columbia Slice Game SIG</i> | 5 | 6 |
| 7 | 8 <i>Intro to the Mac-Part 1</i> | 9 <i>Intro to ClarisWorks-DB Intro to ClarisWorks QuickTime SIG</i> | 10 <i>Web Authoring Intermed ClarisWorks DB SIG WAP BoD</i> | 11 <i>Intro-FileMaker Pro Stock SIG</i> | 12 | 13 <i>Intro to the Internet</i> |
| 14 | 15 <i>Intro to the Mac-Part 2</i> | 16 <i>Intro to Excel Intermed ClarisWorks</i> | 17 <i>Intro to Illustrator Illustrator-Special Intro to ClarisWorks Excel SIG</i> | 18 <i>Intermed ClarisWorks PI SIG</i> | 19 | 20 <i>WAP General Meeting</i> |
| 21 | 22 <i>Intro to the Mac-Part 3</i> | 23 <i>Intro-FileMaker Pro Explorer - Part 1</i> | 24 <i>Intro to Excel Photoshop Intro Photoshop-FX Intermed ClarisWorks Retired SIG</i> | 25 <i>Intro to ClarisWorks Women's SIG</i> | 26 | 27 <i>Intro to ClarisWorks Intro to the TCS</i> |
| 28 | 29 | 30 <i>Explorer-Part 2 Intermed ClarisWorks</i> | 31 <i>Intro-FileMaker Pro</i> | | | |

August 1996

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

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------------------------------------|-------------------------------------|-------------------------------------------------------|----------------------------------------------------|--------|-----------------------------------|
| | | | | 1 <i>Intro to Excel Game SIG Columbia Slice</i> | 2 | 3 |
| 4 | 5 | 6 <i>Intro to Mac Publishing</i> | 7 <i>Intro to ClarisWorks Mac Programmers' SIG</i> | 8 <i>Intro to ClarisWorks Stock SIG</i> | 9 | 10 |
| 11 | 12 <i>Intro to the Mac-Part 1</i> | 13 <i>QuickTime SIG</i> | 14 <i>DB SIG WAP BoD</i> | 15 <i>PI SIG</i> | 16 | 17 <i>Intro to the TCS</i> |
| 18 | 19 <i>Intro to the Mac-Part 2</i> | 20 <i>Intro-FileMaker Pro</i> | 21 <i>Excel SIG Intro to Excel</i> | 22 <i>Intro to ClarisWorks</i> | 23 | 24 <i>WAP General Meeting</i> |
| 25 | 26 <i>Intro to the Mac-Part 3</i> | 27 | 28 <i>Retired SIG Maintaining Your Mac</i> | 29 | 30 | 31 <i>Intro to ClarisWorks</i> |

Please see page 3 for deadlines for Journal submissions.

Meeting Notices

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

Annapolis Slice

3rd Saturday; 9:30 AM; Severna Park Library on McKinsey Rd. (off Rt. 2), Severna Park, MD
Answering Machine: (410) 647-5605
CrabApple BBS: (410) 315-8532

Apple III SIG

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

Columbia Slice

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

DataBases (Mac) SIG

Volunteers needed to restart this SIG

Excel SIG

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

Frederick Slice

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

Game SIG

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

Mac Programmers' SIG

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

Newton Developers' SIG

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

NoVa Education (Ed) SIG

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

Programmer's Interface (PI) SIG

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

QuickTime SIG

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

Retired SIG

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

Stock SIG

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

Telecomm SIG

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

WAP Garage Sale

June and December

WAP General Meeting

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

Women's SIG

Upcoming dates are: , July 25, Sept. 26. At the Pi Office at 6:00 PM dinner (\$2) followed by 7:00 PM meeting/presentation. Call SIG chair, Tayloe Ross (202) 293-7444 for details.

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

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

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
—FoxPro
 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

Graphics

—General
 Bill Baldrige (301) 779-8271
 Jay Rohr (301) 655-0875
—Adobe Illustrator
 Ling Wong (703) 803-9109
—Aldus FreeHand
 Nancy Seferian (202) 333-0126
—Canvas
 Bill Baldrige (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 Cavanaugh (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

—Ile 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

—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 Apples

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.

| | | | |
|------------------------------------|-------------|-------------------------------------------|--------|
| 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 |
| Ken Carter 834-6515 | A2, GS | | |

Annapolis Slice Help Line

Area Code 410. Call in the PM before 10 PM (except Seth Mize).

Mac

| | | | |
|------------------------------------------|-----------------------|------------------------------------------|--------------------|
| Richard MacLean (Annapolis) 280-8756 | MacIIsi | Gini Waters (Crownsville) 923-0139 | Mac+, DTP |
| Steve Toth (Edgewater) 956-6557 | Mac+ | Bill Derouin (Severna Park) 647-0802 | Centris 650, DTP |
| Bob Peterson (Crofton) 721-9151 | MacSE | Bill Waring (Severna Park) 647-5605 | Mac, CD-ROM |
| Helen Hamerstrom (Severna Park) 647-1720 | Mac, HS | Will DeKrone (Annapolis) 626-7716 | Internet |
| Lou Spienza (Crownsville) 573-7140 | Mac IIsi, Canvas, DTP | | |
| Barry Conner (Annapolis) 573-7140 | Mac Telcomm | Seth Mize (Glen Burnie) 766-1154 | IIGS, II+, III, PC |
| Brian Bassindale (Arnold) 757-9541 | Mac IIsi, CAD | Helen Hamerstrom (Severna Park) 647-1720 | IIGS, DTP, HS |

Telecommunications Help Sheet

A quick reference sheet for use while on the TCS

TCS Phone Numbers:

—301-984-4066

(for 300, 1200, 2400 bps)

—301-984-4070

(for 9600, 14400, 28800 bps)

Main Menu

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

File Transfer Menu

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

File Area Menu

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

Editor Menu

<A> Add to File

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

Change Conference Menu

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

Conference Menu

<A> Adjust Pointers
<C> Change Conference
<G> Global Read All New Msgs

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

Bulletin Board Menu

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

User Preferences

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

Electronic Mail Menu

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

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

Macintosh Tutorials

VOLUNTEERS AND INSTRUCTORS—You can't have training without teachers. If you have expertise in any subject useful to Mac or Apple users, please consider teaching. Instructors have an opportunity to work with students in small groups and informal settings. The teaching process is truly rewarding. Besides the spiritual and intellectual, rewards also include compensation; you will be paid. We especially need someone who can offer training on the Internet. Call me if there is a subject that you are qualified to teach.

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

Macintosh Tutorials

The Macintosh 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 I (Course #M070896 for July) (Course #M081296 for August) (Course #M090996 for September)

You should go through the Guided Tour disk that comes with your computer or system upgrade kit before you come to class. You'll learn: how to safely turn your

Macintosh on and off; what the basic dos and don'ts are; how to understand common Macintosh terminology found in manuals and other documentation; and how the basic components of your Macintosh system, hardware and software work. You'll also learn why the Macintosh user interface is consistent across all applications and how this makes learning and using software easier.

Materials required: Your Macintosh, HD drive, start-up disk, and an unformatted DSDD 800k disk.

Date: July 8, Aug. 12 or Sept. 9 from 7-10 pm.

Introduction to the Macintosh, Part II (Course #M071596 for July) (Course #M081996 for August) (Course #M091696 for September)

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: May 6, July 15, August 19, or September 16 from 7-10 pm.

Introduction to the Macintosh, Part III (Course #M072296 for July)(Course #M082696 for August)(Course #M092396 for September)

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: July 22, August 26 or September 23 from 7-10 pm.

Maintaining Your Macintosh (Course #M072496 for July) (Course #M082696 for August)(Course #M092596 for September)

How to maintain and troubleshoot your Mac. Topics will in-

course descriptions continued on page 54



Some Specifics

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

■ **When:** unless otherwise stated, all tutorials are three hours in length and begin at 7:00 P.M. on the date listed. The office building is secured at 6:00 P.M..

■ **Fees:** \$35.00 per class for members and \$50 per class for non-members. Pre-registration and payment must be made to hold a seat.

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

■ **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.

July, August and Sept. Tutorials are the 4 basic ones as well as many others!!!

The 3-part class must be taken as a 3-part class.
All 3 parts must be taken in one month.

—Intro to Mac 1 07/08/96 or 08/12/96 or 09/09/96 (M070896) or (M081296) or (M090996)

—Intro to Mac 2 07/15/96 or 08/19/96 or 09/16/96 (M071596) or (M081996) or (M091696)

—Intro to Mac 3 07/22/96 or 08/26/96 or 09/23/96 (M072296) or (M082696) or (M092396)

—Maintaining the Mac 07/24/96 or 8/26/96 or 9/25/96 (M072496) or (M082696) or (M092596)

See following two pages for descriptions of various other tutorials available!!

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.



clude: 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 "house-keeping" philosophies.

Date: July 24 or August 26 or September 25 from 7-10 pm. ■

ClarisWorks Database I: Introduction

Basic principles of using a database to organize information; defining fields; discussion of field types; how to use multiple Layouts; entering data into fields; use of online Help function; and searching for information in the database. The class is appropriate for versions 2, 3, and 4 of ClarisWorks. Bring a Mac-formatted floppy disk. Prerequisite: Introduction to Macintosh, Parts 1, 2, and 3 or a thorough understanding of the Macintosh computer.

Date: Tuesday, July 9, 1996, 1-4 pm.

ClarisWorks Database II: Intermediate

Modifying a database to provide ease of use; improving the appearance of a database by importing graphics; integration with other ClarisWorks environments (for example, the Draw and Word Processing environments); importing information from outside ClarisWorks; recording and using macros; and use of formulas. Bring a Mac-formatted floppy disk. The class is appropriate for versions 2, 3, and 4 of ClarisWorks. Prerequisite: ClarisWorks Database I: Introduction.

Date: Tuesday, July 16, 1996, 1-4 pm.

Introduction to ClarisWorks

This class will introduce the student to the integrated modules of ClarisWorks. The course will begin with an introduction to the fundamentals of the ClarisWorks environment: the window layout, the help menu, and the universal commands. Each of the six modules: Text, Draw, Paint, Spreadsheet, Database, & Communications will be treated separately but the emphasis will be on text and draw documents. The course will conclude with an examination of some basic integrated applications. Students should come with a basic familiarity with the Macintosh environment.

Dates: July 27, or August 24, 9am until noon.

Introduction to ClarisWorks Text

This class will explore the Text module of ClarisWorks. The course will review the text document window, document formatting, and text manipulation. We will then go on to examine some more advanced techniques including: Outlines, Style Sheets, Stationary, Shortcuts, Spell Check, Tables, and Frames. Students should come with a familiarity with the Macintosh environment and a basic knowledge of ClarisWorks.

Dates: July 27 or August 24, 12:30-3:30pm.

Internet Tutorials

There are no materials required for these classes, however you are welcome to bring your computer if you like. Pi members with Explorer level service will be given preference when signing up for Explorer classes. The Internet Basics class is open to all.

Introduction to Internet

A light introduction to the Internet with emphasis on how to use the Netscape Web browser and the Eudora Light e-mailer. (1 part class)

Date: July 13, 1-4pm

Internet

A thorough introduction to the features and services of the Internet. Detailed demonstrations of the major Internet applications for the Macintosh. (2 parts)

Date: July 23, 7-10 pm (part 1 of 2), July 30, 7-10 pm (part 2 of 2)
Call for August dates

HTML Part 1— The basics

Internet; What it is and how it works; What you need to worry about (i.e. bandwidth, standards); What you need from ISP; FTP Tools (Fetch & Anarchic) Documents (Format & Content); Images (Colors on different platforms & How to make smaller—GIF / JPEG / Transparency); HTML (What it is—Tags and Browsers & Endless change—striving to include formatting information and action, HTML Editors, Testing, How to learn from others, Web Sources for more information).

Date: July 10, 1pm - 4pm

HTML Part 2 - Beyond the basics.

Prior to class Student must make and submit 2 example Web pages for Class review.

HTML (document layout, file management issues, Using CGI scripts, Testing, Getting noticed); Using enhanced functions (Sound, Animation GIFS, Movies, other bells and whistles)

Call the office for dates

Illustrator and Photoshop Tunnels and Towers: Perspective Drawing with Adobe Illustrator

Anything in space can be drawn accurately. What was painful to accomplish with a pencil is easy and routine on the computer. Extremely easy. To understand the principles of accurate rendering, this class uses realistic examples of real projects, each of which will clearly describe the why and the how-to of speedy, accurate lay out of a design in 3D space.

Date: July 17th 2-5 PM



Introduction to Adobe Illustrator

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

Date: July 17th 7-10 PM

Social Effects with Adobe Photoshop

Spill the milk and squeeze the toothpaste. Design a chrome or neon sign for your business or club. Make plastic ID card with your own punched up name and address. All this and a few laughs with Apple Pi enthusiasts.

Date: July 24th 2-4 PM

Introduction to Adobe Photoshop

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

Other

Introduction to Mac Publishing

This course is for those persons who are beginning to use the MacOS for publishing. Topics discussed are: (1) fonts and typography; (2) black and white, greyscale, and color image display and printing; (3) different types of computer graphics files and programs; and (4) automation of publishing tasks. The topics covered in this introduction are important to successful publishing but are not usually covered in classes about specific computer programs. Before

taking this course it is recommended that one know the basics of using the MacOS.

Date: July 2 or August 6, 7-10 pm

Introduction to ClarisWorks

This class will introduce the student to the integrated modules of ClarisWorks. The course will begin with an introduction to the fundamentals of the ClarisWorks environment: the window layout, the help menu, and the universal commands. Each of the six modules: Text, Draw, Paint, Spreadsheet, Database & Communications will be treated separately but the emphasis will be on text and draw documents. The course will conclude with an examination of some basic integrated applications. Students should come with a basic familiarity with the Macintosh environment.

Date: July 9 or July 17 or July 25 or August 7 or August 22, all at 10 am to 1 pm

Intermediate ClarisWorks

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

Date: July 10 or July 18 or July 30 or August 8, all at 10 am to 1 pm

Introduction to FileMaker Pro

This course covers the following topics: what FileMaker Pro does, what a database is, database terms, using a database, creating a new database, entering and editing information in a database, finding information in a database, and formatting and printing. Before taking this course it is recommended that one know the basics of using the MacOS.

Learn how to use the TCS!

The first class will be on Saturday, July 27, from 9 a.m. until noon. The next class will be held on Saturday, August 17 from 9 a.m. until noon.

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

Space is limited—call the Pi office for details at (301) 984-0300.

Date: July 11, or July 23, or July 31 or August 20, all at 10 am to 1 pm

Introduction to Microsoft Excel

This course covers the following topics: what Excel is and why use it; spreadsheet organization; moving around in a spreadsheet; entering data into a spreadsheet; formatting, saving and printing, using formulas in Excel; Excel tool bars; and using the online help in Excel. Before taking this course it is recommended that one know the basics of using the MacOS.

Date: July 16 or July 24, or August 1 or August 21, all at 10 am to 1 pm

Introduction to HyperCard

The course covers using HyperCard, stacks, cards, buttons and scripts. There will be samples of each. Also covered will be creating usable stacks in HyperCard and resources for acquiring further knowledge.

Date: Call office for details. ■



The Alchemist

reviewed by Mary Keene

THE BOX IS the first clue this should be a wonderful experience. The artwork, the color, the layout all scream quality, mystery, curiosity. The box feels truly wonderful. It has a substantial, silky and polished feel—a true sensory experience. The packaging people were superb and worth whatever they cost. But can the program deliver the promise of the packaging? As the program opened, I quickly realized this is what it is all about! This is what the Great God of Computing had in mind when he conceived Multimedia. This was actively interactive multimedia computing at a very basic soul level feeding every nook and cranny of one's being—spiritual, mental, physical, psychological and any other you can think of. Words fail to convey the incredible beauty of this program. It is a truly unique work of art and craftsmanship.

Paradoxical irony

Many years ago at the dawn of the computer age, people became concerned and feared that computers would lead to a sterile, fact-oriented world. I am glad to announce that despite the best efforts of many people, the human spirit is still alive. However, the ravages of time have taken their toll and many human spirits are not doing well. Enteractive to the Rescue! Here is a software program that can refresh and renew your flagging spirits. If you're too far gone for that, it will lift your spirits enough to know

something's wrong. The Alchemist helps you find what your spirit and/or body needs and how to get it.

How ironic! The very computer that was supposed to remove individuality and differences from us thereby reducing everything to non-negotiable numbers is now the instrument that will restore our ability to be individual and different without creating a fear of being different thanks to the very creative individuals at Enteractive, Inc. What an incredible gift this program is! What joy, peace and delight were awakened inside me when I opened this treasure box. The art, music and

narration can not be improved on regardless of how much money is spent towards that end.

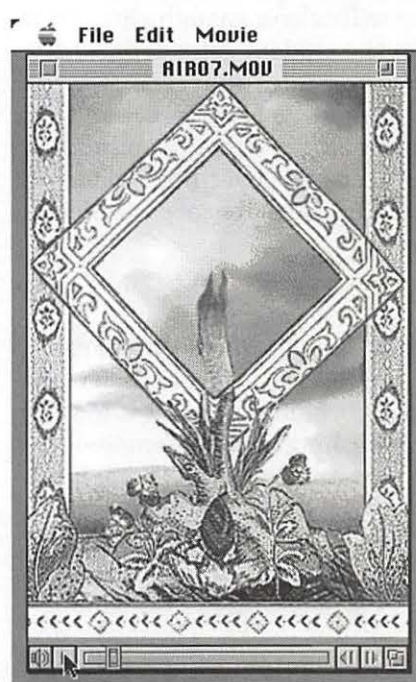
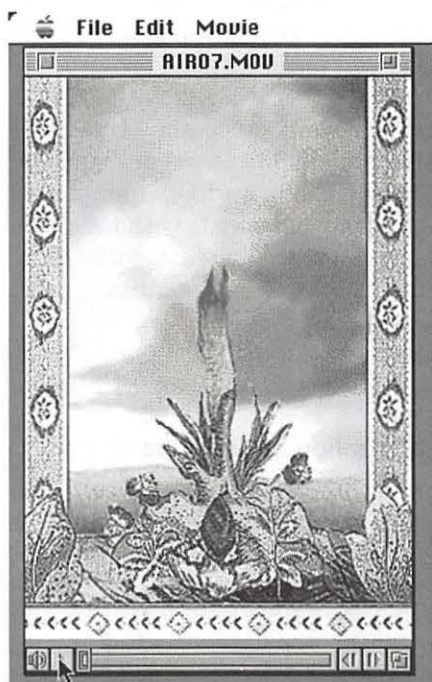
I will pause briefly to take care of some of the mundane housekeeping required in writing a review.

Requirements It has modest hardware requirements and runs on an LCIII or better, uses 4MB of RAM and 5MB of hard disk space, color monitor (must have 256 colors), 2x CD-ROM, System 7.1 or later and a mouse.

Mfg's suggested Price \$49.95 available for both MAC and IBM.

Who shouldn't use it

If you are the kind of person who likes PC's & DOS, who would rather be a bookkeeper than an accountant, who forgets there is a sky to look at, who never revels in the life of ants, birds, squirrels, and nature, read something else. If your bank account balances the first time, if your expense reports account for every single penny and decimal point, if



Four individual freeze-frames taken from one of the 48 QuickTime movies that come with *The Alchemist* (one frame from each quarter of the movie). These illustrate how the artwork evolves in the animation.



you can eat a piece of crumbly cake with a fork and never have a stray crumb in your lap, if cats never shed a single hair while sitting on your lap, stop reading right now. You need this program desperately but you won't benefit from it. If you are the kind of person who has everything together and delights in all the many joys and sorrows of human life, you could probably appreciate this program but I'm not sure if you would benefit from it. Anybody who knows (s)he is a dyed in the wool, true-blue, left-brained person, please turn the page immediately.

Synchronicity

Those who are still reading will be able to experience variable amounts of pleasure from this program. That's right, I said pleasure. This program is based on Carl Jung's concept of "Synchronicity". The Alchemist uses as its teaching medium pleasure, joy, and wonder—the childlike feelings we left behind with innocence and infancy. If you are willing to give yourself completely to the multifaceted and in-

tegrated sensory experiences contained in this program, you will rediscover peace, joy and beauty in your soul on a level that transcends words.

To comply with the need to explain what it is, there are intriguing bits and pieces of words and sentences on the box that describe bits and pieces of the program. But as Lawrence Charters commented when I asked what it was about, "I don't really know what it is. Here, you can read it". What it is, is not something that can be described. It is something that is experienced—the concept of "Process"—the act of evolving; some thing that begins subtle changes within your being allowing you to open the doors you have previously kept locked, the closed doors shackling you to limiting concepts so tightly that you have forgotten how you used to dream and have dreams. For those of you who want to dream again, this program will pave the way for "do-able" dreams. It will also teach you the principles and concept of "Process".

One fundamental ironclad rule

in mental health is that nothing will ever change if nothing ever changes. The beauty of the original artwork and music in this program will take your breath away. It will change, at least for a moment, the way you breathe and that change will be just enough to broaden your horizons regardless of what size they currently are, which triggers "Process".

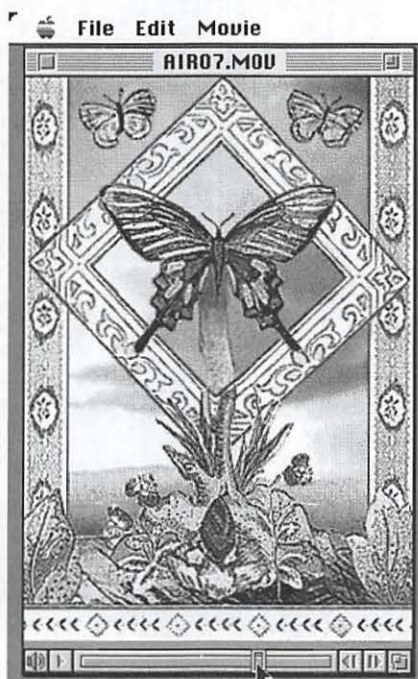
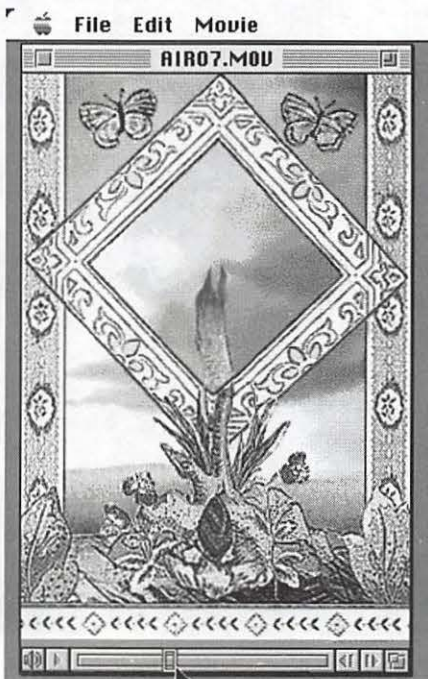
More uses

This program can be used in so many ways. Since it is totally committed to right brain activities, the "grounding ritual" can be used to deliberately change brain activity to be more right-sided. These movies can also be used to take short "brain time-outs" when you are stressed or stuck in a mental rut that is circular. If you have RSI (repetitive stress injury/carpal tunnel syndrome), take a break with the meditative movies at regular intervals refreshing your wrists and your brain while giving your waistline a break.

Since true discipline means teaching a different way that will have a different outcome, Parents can use the movies to graphically time "Time-outs". There is a potential that instead of feeling humiliated, the child will learn how to use negative situations to find positive results. At least there will be no argument about how long the "Time-out" is and the ability to tell when it is over may begin to restore a sense of being in control of one's actions—"Responsibility". If this works, it could progress to helping the child learn to recognize his feelings and taking his own "Time-outs" instead of acting out. (Remember I said The Alchemist restored the ability to dream!)

Great Dessert

There are programs out there that list themselves as "Head Candy", To me, many of the Darkside of the Mac modules can





be divided into “head candy” and “yummy desserts”. Using this metaphor, *The Alchemist* is an example of the most exquisite and decadent combination of Belgian chocolate, macadamia nuts, delicate whipped cream, and raspberries plus it’s non-fattening!

Focal Points

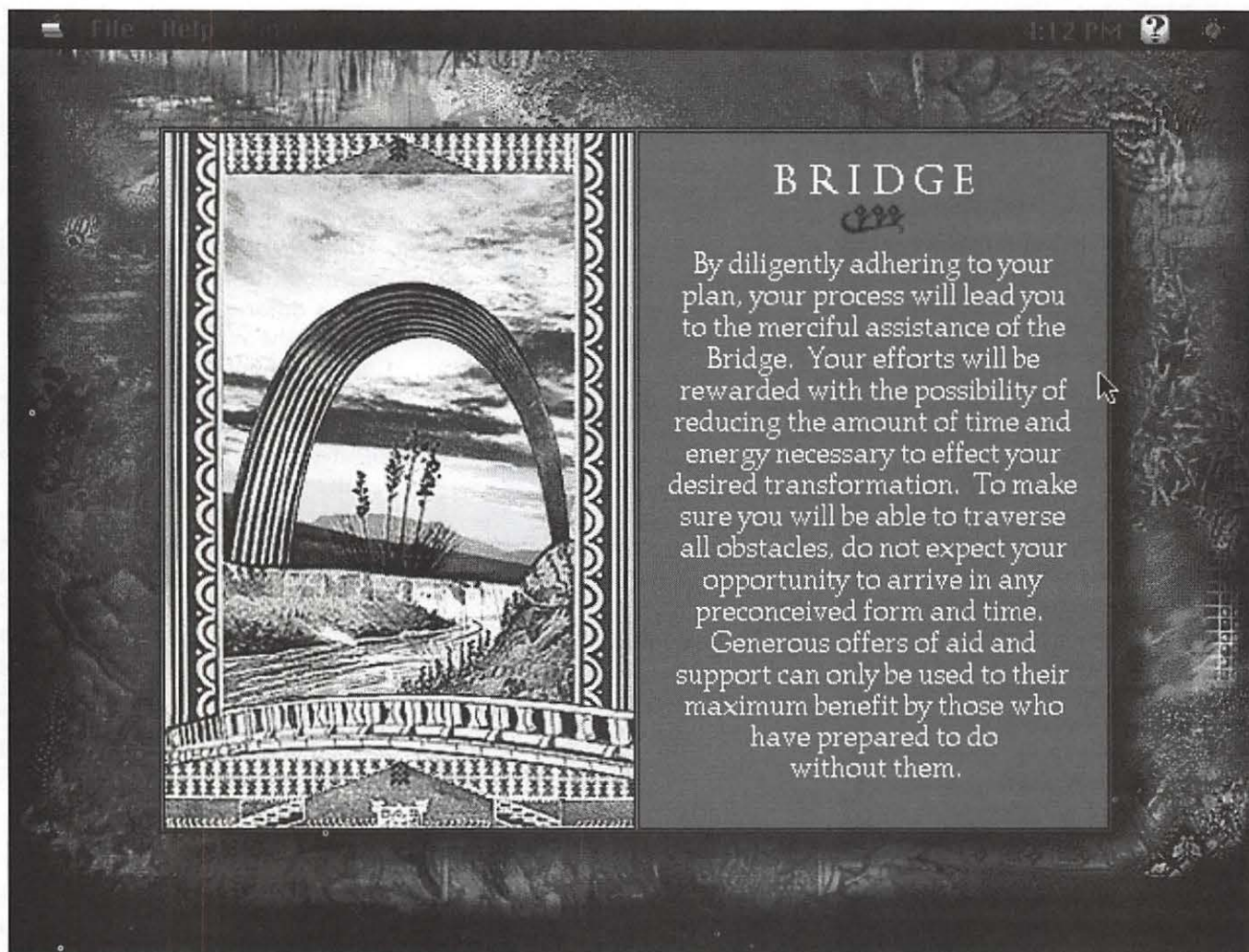
This program can be used to help you focus when you are starting a new project or task and to change your focus when you get stuck. It can become a very personal and intimate conversation with your soul. It’s amazing what happens when you are courageous enough to

identify a painful area and ask your soul how to heal it. Sometimes solutions are very simple. Sometime we ask the wrong questions. Sometimes we don’t hear what is said. *The Alchemist* helps us be quiet enough to hear and when all else fails, it quietly shouts at us until we listen.

I am purposely trying not to give away a lot about the content of the program because I don’t want to create concepts in your mind that may interfere with your personal surprise and delight in this program. This program is a very personal experience because of our individual uniqueness. Each person will experience it differently and differently

each time it is used. What it does best is quiet your mind and spirit while resting your body much the same way biofeedback does. Then in the quiet peacefulness, you can do things as passive as recharging your batteries, or as active as formulating complex campaigns. For those with chronic pain syndromes, it can be used in a biofeedback mode to reinforce positive feelings, increase your level of endorphins and preserve your stores of serotonin. In the early stages of migraines, it can be used as a form of biofeedback to modify the attack.

The Alchemist contains 48 meditative movies that help you find



A meditative card from one of the movies. As each card comes up you click on it and it evolves, both image and text.



or awaken the deep intuitive instincts which will enable you to work out problems and keep yourself connected to your soul and integrity regardless of what is going down. They help you examine your beliefs, your concepts and your dreams so you can find which are the healthy ones, which you can afford to keep and which ones need to be left behind.

Description

It can be described as a game, as a great art project, as edutainment, a beautiful "coffee table cd-rom", a fanciful bit of fluff and probably another dozen or so names. But in reality it is in a totally unique category of computer software yet to be named ("Innerspaceware"?). It is a category that has never existed before except in the most skillful of imaginations. It is pure imagery that speaks to your brain in the language that is your brain's primary language: imagery. It can be used in many modes, ie, visual only, audio and visual, text only, etc. You choose what your needs are each time. For those with depressed moods, it can help you reconnect with more comfortable thoughts, for those with clinical depression, it can be used to help learn the concept of reframing and viewing situations as evolving versus static and stagnant. As an entertainment only mode, it will provoke a lively discussion with one's self or with others. When you want to run away, *The Alchemist* will take you far away on a safe journey.

Features

Pro

When the diary feature is accessed, the date of the selected question is shown on the screen. The full text of the "help" screen is printable. The program is fully annotated and cross referenced for multiple path access. There is in-depth documentation in the "Help" section and

the glossary contains more useful information. Book marks are available in the "Help" section.

The very extensive troubleshooting guide is written in English. An 800 number for the corporate offices is listed in the Documentation. The first time I tried it, the phone line was out of order (per phone company). I was later able to reach it and the person who answered was courteous and helpful. The technical support number is a local call to the Sonic Images Division located on MacArthur Blvd. I called that number with a question and a polite gentleman named Sam listened to my question, asked if he could call me right back after he changed machines. He returned my call promptly after testing his answer on a computer so he could be accurate. Have you ever noticed that software with the least need of troubleshooting suggestions is usually the software that is most heavily documented just in case a glitch occurs? Well, that seems to be especially true in this case. I wonder if the process of documenting the potential problems and finding a solution stems from more extensive debugging on the programmer's part.

Not only did I not need any of the troubleshooting tips but I was able to access all of the files used to create the program because they were very easily accessible. All that was required was a minor bit of curiosity and poking in files which is something I always do. This was the first time I was treated to a behind the scenes look at the program. I actually found parts of the finished program in modular form. The QuickTime animations are so terrific, I loved the fact that I could hunt them up at will and play them to my heart's content without opening the program. I also found text files of the program so I could print out the portions I most wanted to

carry around with me for further pondering.

A note pad is provided for use within the program even though I could access the Apple menu options and the finder within the program. (I tested on a PowerMac 6100 with 8MB of RAM running System7.5 with virtual memory on.) It looks like a miniature "sticky pad" in the "Help" section. It's movable and expandable. I found it by accident one day. But I forgot how I used it. That was the question Sam answered for me. Since Apple menu is available also, you have many ways of keeping notes of things that occur to you while watching the animations.

I love the way the buttons illuminate when selected. Yes, they do not merely "light" up, they actually appear to become illuminated from deep within—almost a translucent glow. Color in *The Alchemist* is used exquisitely and extravagantly everywhere.

"Con"

I carefully searched for negative things to say so as to give a balance to this review. The best I could do wasn't very good. There are some screens in the program that I would like to be able to print out and carry around for reminders and positive reinforcement in times of stress. The program does not provide a print option for these screens. However, I was able to use the screen shot command (cmd-shift-3) to take a full size screen shot which I could then print out. It can be imported into a ClarisWorks drawing document and resized but the text becomes unreadable. The first screen shot I took did not make the loud "snapping" noise so I didn't think it had worked but I stumbled upon the clipping later.

Because this program can be used for fun, entertainment or serious use, I would like to see some form of encryption, a feature that



allows for multiple diaries with password access, or diaries that could be relocated to a password or encryption protected partition or location.

Work-around Security patch

I found a primitive way to create private files. Opening the program creates a diary file. When a diary file is present, another one is not made. After you use the program and save a question to the diary, close the program and make the diary an invisible folder with an invisible name. The next time the program is opened, a new diary file will be created. When you want to use your private diary, double click on the invisible file. Opening the program that way will allow you to use your private diary and only someone who knows the trick of the invisible files would be able to access it. For maximum security, make the invisible files with the 16 color monitor setting, for slightly less security, the file can be made with the 256 color monitor setting. Since this is supposed to be a secret, I'll let you research how to make invisible files or email me at: elmer.keene@tcs.wap.org for directions.

Caution

The only real problem I could find with *The Alchemist* is that any adjustment to the sound level from within the program's preferences affected the System sound control. It appears that *The Alchemist's* sound control "hijacks the system sound control and holds it hostage even after the program is exited. If this happens, reopen *The Alchemist*, reset the sound level and exit restoring System sound. This was a serendipitous discovery. I have a game I like which has a somewhat obnoxious sound track that does not respond to the System's sound control. I could disable sound in *The Alche-*

mist, play the game in silence, restore sound in *The Alchemist*, and revert to normal sound control.

Summary

No it doesn't fry eggs sunny side up, but it does Windows (PC type) and it is the least painful way I have encountered to learn and understand the concept of "Process". *The Alchemist* was aptly described by a friend who tried it as being like multiple stage fireworks. The first burst is spectacular but the successive bursts continually expand our appreciation of spectacular. This perfectly describes *The Alchemist*. The first encounter is a wonderful multimedia experience. Each successive encounter will expand your awareness of how *The Alchemist* can be used to further expand your consciousness. Each experience will yield yet another secret— either yours or *The Alchemist's*. *The Alchemist* does not overwhelm the senses, it fills them to capacity. With each level of expansion, our capacity enlarges and *The Alchemist* continues to yield new depths to explore at one's own speed. This program is so elegant, one forgets the depths it contains. Its simplicity and ease of use make it ideal for all levels of users over the Age of Reason (scientifically set by most scientists as age seven) but even babies will delight in the kaleidoscopic imagery.

The Alchemist is a transformational system based on the concept Carl Jung called the "Law of Synchronicity"—the principle of "meaningful coincidence" which states that events and even thoughts occurring at the same time are connected by a relationship of significance, if not actual causality (excerpted from *The Alchemist*). "When the student is ready, the teacher will appear" (source unknown).

Requirements It has modest hardware requirements and runs on an LCIII or better, uses 4MB of RAM and 5MB of hard disk space, color monitor (must have 256 colors), 2x CD-ROM, System 7.1 or later and a mouse.

Mfg's suggested price \$49.95 available for both MAC and IBM.

Enteractive, Inc. Corporate Offices Customer Service Dept. 110 West 40th Street New York, NY 10018 1-800-591-6100 or 1-800-452-9999

Local offices (Tech Support)

Enteractive, Inc. Sonic Images Division 4590 MacArthur Blvd. N.W. Washington, D.C. 20007 202-337-3657

Bonus

When the registration card is received by Enteractive, they will send a free screen saver based on the artwork found in the program.

Wish list for next release

A printing option that would let the user choose full size or scalable size printouts of the "card" screens and/or easier ways to provide "private diaries" for multiple users. Both would be great but only one is actually needed. How really dynamite it would be if they could add holograms or some form of 3D to this program! ■

Mary Keene 703-569-1159 email: elmer.keene@tcs.wap.org

Special note: *Mary Keene will be presenting The Alchemist at the September meeting of the QuickTime SIG.*

**SIG information continued
from page 19**

Columbia Slice

by Steve Ocone

For the May Columbia Slice Ellen Baniszewski gave demos of Band-in-a-box and a few other applications from PG Music. Although these are all MIDI applications Ellen didn't use any external synthesizer or keyboard controller for her demos. Instead she used a piece of (free) Apple software called Quicktime Musical Instruments. In this article I'll start by covering some MIDI basics and working with sound.

Anybody who works with sound files knows that they take up a lot of storage space. I work with 16 bit sound on my computer and have had files as large as 700 megabytes. I have to split large projects into sections to work on them.

In comparison to sound files, MIDI files are miniscule. MIDI stands for Musical Instrument Digital Interface. It is the language with which synthesizers, computers and other musical equipment communicate with each other. A MIDI file is like a sophisticated player piano roll. It contains information about when a note starts or stops, what instrument it should be played on, how loud it should be, etc. The information is generally fed to one or more external synthesizers to create the actual sound. A synthesizer can usually play many different sounds simultaneously. The sounds in the synthesizer are usually created from recording samples of actual instruments.

Most musicians creating MIDI files do so by using an external controller, usually an electric keyboard that can output MIDI information. The MIDI information is fed into a computer via an inexpensive inter-

face. Many programs also let the user enter notes via the QWERTY keyboard. This method is slow and tedious to use when creating a composition from scratch, but was acceptable for the programs that Ellen demoed.

After the information is in the computer it can be edited. What you can do depends on the capabilities of your particular software. Notes can be assigned to different instrument sounds, there can be tempo changes, key changes, individual notes can be shortened, etc. After finishing one "track", lets say a piano part, you can play it back while adding another track such as bass, or drums, or a whole string section.

Normally a musician would then play back the file and send the information to one or more external synthesizers. Apple has created an alternate method of playing back your files without external devices. It's called Quicktime Musical Instruments and it doesn't sound half bad. It certainly is a step up from the Apple sound files you are used to and the files are smaller. And it is free.

Band-In A Box is a fabulous MIDI program which can be enjoyed by musicians and non-musicians alike. It allows users to quickly create their own musical compositions in almost any style. It will supply base lines and drums and chords. The settings can be changed to your liking. It was not designed as an educational tool, but it could be used as such. It works best with an external keyboard but can be used without one. I have a few musician friends that love it though they don't consider it a tool for serious composition. Band In a Box is sold as an "automatic accompaniment program." With a few clicks of a mouse musicians can create accompaniments to play along with.

The other software Ellen showed, Ragtime Pianist and its many siblings are not for creating MIDI Files from scratch. They al-

ready have many familiar and not so familiar musical compositions available to play. On these too, the user can make changes to the sounds, speed etc. There can be a play list (you can play back several in sequence). It includes a music trivia game, a music glossary, and musician biographies. It can play standard MIDI files. Standard MIDI Files is one way musicians exchange files without needing the same software. You can find many files for free on various electronic bulletin boards.

The Columbia Slice meets the first Thursday of each month at 7:15pm except July and August. The meetings are easy to get to (right off route 29) and everyone is invited. Call Tim at 410-997-9317 or Ellen at 301-596-6443 for directions.

StockSIG June Meeting

by Morris Pelham

PATIENCE IS A virtue, right?

For investors, patience is sometimes a virtue, sometimes not. If you invest in mutual funds and your mutual fund does poorly, it may have a poor manager and patience will not help that. It may hurt.

For investors who buy stocks directly, patience is more likely to be a virtue. We all know that stock prices fluctuate. A stock will become more popular and it's price will go up, or it will become less popular and it's price will go down, and then it will reverse. What went up will go down, and what went down will go up.

In our portfolios of Dow stocks we have seen a lot of that in the last few years. We have seen Union Carbide, Philip Morris, Goodyear and others become unpopular and cheap, then become more popular and go up to very high prices.

Now we see Woolworth rising from the near dead. We included this stock in our 1994 portfolio of

Dow stocks and in our 1995 portfolio of Dow stocks. Then its dividend dropped to zero and it wasn't eligible for our 1996 portfolio. In our model portfolios we "bought" this stock at prices of \$23 1/4, \$20 3/4, \$15 1/8, \$12 3/4, and \$10 7/8. It finally bottomed in the last 52 weeks at \$9 3/8. Then it started going up. Way up.

In our 1994 portfolio Woolworth was up to \$15 5/8 as of April 1, 1996 and the portfolio as a whole is up 61.64% to that date. The other stocks in that portfolio have been going up pretty steadily, but Woolworth has been a drag until just recently. We have made jokes about it at our StockSIG meetings for a long time, asking each other "Did you buy enough Woolworth yet?"

While it was going down the answer always was "yes, too much", but now that it's going up the answer has changed to "no, I wish I'd bought more". It's always that way. As of June 3, 1996 Woolworth had risen to a 52 week high of \$21 7/8 and I'm really looking forward to our second quarter results next month.

At our June meeting we talked about all of the above and more.

Mark Pankin reports that Woolworth is the best performing Dow stock this year, up 57.7% since December 29, 1995. Mark's 1995 Beating the Dow portfolio is the best performing one, up 23.2%, and includes Woolworth. His two year combined (1995 plus 1996) Beating the Dow portfolio is the second best, up 19.4%, and also includes Woolworth. Mark's Beating the Dow portfolio for 1996 is up 9.5%, and does not include Woolworth, which pays no dividend now and is no longer eligible. The Dow itself is up 10.3%, and includes Woolworth of course.

Mark also reports that his Fidelity Select mutual fund portfolio is doing well. He now owns only the Retailing fund, since March 18, and that fund is up 11.84% since the purchase.

My Fidelity Select portfolio is more diverse, I own more than just one of these volatile funds. I believe that owning more than one lowers the risk. Right now that means I continue to have a string of small gains and small losses, with the 3% load and the \$7.50 redemption fee the only common threads.

John Kelley told us a little about his daily tracking of the Dow stocks,

but no handout.

Glenda Finley brought her business card to our sign-up sheet, and that was nice. It can be very hard to read some names, and I have been known to mis-spell one or two.

Thanks to all!

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

Defective Chips Cause Freezing Up of Some Apple Computers

CUPERTINO, California (AP) — Apple Computer Inc. said Thursday that defective chips are freezing up some of its most popular computers, and the company has set up a repair program.

The defects occurred only in a limited number of computers, and problems will be fixed only as they appear.

Owners of Power Macs and Performas should not send healthy computers in for a repair, said Apple spokeswoman Nancy Morrison. The notice to Apple's 8,000 distributors went out Wednesday, she said.

The defects in the Performa and Power Mac desktops will be repaired through dealers. In some models, color hues may change and the system can freeze, Morrison said.

She said the problems arise from defective ROM/cache and clock chips.

Apple hasn't yet determined if the defective chips were installed only in certain factories or in certain lots, Morrison said, and therefore can't estimate how many devices might be affected.

The problem affects Apple computers with four-digit model numbers beginning with 52, 53, 62 or 63, the company said.

The company also said it has found cracks in the housing around the hinge in some PowerBook models. And in others, the AC jack may become loose or cease to work.

"On the powerbook side, we feel we can do a better fix if we have the customers send the computer back to a central repair depot," she said. The PowerBook logic boards will also be upgraded, she added.

Repairs will not be needed on all of the approximately 1 million PowerBooks and Performas, she emphasized.

Apple had to recall some of its laptops last year after rechargeable batteries caught fire.

The memo instructs dealers to take machines to Apple service providers for repairs or to call 1-800-SOS-APPL. Owners of the machines who think they have problems also may call the toll-free number, although they are likely to be told simply to take the machine to a dealer for repair.

The company will fix the defects for free at any time over the next seven years. Analysts said Wednesday's actions show a heightened responsiveness to customer service and support, possibly triggered by a tapering demand for Apple's products. ■

Submitted by Tom Witte

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Playing with Poser 1.0 — A Second Perspective

by Etana Finkler

I WAS INTRIGUED as soon as I saw the ads for Poser, but immediately had some questions.

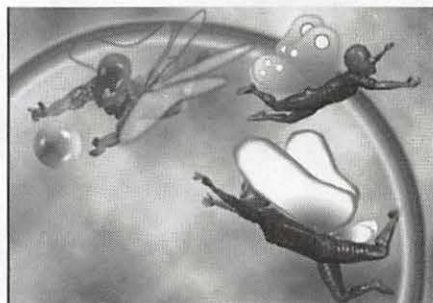
1. Proportions: The package image shows a superhero figure, and I usually want more realistic proportions in the figures I use: "Could I vary the figure proportions?" Yes, in fact, there is infinite variety—Poser has resident figure sizes of infant, toddler, child, adolescent, ideal adult, model, and superhero, all provided in both male and female. One can also use the "Parameter Dials" to vary the figure from 20 lbs. underweight to 40 lbs. overweight. AND one can choose a body part and vary the scale and taper of just that part.

2. Use with other programs: Save your illustrations as PICT files to import into Adobe Photoshop® or Fractal Painter®. Import a DXF or a RIB file into a 3D program. I found it easy either to bring a Photoshop background PICT into Poser and work there, or to export a PICT to

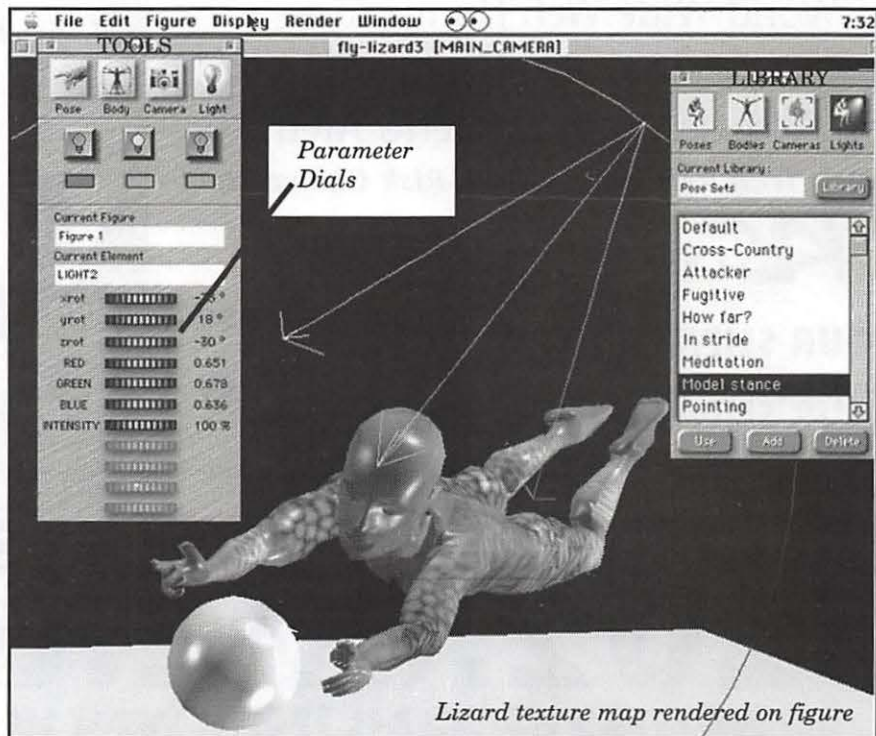
Photoshop and work in Photoshop, which is what I did in these examples. Fractal makes both Poser and Painter, but I have only version 1.0 of Painter, which on my old IIsi was sooooo slow I ripped it off my machine. Painter is where the authors suggest doing animation: open both Painter and Poser. Set up your Painter movie file. Save a frame in Poser, copy and paste it into Painter. Save often. When finished, export to a QuickTime movie.

3. Clothing? The surface of the figure can be customized with bump maps, texture maps, and surface

color. A custom bump or texture map can be painted in an image-editing program. Male and female templates are provided. Save as a PICT file, 8-bit, gray scale image, and then easily load it in Poser. It will be "skin-tight,"



Poser figures brought into Photoshop for background and effects

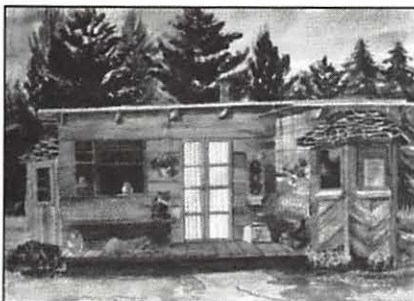




as you are painting the surface of the Poser model.

4. Painting Aid: Poser can aid your paintings. Say you have a photo of a background, and another of a person. The lighting source is different on each. Poser can be a study aid, creating a rough sketch of the human and lighting it to match the background. Likewise, if your model's head is the wrong direction, etc., you can make a sketch quickly in Poser.

5. Fun: Everytime I sat down to write the review of Poser 1.0, I got caught up playing with the program. What a joy to own a PowerMac!—to be able to just play in Poser without having to stay in the wireframe or outline mode! I have been playing around with this program for hours upon hours, moving from the facets mode to the render mode at whim.



6. Uses: On the facing page I am in progress of creating a mock stained-glass window of flowers and flying butterfly nymphs. I used the toddler-size human in Poser, and played with different positions, lighting and coloring, as well as adding Poser's included texture map of the lizard. I exported PICT files from Poser to be used in Photoshop. This page, left, I imported my line-art drawing as the background in Poser, and drew figures to see how off I had been with my line art. Below, I scanned one of my watercolors as a PICT, again brought it into Poser, and added 2 figures. When I finished the first one, I pasted it into the background, copied it, and reposed the copy. Then I rendered Poser's tutorial's texture map of lycra shorts, shirt and shoes.

7. Problems

a. Resolution: It seemed that the resolution I brought into Photoshop (at 72dpi) was dependent on how large my Poser window had been, with 11 inches as maximum width, because that is the size of my monitor. So, I would imagine fine resolution figures are not possible at any decent size.

8. Conclusion: I still don't under-

stand the cameras and the lighting. Practice... I wish there had been some more pictures; examples of uses of Poser. But for the price, I think this can be a very useful little program, with plenty of complexity beyond the basics. ■

System requirements:

- Apple Mac with FPU, or PowerMac
- System 7 or better
- Color display, 24-bit better
- Hard drive
- 6 MB of available RAM, 8 MB recommended; Poser loves memory.

Fractal Design Corporation
335 Spreckels Drive, Aptos CA 95003
Tech. support: 408-688-8800
Internet:
mac_support#fractal.com
CompuServe: GO FRACTAL
P.O. Box 2380, Aptos, CA 95001-2380
more info:
WWW: <http://www.fractal.com>
AOL: Keyword "fractal"
CompuServe: GO GUGPRA
Catalog price: approx. \$130.





APS DATLoader 600 and Retrospect Remote 3.0

by Paul Chernoff
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I BOUGHT AN APS DATLoader 600 to allow me to back up 18 gigabytes of data on a local area network over a weekend. The APS DATLoader 600 (hereafter referred to as the DATLoader) is a DDS-DC DAT drive with an automatic tape loader and tape magazine. As each backup tape fills with data the unit advances to the next tape.

Managing the backup of our 30 Macintosh computers was difficult. No one tape backup unit could back up the entire office. In addition, we have a mix of Exabyte 8mm tape drives and a variety of DAT drives with different hardware compression options. And with tape drives scattered over 3 floors, I spent too much time checking the status of multiple backup operations. While not intuitive in its operation, the DATLoader 600, with its 6-DAT capability, was the solution.

I considered other backup products but decided not to buy them. The new digital linear tape drives hold 30-40 gigabytes of data but require high data transfer rates and are not recommended for network backups. I also considered Exabyte's new Mammoth high capacity tape drive, but I was unable to find anyone who had used it. A tape drive with a built-in tape changer was the best solution to backing up my office.

The APS DATLoader 600
APS advertises its DATLoader

600 at \$2,850, but my APS corporate rep was able to get me one for \$2,450 plus shipping. The package includes the DATLoader 600, a Flat-Pak (magazine that holds 6 tapes), SCSI cable (25 to 50 or 50 to 50, according to your needs), Retrospect 3.0i, and 6 Fuji 120m tapes. APS seems well stocked with 120m tapes, which I find amazing because there is a worldwide shortage of data-quality 120m DAT tapes.

I was struck by the DATLoader's large size. It is boxy, about the same height as my PowerMac 7100/66av, and almost as wide. Just as I get used to smaller storage devices — both hard disks and tape drives — here is the largest device I have attached to my computer's SCSI port. The mechanism inside the box conforms to a 5.25" full-height internal form factor.

The box is rather plain. There is a panel with 3 buttons: index, load, and eject. There is a big empty rectangle for sliding in the Flat-Pak and a system lock screw that allows you to pull back the operating unit from the box. The back has 2 SCSI-

2 ports, a power cable socket, and an on/off switch, as we have come to expect. What I didn't expect were the "SCSI in" and "SCSI out" labels and 2 SCSI number indicators. Unfortunately it includes a standard instead of an active SCSI terminator. This was like no other DAT drive I had seen before, and the ports were the clue that using the drive would be less intuitive than most Macintosh peripherals.

Rather than bore you with my trials of setting it up, let me tell you what I learned: *read the instructions!* The DATLoader comes with 2 sets of instructions. Just read the one titled "Read me before using." It will save you much trouble and from possibly having to return your unit for repairs. Follow the directions to the letter. The "Setup & Operation Manual" was less helpful and can be read after you have set up the DATLoader. I will guarantee that you will jam the tapes into the unit if you do not follow instructions.

It's Not Intuitive

The DATLoader 600 has a small but significant learning curve. I encountered a few problems after setting it up. Some problems were technical and others involved my understanding of the drive. From setup to use with Retrospect, you need to follow instructions and gain experience with the drive's operation.

The DATLoader is actually 2 different devices packaged together, each requiring its own SCSI address. One address is for the DAT drive while the other is for the tape

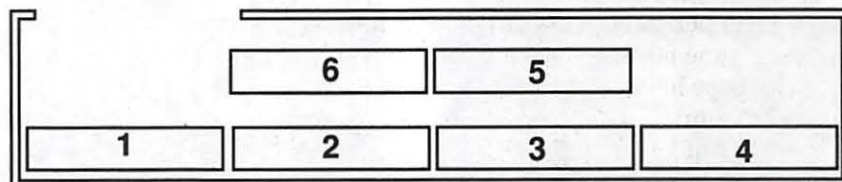


Figure 1 — Six-tape magazine slot positions

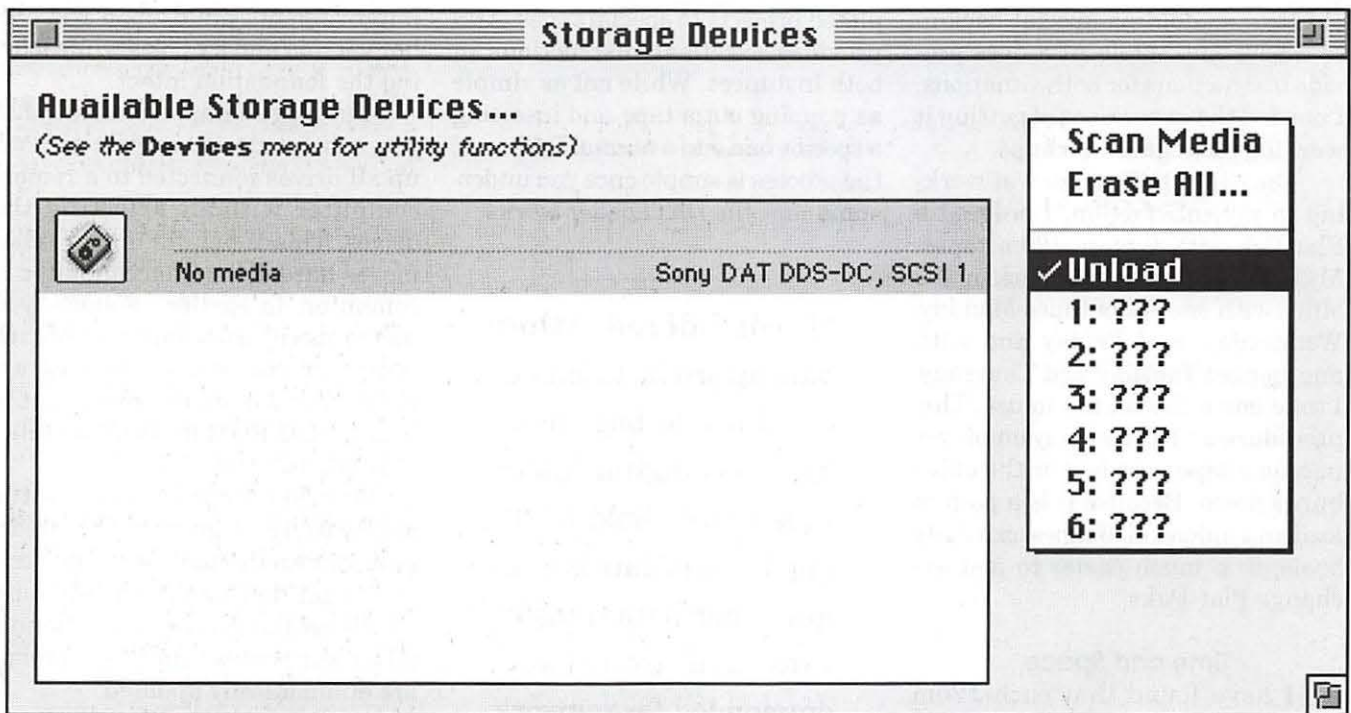


Figure 2 — Retrospect recognizes that 6 tapes have been put in DATLoader

loader. If you use Retrospect as your backup software, the SCSI addresses must be 3 numbers apart (i.e., 1 and 4, 2 and 5, or 3 and 6). The DAT drive is a Sony DAT (DDS-DC) unit capable of DDS-DC hardware compression. The tape loader is a TapeWorks Loader.

The other odd characteristic of the box is its SCSI ports. They look like any other 50-pin SCSI ports, but they are labeled “SCSI in” and “SCSI out.” The “SCSI in” port must be connected to the computer or to another SCSI device that connects to the computer. Also, APS fails to offer internal SCSI active termination. APS provides a standard external SCSI terminator.

Because the magazine lies flat and holds tape in 2 levels, rather than a level per tape, it is not obvious which tape is which (see Figure 1). Once a tape holds data, I use Retrospect to identify each tape so I can label them. But I am not always sure which tape is which because the DATLoader moves each tape up one

position when a tape is unloaded.

Unfortunately, my computer froze the first two nights I used it to back up the office. I deduced that the DATLoader encountered a physical problem (e.g., a bad tape), and Retrospect froze in reaction. After conferring with APS and Dantz, I moved my speakers and monitor away from the DATLoader to reduce electromagnetic interference, which solved most of my problems. I also improved Retrospect’s behavior by restarting my computer at night with all extensions off. I presume that a conflict between Retrospect and some extension caused Retrospect to freeze when a hardware error occurred.

What took longer was figuring out how the tape magazine worked. The magazine holds 6 tapes, 2 on the top level and 4 on the bottom (see Figure 1). The tapes are moved around by software and by pressing the index button. Fortunately, it is possible to slide the operating unit out of the box an inch and watch the

mechanism operate. It’s fun to watch the tape loader pick up a tape, plop it into the DAT unit, remove it, and advance the tapes. APS recommends watching the DATLoader when you first use it so you can better understand how it works.

At times tapes did not completely unload. The DAT mechanism ejected the tape, but the loader failed to move the tape back into the magazine. Pressing the load button completed the unload action. Strangely, the load button will load a tape from the #1 position into the DAT mechanism or return an ejected tape to the Flat-Pak magazine, but will not unload the DAT tape from the DAT mechanism. This last action can only be done with software. Fortunately, this problem has never occurred during a backup. It was most likely to happen when I used a cleaning tape that is supposed to automatically eject after cleaning.

Once I became used to the drive, I had no problem restoring from an



old tape or doing a special backup to a new one. While APS does provide instructions for both situations, I needed the experience of getting it working for regular backups.

Once the DATLoader was working to my satisfaction, I ordered a Flat-Pak with 6 more 120m tapes. My backup strategy is to back up the office with one set of tapes Monday, Wednesday, and Friday and with another set Tuesday and Thursday. I take home the set not in use. This procedure is to protect my employer in case a tape goes bad or the office burns down. Because it is a pain to load and unload all 6 tapes on a daily basis, it is much easier to just exchange Flat-Paks.

Time and Space

I have found that each 120m tape holds 4.5 to 5 gigabytes of data. Many of our files compress poorly because they hold QuickTime and audio data. The ability to hold 27+ gigs per Flat-Pak means that I can back up all office Macintosh workstations, with the exception of our recording studio, from my computer. This greatly simplifies backup and retrieval operations.

However, it takes a weekend to do a complete backup because of time limitations. The DATLoader is rated at 28MB/minute transfer rate, a speed I have never witnessed. I have seen backup speeds of up to 19MB/minute and verify speeds of up to 26MB/minute. In 12 hours, I am able to back up only 5 to 6 gigabytes of data, partly because we have all data verified after it is backed up. This does not present a major problem because on most nights I perform an incremental backup.

Doing Special Backups and Restorations

Although the Flat-Pak holds 6 tapes, I have found it easy to restore from older tapes and to archive com-

pleted projects to special tapes. APS provides excellent instructions in both instances. While not as simple as popping out a tape and inserting a specific one into a normal DAT unit, the process is simple once you understand how the DATLoader works.

“I considered other backup products but decided not to buy them. The new digital linear tape drives hold 30-40 gigabytes of data but require high data transfer rates and are not recommended for network backups. I also considered Exabyte’s new Mammoth high capacity tape drive, but I was unable to find anyone who had used it. A tape drive with a built-in tape changer was the best solution to backing up my office.”

Retrospect 3.0

I did not set out to write a comprehensive review of the latest version of Retrospect, but I want to cover some of its new features because it is bundled with the DATLoader. When I launched the new copy of Retrospect, it used my version 2.1 existing scripts, client information, and preferences. While it has a new look, anyone comfortable with version 2.0/2.1 should have no problem working with version 3. The

improvements build upon the earlier version and fix holes while leaving the foundation intact.

The biggest improvement is that you can set up Retrospect to back up all drives connected to a remote computer without selecting the drives. This is helpful if your office moves hard disks from computer to computer. In earlier versions, you had to specify each hard disk of each computer you wanted to back up. Retrospect 3 is smart enough not to back up CD-ROM disks or mounted network volumes.

Another improvement is the ability to create groups. I created a group for each department, then create scripts that back up these groups. If I change the composition of a group, all backup scripts using those groups are automatically updated.

An option that I have not yet used is a special backup server option. The idea is to dedicate a computer as the backup server and set it up to back up each computer once a day. The backup server can detect when laptops and duos have joined the network and can start a backup automatically. It can also change the order in which computers should be backed up to ensure that it gets them all.

Retrospect and Tape Changes

Retrospect works well, but its control of the loader mechanism can be improved. As mentioned above, loaders and tape drives must be 3 SCSI numbers apart for Retrospect to recognize that they go together. To work with tapes in a tape loader, I follow these steps:

- 1) Start Retrospect.
- 2) Load the Flat-Pak into the DATLoader.
- 3) Select “Configure Devices” in Retrospect to force the DATLoader to scan the 6 tape locations. The “Loader” popup menu will show which slots have



tapes in them. The "???" means that a tape is in the location but the tape name is not known (see Figure 2).

- 4) Select "Scan Media" from the "Loader" popup menu to identify the each tape's name. This step takes 2 minutes because the DATLoader must load each tape into its DAT mechanism and read its tape header. The "Loader" popup menu will now show each tape's name. You can load any tape into the DAT mechanism by selecting it from this menu.

Problems Encountered

The DATLoader/Retrosect combination works well, but I have had a number of problems with both the hardware and software. As I mentioned above, Retrosect works fine but is touchy in response to hardware errors. In the beginning, I had many problems with Retrosect freezing. My solution is to reboot my PowerMac and press the "Shift" key to turn off all extensions. Retrosect seems to react better to hardware errors with the extensions off. I corresponded with Dantz technical support, and they suggested that I eliminate as many SCSI devices as possible and isolate the drive from interference. I took their advice and most of my backup problems have disappeared.

One limitation of Retrosect is the handling of media problems. When a bad tape section was encountered, Retrosect put a dialog box on the screen notifying me about the problem, pausing the backup.

I have returned the DATLoader twice to APS for repairs. In both cases, the problem has been with the magazine locking-mechanism. On my first day using the DATLoader, the Flat-Pak would not stay in the DATLoader. APS replaced my machine with a new one. After a week of perfect performance, the Flat-Pak

got stuck in the DATLoader. I think it happened because I pressed the "load" button when there was no tape in position #1. The eject button failed to work, yet the DATLoader insisted that the magazine was not inserted.

I am still dissatisfied with the locking mechanism. I need to give the Plat-Pak the right amount of pressure to get the DATLoader to accept it. Adjusting the emergency release screw has helped its function.

Technical Support

APS Technology's technical support has greatly improved over the past year. APS provides toll-free technical support numbers, one for Macintosh users and the other for Windows/DOS users. The technical support reps quickly answered the phone and were courteous and helpful. They get many calls from people who have not read the manuals, and they patiently provide all required information. I sent in my first unit for repairs and received a new unit as a replacement in less than a week. The second time, it took over a week.

Contacting Dantz for Retrosect support is more difficult. I had to leave my name and phone number on a voice-mail system, and the next day a technical support person called me back. Unfortunately, I was not at my desk, and he left me a message on my voice-mail system with his name, phone number, and e-mail address. Rather than play phone tag, I wrote to him and received a reply the next day. The information I received was helpful.

I mentioned the problems to my APS sales rep, and he was interested in correcting the problems and making the device work smoother. He was concerned about any problems I had with Retrosect because APS considers the DATLoader and Retrosect to be a single package.

Conclusions

While the DATLoader was returned to APS for the 2nd round of repairs, an alternative to the DATLoader occurred to me. APS sells high-capacity DDS-DC DAT tape drives for under \$900, so for less than the price for the DATLoader, I could have bought 2 DAT drives and used both of them with a single backup station. Retrosect allows a single computer to use multiple tape drives. While I would have lost the ability to back up to 3 tapes over a weekend, the operations would have been simpler and cost less money, and my backups would be operational even if one of the DAT drives broke down.

I expect to be able to back up approximately 30 gigabytes of data in a single Flat-Pak. I can now start a fresh backup Friday evening that will span 4 tapes and finish 40 hours later. But before buying, you should seriously consider your backup needs and determine if a DAT drive with tape loader is the best solution or if a less expensive and simpler solution, such as multiple DAT drives on a single computer, better meets your needs. Also be prepared to ensure backups are carried out if you need to send the DATLoader out for repairs.

Nuts & Bolts

APS DATLoader 600
 \$2499.95 plus shipping
 APS Technologies
 6131 Deramus
 Kansas City, MO 64120
 (800) 235-8935
<http://www.apstech.com/> ■

Paul Chernoff is the Director of IS at Enteractive, Inc., and a Macophile since 1985.



Iomega Zip Drive— Frequently Asked Questions (FAQ) Version 1.0

Compiled by steveg@phantom.com
(Not in any way associated with Iomega)

THIS FAQ ATTEMPTS to answer many common questions and clarify many misconceptions about the Iomega Zip drive, one of the most innovative and viable secondary storage and backup devices to come on to the Mac scene in a very long time. Additions, addendums, corrections, or further questions can be submitted to steveg@phantom.com. In no way whatsoever am I to be held responsible for errors or omissions in this FAQ that could lead to further misconceptions, problems, conflicting issues or (for whatever reasons) sudden death. Use this FAQ at your own risk.

Q: What is the Zip drive?

A: The Zip drive is a new drive from Iomega Corporation, makers of the Bernoulli line of removable storage devices (SyQuest's primary competition in that field). The drive uses proprietary cartridges providing 100-MB unformatted storage capacity (25-MB cartridges are expected to be released soon). The drive was first advertised in the catalog pages of MacWarehouse (a popular mail order company) several months before the drive began shipping. As a result, a huge backorder was created even before the first drives began trickling out. After the drives began shipping in earnest,

other mail order companies and local retailers began advertising and selling them. Waiting periods ranged from a few days to over a month, depending on which vendor you ordered from and exactly when you ordered. The drive itself is rather small, measuring a scant 7" long by 5.25" wide by 1.5" high (slightly larger than the typical Supra modem), and weighs less than one pound (including disk). The case is a cheap-feeling but reasonably sturdy dark blue plastic affair with six gray rubber feet attached, allowing the drive to be set flat (like a typical modem) or on edge. A green LED on the front of the drive indicates that the drive has power, while an orange LED next to it acts as a busy light. A small round gray button is set below the two LEDs and acts as an emergency eject button. (When the drive is connected to the Mac, the disk is automatically ejected like a floppy disk when the disk icon is dragged to the trash can. If for some reason you have a disk installed and the computer is not turned on, for example, pressing the button on the drive will eject the disk.) A clear plastic window is on the top of the drive allowing the user to see the label of an inserted disk. The back of the drive has two 25-pin SCSI connectors. Between the two connectors are two switches;

one allows the user to set the drive between SCSI ID 5 and 6 (those are the only two options available), while the other provides termination (ON if the Zip is the last device on the SCSI chain, OFF if there are devices on either side of the SCSI chain). The power inlet is located on the side of the drive (on the same side that would face down if the drive were positioned on its side) and provides both a recessed power connector and a recessed power cable guide for aesthetically routing the power cord. The drive ships with an external two-prong power supply (which weighs slightly more than the drive itself!), one 100-MB "Zip Tools" cartridge containing many excellent utilities for formatting, indexing and backing up your data, two floppy disks for installation (one for Mac, one for PC), a thin but complete owner's manual, a shielded 25-to-25 pin SCSI cable, and the usual assortment of promotional goodies. Setting up the drive takes only a few minutes.

Q: What's the deal with the cartridges?

A: As of this writing, only 100-MB cartridges are shipping. Each cartridge has an unformatted capacity of 100-MB; after formatting, they provide about 95-MB of storage capacity. Cartridges cost between \$15 and \$25 apiece depending on vendor and quantity purchased. Each cartridge measures about 3.875" square and are about .25" thick. They come in a hard clear plastic fold-out case, similar to a magneto-optical disk. The cartridges are pre-labeled; replacement labels are available from Iomega for a rather pricey \$3 for a package of 10. Iomega plans to have 25-MB cartridges available soon. Cartridges can be formatted with just about any SCSI formatting utility, including Hard Disk Toolkit, Silverlining, and Drive7. No significant performance



or capacity differences were noted between using the different formatting utilities. (Golden Triangle's TimesTwo utility can be successfully used to format the disks to an artificial 200-MB each, but all things considered, this isn't a smart idea for many reasons.)

Q: How fast is the drive?

A: Like any SCSI device, overall performance will vary depending on what system and configuration is used. On my system (Mac IIci w/ 33Mhz DayStar Turbo 040i, 32-MB physical RAM, System 7.5.1, about one row of extensions on a 24-bit 1024x768 monitor), Speedometer 4.0 gives the drive a rating of .794, which is slightly faster than the Performantz 44-MB SyQuest drive

that I tested as a comparison device (and gave a rating of .736). This is fast enough to run most software; QuickTime movies run quite smoothly from Zip disks, as do sampled sounds and similar time-specific files.

Q: Does the Zip drive use Bernoulli technology?

A: No, not at all. The Zip drive is a sort of hybrid of modern drive assembly techniques and established Winchester-type drive mechanisms. The Bernoulli Effect, and the technology that Iomega applies to it, is not to be found in this drive.

Q: It's such a new drive...How does it rate in terms of quality?

A: Only time will tell for that, of

course. It is my personal feeling, and the overwhelming feeling of most of the Zip owners on the internet, that the Zip drive is quite solid and reliable. I've personally put about two hundred consecutive hours of access time on my Zip drive and had nary a single problem. I've transported the drive in a plain plastic grocery bag to work and back (a half hour New York walk) and hadn't had a problem with it. The drive is tightly constructed, though some may think it feels cheap. (My drive survived numerous leg-bumps while walking to and from work and survived without a single scratch.)

Q: Any other things, good or bad, that I should know?

A: There are some issues which some people find fault with, which

Best Recent Press Release

For Immediate Release

May 24, 1996
 Contact: Judith Frey, Director of Public Relations
 e-mail: judythecootie@casadyg.com
 C&G web page: <http://www.casadyg.com>

Casady & Greene Inc. offers to buy Apple Computer

Salinas, CA: Casady & Greene, Inc., award-winning software publishers for over eleven years, announced today its plans to offer an undisclosed amount in a bold and unprecedented, straight buy-out attempt of computer Goliath, Apple Computer.

Judith Frey, Director of Public Relations for Casady & Greene, stated, "At this time we feel that we must address the abounding industry rumors regarding a

buyout. These rumors suggest that representatives of Casady & Greene have been spotted driving up and down in front of One Infinity Loop scouting out their new parking spaces at the home of Apple corporate headquarters. Another rumor comes from an unidentified witness placing Charles R. Fulweiler, C.E.O. of Casady & Greene, in Apple Computer's parking lot in Cupertino earlier this week. Our response to this speculation is this - we are doing our very best to start these rumors just as fast as we can."

Apple Computer's CEO, Dr. Gilbert Amelio, did not comment on the rumored sale, but Dr. Fulweiler of Casady & Greene offered this note of confirmation, "I am perfectly willing to purchase Apple Computer if they are interested in our price. C&G plans a number of other acquisitions in

1996 as well. In June, our goals include the Eiffel Tower and the Hope Diamond."

The media can expect further updates if negotiations continue.

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I'll point out here. First, the drive has no POWER switch. When the drive is plugged into an active electrical outlet, it's on; when it's unplugged, it's off. I personally have no problem with this as my drive is plugged into a switchable power station (Kensington MasterPiece Plus; no affiliation, though I think this is an excellent unit) and I can turn it off and on with the station's button. The drive also has only two SCSI ID options (5 and 6), which means that if you have a relatively full SCSI chain, you may find yourself switching the ID's of other devices on the chain. As was previously stated, the drive has two 25-pin SCSI connectors and ships with a 25-to-25 pin SCSI cable. For most users with multiple SCSI devices, this means that the Zip drive will be the first drive on the SCSI chain and other devices will plug into the Zip drive. If you happen to have a spare 50-to-25 pin SCSI cable, you can place the Zip drive on the end of the SCSI chain (thus eliminating the need for external terminators, since the Zip has switchable termination) by connecting the 50-pin end to your formerly-last SCSI device the the 25-pin end to the Zip drive. The drive is VERY quiet. For some, this is a blessing; for others, a curse. The drive makes a quiet (library-level) clicking sound as the read/write heads move across the disk, but that's about it. Do not rely on auditory feedback to determine the status of the Zip drive. :-) The drive also has a power saving mode. When the drive is not accessed for a few minutes, the drive kicks down into a low-power mode. When the drive needs to be accessed while in low-power mode, it only takes about a second for the drive to get back into action (considerably less time than it takes for a PowerBook's hard drive to spin back up). When inserting a disk, there is no lengthy spin-up time like a SyQuest drive so the

disk is almost instantly available. When a disk is ejected, there is no spin-down time so the disk ejects at least as fast (if not faster) than a

floppy disk, and leaves the drive with a very solid and satisfying "ker-CHUNK" sound.

Well, that's about it. Enjoy. :-) ■

Color Printer Challenges— Ink Refills

by Mary Keene

IHAVE AN APPLE Color StyleWriter 2400 and use ink refills. I had similar experiences to the ones related in the article. About the fourth or fifth time I refilled the small black tank, it would not hold the "known volume" of ink (3 ml). It was a bit of a nuisance since it meant refilling more often. I knew the tank was empty because I had run a test sheet to see if there was any ink left in any of the tanks.

About 12 months after I first started refilling my tanks, the amount of ink accepted by the tanks again dropped by about 50%. The refilled tank was a bit heavier than the empty tank (I had been using 2 tanks so I wouldn't have to stop in the middle of a print job to refill). I called the 800 number provided by my ink company and talked to their very helpful techs who confirmed my theory that the tanks contain "filler materials" in addition to the ink. She explained that each tank contains various foams or absorbent "stuffing" to hold the ink and keep it from running out. After a while, this "stuffing" becomes super saturated or begins to break down and will not hold ink very well. At this point the tank needs to be replaced.

When my printer was brand new and using the original Apple supplied cartridge, yellow was the

first color I ran out of and refilled according to the refill instructions. Shortly thereafter, the red appeared to run out and I attempted to refill it only to have the red ink run out of the overflow hole. According to the refill instructions, this meant I had overfilled the tank and probably color contaminated all my tanks. But I had only added 10% of the refill volume. Puzzled, I called the 800 number. The tech told me that since the test sheet I ran indicated "an empty tank" but it had overflowed, the ink jet or a nozzle might be clogged versus the tank being empty. I tried using the "super clean" option on the printer to open the clogged ink. Not only did that not work, but it caused a lot of black ink to contaminate the bottom of the color tank saturating the color pads that dispense the individual inks. I called the ink company back and the tech said this indicated the red jets were probably clogged and I would need to replace the tank for sure, due to the contamination and possibly the printhead since it seemed that was probably the site of the clog. Not wanting to spend that much if there was any possible way out, I decided to accept her offer of a clogged jet cleaning kit, which she sent without charge.

When I received the kit, it had



instructions on how to unclog Canon printers which had a different cartridge style. I called back and the techs consulted. They were unsure how to clean my cartridge. Having nothing to lose, I listened to the concepts and cautions they provided. It was a lengthy procedure because I had to be sure I tried only one thing at a time so I could remember what worked.

I first used one of the supplied solutions and a lint-free "wipe" to supply very small amounts of the solution directly to the inks nozzles. I then let the cartridge dry for 72 hours before trying it again. It worked but due to the black ink contamination it printed black. Since the tank was more expensive than I liked, I decided to experiment in decontaminating it and if nothing else, I could then use it as a back up "giant" tank for black. Since it appeared that all the contamination occurred at the bottom pads and not at the overflow hole, I cut the "wipes" into 1 inch squares and folded these into small pads that I could use to blot out all the ink left in the tank. This seemed to take forever. I also noticed that the inks "pads" were less black. I then tried using the wipe squares to directly apply small amounts of the cleaning solution to the "ink pads". After a long while, I began to see the original colors show up on the "pads".

After they were pretty much cleaned (the yellow still had some faint black stains), I used the solution to clean the corresponding "pads" in the printhead cartridge. That seemed like it would never clean well. So I carefully propped the cartridge in an upright position and placed a wipe pad on the "ink pad correspondents" and applied enough solution to saturate the pad until it was pretty drippy. I let that soak for 24 hours and checked the cartridge. There was definite evidence of cleaning. I used the fluid directly on the

cartridge Ink pads and made sure they were covered with solution after securely propping the cartridge upright. (There had been no evidence of fluid leaking from the previous attempt and no signs of getting the circuits wet). The hardest part was remembering not to touch the printhead circuits when I handled the cartridge. I let it soak for 24 hours and found it getting cleaner. So I dried it out, blotted out the excess fluid well, refilled it again and soaked it another 24 hours. That time it seemed to be completely clean.

"When I received the kit, it had instructions on how to unclog Canon printers which had a different cartridge style. I called back and the techs consulted. They were unsure how to clean my cartridge. Having nothing to lose, I listened to the concepts and cautions they provided. It was a lengthy procedure because I had to be sure I tried only one thing at a time so I could remember what worked."

The cartridge "ink pads" appeared to be tiny mesh screens and there was no trace of ink left on them. I repeatedly blotted them with wipe squares until I got dry squares back, let the printhead and ink tank dry out for 72 hours and blotted again with wipe squares to be sure they were completely dry. I refilled the color tanks with a small amount of ink—all the blotting and cleaning

had pretty much emptied them—and tried the cartridge in the printer. (The yellow pad lost its black stain after I refilled it.) This worked! I topped waited until the tanks emptied, refilled them and continued using them for a total of about 15 months before purchasing new tanks. The color tanks hold very small amounts of ink and when they became saturated, held even less but it still is worth the inconvenience to cut ink costs big time.

The refill company I use has a written guarantee that if a service tech will state in writing that the third party ink damaged the printer, the ink company will repair it so I felt secure in using their products. The only "uncovered" risks I was taking were the risks of damaging the printhead circuits by touching them or wetting them.

I asked the ink company why they didn't provide empty tanks like one other ink company does for the Hewlett-Packard printers. They said they were trying to find a tank manufacturer whose products allowed the ink company to continue offering its repair warranty. Most of the tanks they have tested to date have not met their strict specs.

They are also in the process of perfecting a pigment based ink rather than a water based ink that will reach the market later this year. This new ink will create more intense and vibrant color.

The only real complaint I have about the third party ink refills is that they are very fugitive and run at the slightest hint of moisture. I have tested many craft products to find a post printer product that would make the documents water proof or at least less fugitive. Unfortunately, I have been unsuccessful to date in that quest but I have not given up yet. The Apple ink is not completely water proof but it is somewhat more water resistant than the third party ink. ■



Public Use Power Macs Popping Up All Around the DC Metro Area

by Phil Shapiro

THIS PAST MONTH brought wave after wave of good news in the public access computing front. Early in the month the Computer Assisted Literacy Center of DC (CALICO-DC) received news that Apple Computer will be donating to the center five new Power Macs, along with a flatbed scanner, laser printer, and Quicktake camera. This influx of new technology will mean that the free-to-use CALICO-DC computer lab will be able to offer even more to the adult literacy students who make use of its services.

This grant was part of a new partnership between Apple Computer and the Community Technology Centers' Network (CTCNet), a national nonprofit organization composed of 65 community technology centers. In November of 1995 Apple agreed to donate 75 Power Macs, along with assorted peripherals, to various community technology centers affiliated with CTCNet. Fifteen of the 65 affiliates received "packages" of five Power Macs (and assorted peripherals).

In other news, the Friends of Takoma Park Library, in DC, gave this branch library a new Power Mac for staff and public use. This computer is equipped with a modem and PPP account to give library staff

(and the public) use of the world wide web. A color StyleWriter rounds out the gift. Betsy Madero, the branch librarian, is excited about how this gift can extend the library's services.

Meanwhile, in northern Montgomery County a free-to-use public access computer lab, the Lakeforest Library Connection (LLC), opened up right inside the Lakeforest Shopping Center. This computer lab, located beside JCPenney on the lower level of the shopping center, offers free access to about twenty Power Macs and Pentiums. Spearheaded by the Montgomery County Public Libraries (in conjunction with the vendors of Lakeforest, Apple Computer, Hewlett Packard, and a host of other public and private supporters), LLC seeks to expand access to technology tools and the Internet. (See sidebar article for further information about the Lakeforest Library Connection.)

Increasing the number of Macintoshes available for free public use is good news for everyone. People who have never used a Mac can have the good fortune of test driving one at no cost. User groups can use the opportunity to increase their public profile by having information about their group within arm's reach of the computers. And people who are Mac enthusiasts can

make use of the public access computers to show others why Macs are easy to get to like.

Another neat use for public access Macs is to use them as "display showcases" for the best student-created multimedia in the metropolitan area. With over a gigabyte of hard drive storage, it would be interesting to reserve 300 to 400 megabytes to showcase the best student-created creative work. It sure would be motivating for students to know that their creative multimedia work would be generally accessible to the public on free-to-use public access Macs.

Naturally, this student created multimedia could be deleted every few months to make room for new creative work. In that way, the public access Macs could take on the additional role of being "museum showcases" for student creative talent.

Whatever they're used for, public access Macintoshes bring rays of sunshine to the community. We in the user group community are ideally situated to help nurture the concept of public access computing so that one day it will be natural to say: "I can't believe they designed this shopping center without a free-to-use public access computer lab."

The author works as the Washington DC regional coordinator for the Community Technology Centers' Network (CTCNet). He can be reached at: (202) 686-5465 (home/office) or at pshapiro@his.com <http://www.his.com/~pshapiro/>

Further information about the work taking place at other community technology centers can be found on the CTCNet web page at <http://www.ctcnet.org/> or by writing to the organization at: ctcnet@ctcnet.org



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The Lakeforest Library Connection— First Impressions

EARLIER TODAY I visited the new "Lakeforest Library Connection" (LLC) in the Lakeforest Shopping Center, in Gaithersburg, Maryland. I wanted to see first hand how this free-to-use computer lab was being put to use.

I chatted for a while with Bob Dorsey, the LLC manager, who told me that over 95 percent of the people visiting LLC were interested in using the computers to browse the web. I stayed around for an hour or two to lend assistance. Here is a brief snapshot of the people who visited LLC while I was there.

A husband, wife, and grandmother came into LLC to use the web to find out more about suggested treatments for a medical condition. The family was interested in learning more about such treatments so that they could be more informed patients. A search of Alta Vista brought them to information that was very close to the kind of information they were looking for. (For those who might not know, Alta Vista is a popular search engine of the web. You can reach Alta Vista at <http://altavista.digital.com>)

Another individual was interested in finding information about Barbados, to assist in a planned trip to that country at the end of the year. Although exhibiting great perseverance, this individual did not seem to put his finger on the kind of information he was looking for. All the same, the fellow stuck around for over an hour browsing other subjects on the web.

Another person came to me with a newspaper advertisement in hand, jabbing at the web page address with a friendly smile on his face. Within thirty seconds he was looking at the web page he was interested in.

A security guard from the Lakeforest Shopping Center popped in for a minute to visit. He couldn't stay for long, but was interested in coming back during his off hours.

An out-of-town scholarly looking person asked me if the computer he was using had telnet capability. Sure enough,

NCSA Telnet was loaded on the Mac he was using and in less than a minute he was merrily checking his email at Rutgers University, where he teaches. With family members in tow, he proceeded to explain to his relatives all about telnet, the Internet, and the web.

An individual walked into LLC, sat down at a Performa 5200, and courageously declared: "I've never used a computer in my life before. Can you help me to start at step one?" Although I was tempted to show him a thing or two on the web, I soon realized that he would be much better off if he first started with one of the interactive Performa tutorials.

Someone asked me if the web would be useful for looking for a new job. I felt obligated to explain that generally speaking the web is not a gigantic treasure trove of previously unannounced jobs. But if the person had special skills (especially in the technology field), then the web might very well pinpoint possible job leads.

I also had a chance to chat with one of the Montgomery County librarians who will be staffing LLC part-time. I talked with her about how essential it will be to involve volunteers at LLC to help fulfill the mission of this promising public access project. To help the LLC staff (and the public) learn more about Washington Apple Pi, I dropped off about a dozen copies of the Washington Apple Pi Journal (marked: "For Reference Use Only. Please Do Not Remove from LLC."), and two dozen WAP membership flyers.

Getting There: Lakeforest Library Connection is quite easily accessible by car or public transportation. By car, take exit 11 off I-270. The Lakeforest Library Connection is located at the lower level, north end of the shopping center.

By public transport, take the Red Line subway to Shady Grove. From there you can take any one of several Ride-On buses that pass by Lakeforest Shopping Center. (Specifically, the 55, 57, 58, 59, and 62 buses.) Ride-On info can be obtained by calling: (301) 217-RIDE. —P. Shapiro



GS Hints

By Luis Felipe de Melo Moura
(GSAUG of Brazil)

From Gravensteln Apple Users Group,
March '96, pp 10 & 11

BEING A HEAVY user is not easy; being a heavy user with a computer that hides most of its features is even worse. That's why I decided to write a few hints that I found out by myself and that may be extremely useful for those who find themselves in difficult situations...

1. Changing a filetype EASILY:

The GS/OS system 6.01 package contains an NDA called File Manager. This NDA is a small utilities program. Although it doesn't look so important, there's one option that is wonderful: the info option. This option allows you to change a filetype without any trouble! For those who are extremely used to editing blocks (like me), it's only more practical. But for those who don't like (or don't understand) block editing, it's a great tool! Here are some practical examples of how useful it could be:

- If you type a text in the Macintosh (ASCII format) and want to use it in your IIGS, you'll have trouble.

The Mac sometimes 'corrupts' the filetypes of the files, so that any file is recognized by the IIGS as 'Unknown' except for the folders. With this tool, you may change the filetype to ASCII text and it'll work fine! And all of this is done in a very friendly menu.

- One of the best features of the showme! NDA is the allowance to directly view a GIF file. However, this file must be in ASCII format.

But when you download some files from a BBS or an Internet site, they may be saved by your IIGS with a different filetype. Use the File Manager to fix them.

2. Stay Cool!

- It's not new (at least, I hope it isn't) to anyone that the Apple Color RGB monitor generates an excess of heat which can cause a serious focus problem. This is easily solved by

"The Mac sometimes 'corrupts' the filetypes of the files, so that any file is recognized by the IIGS as 'Unknown' except for the folders. With this tool, you may change the filetype to ASCII text and it'll work fine! And all of this is done in a very friendly menu."

putting a fan at the top IIGS and left of the monitor. But remember, the fan must remove air from the monitor, so do not direct the air stream TO the monitor, but FROM the monitor to the exterior. You'll see the big difference it'll make, especially if you live in an area that is extremely hot during the summer, like I do.

3. Saving memory and creating Alias

- I recently installed in my computer the most wonderful NDA I've ever seen: Desktop Utilities v3.3. First of all, it lets you add Inits, Fonts and Desk Accessories that were not loaded during the GS/OS boot! It also lets you remove Desk Accessories that were loaded during the boot. There are some nice features such as menu bar IIGS and ProDOS 8 clock, second apple menu, CDA menu (from the menu bar), second font menu, GS/OS and ProDOS 8 screen saver, and many others.

But the best options in these programs are, in my opinion, the QuickSwitch (which is a menu bar-based aliasing system just like in the Macintosh) and the Virtual Desk Accessories (VDAs). The VDAs are accessories that look and act like normal DAs, but give you many other options that make them really flexible. You may configure a VDA to:

1. Appear in the Apple menu/CDA menu but not be loaded to memory in order to gain space that was previously occupied unnecessarily.

2. Be preloaded entirely during the boot. There are also many other VDA options. It is difficult to explain how a VDA works but, for you to have an idea, I freed up half a Meg of my RAM without removing anything. I've installed all my DAs as VDAs and they're not loaded to memory until I access them. Isn't it wonderful?

3. Better Working Icons

If you're like me and like icons but hate the fact that they make the disk reading slower (when you insert a disk) and that they occupy more memory, you may use an icon editor that works with resources, such as ICE (the best I've ever seen), to help you solve this problem. Simply edit the finders resource (in the start or Finder file) icons and replace them. Your icons will be used as the standard Finder icons. You'll gain

speed and memory.

4. Anything but TEACH!!!

If you don't like the Teach file (who does?), which comes in the system package and don't want (or don't have) an NDA word processor in order to have the files loaded from the finder, follow these simple steps:

- Copy your favorite word processor program to your System disk.
- Delete the Teach file and rename the WP program as 'Teach'.

Now, every time a text document is opened, the GS/OS will call this program, instead of Teach.

5. Copying defective files

If you've ever tried to copy a defective file from the Finder, you know that it's impossible to do that. The best thing to do is, of course, to use a disk repair program or try to clean the disk. However, there are situations when the disks can't be recovered and we need to copy the files to somewhere else. Well, instead of the Finder, use the File Manager NDA. That's because it copies the files even if the disks are defective. Of course we can't guarantee that the files will be recovered, but, since nothing else is left, why not try?

6. Measuring the speed with Slixlaunch

The author of Slixlaunch, an init file that was distributed in a previous DOM Gravenstein User Group, says that it is nice, but useless. Well, he is wrong. If you own a Transwarp GS, this could be quite useful. The TW GS' default settings include an increase in the AppleTalk IRQ, which is good for those who use AppleTalk. However, it significantly decreases the processing speed. Although it gets slower, you'll hardly notice it—but it makes a great difference, especially when working

with graphics. It is true that you can easily change this option in the Control Panel menu, but, many times, when the computer is turned off, the Transwarp sets some options to default again. So, to know whether the Transwarp has done that or not, install the Slixlaunch in your system disk. When opening a file, if the Transwarp's AppleTalk IRQ is off, you'll notice a dramatic decrease in the launch effect speed, in relation to the one when the IRQ is off. This

"If you really want to become an expert, follow my advice; subscribe both to Shareware Solutions II and Softdisk GS. By doing that, you'll get to know your machine better than ever before."

means that, whenever your Transwarp resets your configuration, you'll know in time to change it back to normal.

7. Nasty dithering

Most users, when converting high-quality images to lower-resolution screens, use the pattern dithering option, because they think that the palette of the generated picture doesn't contain enough colors to support a closest match correspondence. But I tell you: unless you're dealing with photos, the closest match is almost always the best option. It's better to have a few colors a little bit changed than to lose (sic) resolution. And the dithering DOES make the picture loose resolution. So, whenever it's possible, try using the closest match option instead of the dithering. You'll get much better results, especially when generating GS/OS backgrounds.

8. Better grays

The majority of the converting software for the IIGS only give (sic) you the dithering or the closest match options when generating grayscale pictures. However, there is a kind of convention that's not so popular but is the best way to generate grayscale pictures and, with some images, the superior quality of those pictures is really amazing. I've only seen this option in Seven Hills' SuperConvert: I'm talking about the "Error diffusion" option. I won't describe to you how the process works, since only the results matter. But, believe me, once you've seen its quality, you'll have no doubts! As I haven't seen all of the converting programs available, I can't really tell you whether another program uses this option or not.

9. Becoming an expert

If you really want to become an expert, follow my advice; subscribe both to Shareware Solutions II and Softdisk GS. By doing that, you'll get to know your machine better than ever before. To be honest, I acquired a great deal of knowledge by reading the newsletter I subscribe (or used to). And remember, these newsletters are not only for experts or beginners, they focus on all sorts of possible areas. In order to get more information on the Shareware Solutions II newsletter contact Joe Kohn, 166 Alpine St., San Rafael, CA 94901-1008 or CIS: 76702,565 or GENie: JOE.KOHN. If you want more information on the Softdisk GS call (toll free) 1-800-831-2694. And remember, by subscribing, you're not only providing yourself and your computer with first class information, but you're also helping the Apple II market to continue to be healthy.

Well, hope you've enjoyed the hints. Till' next time!

Printed in the April 1996 issue of The Seed, newsletter of the Denver Apple Pi, Inc.



Errata

by Lorin Evans

IN THE April/May Journal, I wrote about creating an emergency start-up disk for the Apple IIGS equipped with a hard drive. I erred in my instructions on creating a disk for System 6.0 computers. And did I hear about it. John Engberg, a long time Apple II operator got to me first. Thanks to his testing, the rest of the folks who filled my e-mail box got an immediate correction.

Here are the amended instructions for creating a real working System 6.0.X start-up disk that were sent to those who wrote.

1. Make a copy of the System.Disk. Change the name of the copy to Emergency.Disk. Delete from it:

- Basic.System
- From within the System folder:
 - P8
 - from the CDev folder: all items
 - from the Desk.Accts folder: all items

— from the Drivers folder: AppleDisk 5.25

2. Find the SystemTools1 disk. Copy Adv.Disk.Util from it to the new Emergency.Disk. Leave it at the root level of the disk along with ProDOS, System.Folder, and Icons.

3. Find the Install disk. Open the System folder.

— Open the Drivers folder. Copy SCSI.Manager and SCSIHD.Driver to this folder on the Emergency.Disk. If you use either the InnerDrive or Vulcan Drive, add those drivers as well.

— Open the Fonts folder. Copy Fast.Font into the Fonts folder on the Emergency.Disk.

4. Close all folders.

5. Eject the disk, lock it and label it 'Emergency Start-up Disk' ■

New Apple IIGS Products

EGO Systems, the folks who brought the Apple II community the wonderful GS+ Magazine, have several new Apple IIGS items as well as a new catalog of Apple II and Macintosh products.

RICH TEXT FORMAT TRANSLATOR

For those who use GraphicWriter III, EGO has a new RTF Translator module for the Seven Hills Software page layout program.

"RTF" stands for "Rich Text Format." This is a file format specifically designed to allow formatted text information to be easily moved from one computer platform to another. So, using this translator, GraphicWriter III users can import RTF files created on ANY computer!

When you import an RTF file into GraphicWriter III, here's what the translator squeezes out of the file for you:

* **Font Information:** Typeface (Times, Helvetica, etc), size (10 point, 24 point, etc.) and style (bold, superscript, etc.) information is all preserved!

* **Text Colors:** Colored text in your RTF file is automatically given the best matching GraphicWriter III color!

* **Paragraph Justification:** Was that paragraph originally centered? Or was it right justified? No need to guess, the RTF Translator figures it out for you!

* **Paragraph Indentation:** Each paragraph's indentation is recreated in GraphicWriter III, relative to the columns in your page layout!

* **The Text:** Of course, all of the

above would be useless if the text itself wasn't imported!

And, the RTF Translator for GraphicWriter III doesn't just import RTF files, it exports them as well! This is a great way to share the text you create in GraphicWriter III with all those non-IIGS-owning computer users out there!

The RTF Translator for GraphicWriter III requires GraphicWriter III v1.1 or later (version 2.0 is recommended but NOT required). It comes on a single 3.5-inch disk and includes printed user's documentation. The price is \$24.95 which includes shipping to anywhere in the world!

ZIP IIGS ACCELERATORS

EGO has reached an agreement with REMCorp (the makers of the ZIP GS accelerator card) that means they are available at a new low price!

The new price for a ZIP GS 8MHz/16K cache accelerator is only \$174.95! If you own a IIGS, this is THE card to have. The Washington Apple Pi bulletin board runs 24 hours a day with IIGS and ZIP accelerators. They provide the speed you have been looking for at a very affordable price.

As always, this new price includes shipping to the USA, Canada, Mexico, and surface mail to the rest of the world.

AWGS TRANSLATOR FOR GW III

If you use AppleWorks GS (AWGS) as your text editor and GraphicWriter III for page layout, you know how hard it is to move formatted text into page layout. EGO had created an import-only translator for AWGS text. If you would be interested in such a translator (either import or import/export) give Diz a call.

NEW APPLE II/IIGS & MACINTOSH CATALOG

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Plastic orders, call: (800) 662-3634
Just want to chat: (423) 843-1775

(When sending a check or money order, Tennessee residents MUST add 7.75% sales tax.) ■

800k Drives for the Apple II Computer

by David Empson

APPLÉ PRODUCED two 800k disk drives for the Apple II family of computers: UniDrive and Apple 3.5 (model A9M0106). While they look somewhat alike, they are very different internally. Take a look.

Mechanical Differences

The two drives have the same drive mechanism, but a different interface board within the drive. The Apple 3.5 Drive has a simple board which re-routes signals as required. The UniDisk 3.5 has a small microcomputer, consisting of a 65C02, RAM, ROM and an IWM disk controller. It is possible to convert either drive to the other type by swapping this board.

The UniDisk can be used on any IIc, except one with the original ROM set [see sidebar to learn which ROM set is in your IIc]. It works with the IIc+, IIGS (with a UniDrive driver installed) or a IIe with an appropriate controller card (Apple 3.5 Floppy Disk Drive Interface Card, or Apple II 3.5 Disk Controller Card).

The disk hardware in the Apple 3.5 Drive is controlled directly by software running in the IIgs (the ProDOS/SmartPort firmware or the GS/OS driver). Raw data from the disk is sent over the cable, at 2 microseconds per bit (twice the speed of a 5.25" drive).

Working Differences

With a UniDisk 3.5, the ProDOS/SmartPort firmware or GS/OS driver sends command packets to the microprocessor in the drive, which is then responsible for doing the actual disk I/O. The data sent over the cable consists of command and data packets, and the only encoding required is to convert 8-bit bytes to 7-bit bytes (the IWM can only transfer 7-bit data), at 4 microseconds per bit. The drive does the "nibbilising" and "denibbilising" (conversion to and from the raw disk bytes), handling of sectoring, seeking, formatting, etc.

The UniDisk 3.5 is noticeably slower than an Apple 3.5 Drive: data takes about twice as long to transfer to and from the drive. The most significant effect of this is that a different interleave should be used for optimal performance.

An Apple 3.5 Drive is able to handle a 2:1 interleave, while a UniDisk 3.5 works best with 4:1. With the correct interleave, the UniDisk 3.5 will take twice as long as an Apple 3.5 Drive to read or write each track (assuming the Apple 3.5 Drive reads the track in sector order, which is not necessarily true—see below).

If you use a 4:1 interleave disk in an Apple 3.5 Drive, the transfer rate for write (and possibly for read) will be halved, because the drive will require four complete disk revolutions to write each sector, instead of two.

If you use a 2:1 interleave disk in a UniDisk 3.5, the transfer rate will be significantly slower: anything from four to eight times, because the UniDisk will require more disk revolutions to read or write each sector.

If you are using a ROM 3 IIGs, or GS/OS drivers, or a SuperDrive controller, then an Apple 3.5 drive is able to read data as fast as possible: the driver reads the complete track into memory, and then extracts each sector from the track image (rather than searching for each sector on the disk as it is requested).

Diversi-Cache uses the same technique to speed up disk accesses on a ROM 1. This doesn't apply to a write. It is not possible to do this with a UniDisk 3.5, because it doesn't have enough memory to dump an entire track.

Combining Drives

You can use them in combination with other daisy-chainable drives. Make sure the UniDisk 3.5



What Version IIC Do You Own?

There are four ROM revisions of the IIC, not counting the IIC+. You can find out which ROM is in your IIC by doing the following:

1. turn-on your IIC with no disk in the drive.
2. press and hold down two keys: <cntrl> and <reset>. Release both. You should now see a <|> in the lower left corner of your screen.
3. Type "PEEK(64447)" (without the quotes). A number will appear on the screen. If it is:

Version Description

- | | |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 255 | The original ROM. UniDisk 3.5 is not supported, and there is no self-test or mini-assembler. Drive 2 can be booted using PR#7. Mouse firmware is in slot 4. |
| 0 | The "UniDisk" ROM. UniDisk 3.5 is supported, and the self-test and mini-assembler are available. Slot 7 has rudimentary AppleTalk support (requires a non-existent external interface box). |
| 3 | The "Memory Expansion" ROM. The mouse firmware is in slot 7, and the memory expansion firmware in slot 4. |
| 4 | Bug fixes in the support for the memory expansion card. |

All ROM versions will work in all motherboard versions, but memory expansion support obviously requires the slot (under the keyboard) which was added in the last motherboard.

Installation of the Apple IIC Monitor ROM upgrade will make the IIC compatible with UniDisk 3.5 drives. The procedure requires a new Monitor ROM (available from Alltech Electronics) and two modifications to the motherboard.

(1) Find the two triangles marked W1 on the main logic board. Using an artist knife, cut through the juncture point of the two triangles. BE CAREFUL not to damage other parts or traces nearby.

(2) Find the two triangles marked W2 and solder them together using a low wattage soldering iron and a small drop of solder.

Except in very rare circumstances, if your IIC reports that it has ROM version 3 or 4, you almost certainly have the last motherboard version. If you have ROM version 255 or 0, you might have either of the first two ROM versions, depending on when your IIC was manufactured and whether the ROM was upgraded.

The only way to be sure of the motherboard version is to open up the IIC and look for distinguishing features. The memory expansion slot is under the keyboard, but telling the first two versions apart also requires taking out the disk drive and looking for a crystal in place of a chip on the motherboard at location C7.

[NOTE: The Monitor ROM chip to upgrade your IIC so that it can access a UniDisk 3.5 is available from Alltech Electronics, 2618 Temple Heights, Oceanside, CA 92056. Their telephone number is: (619) 724-2404. They also sell reconditioned UniDrives.]

comes AFTER any Apple 3.5 Drives on the chain, but BEFORE any 5.25" drives. If you are using GS/OS, you will also need the UniDisk3.5 driver installed on your System disk.

With The Macintosh

The UniDrive will not work with a Macintosh, unless it is converted to an Apple 3.5 Drive by replacing the interface board. The Apple 3.5 will. ■

David Empson is a founding member and current committee member of the Wellington Apple Users Group, of Wellington, New Zealand. He has been using and programming the Apple II since 1981. He writes computer programs for a living. He can be reached via E-Mail: dempson@actrix.gen.nz, or by snail mail: P.O. Box 27-103, Wellington, New Zealand.

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The Apple II and the World Wide Web

by Steve Cavanaugh
The Apple Blossom Magazine

WHILE THE Internet and the World Wide Web may seem to be the cutting edge of telecommunications (and they are!), they are not immune from invasion by Apple II users. Several Apple II companies and supporters have established web pages which can be viewed using Lynx. If you have a shell account on a Unix-based Internet server (such as at the University of Delaware) then you start up Lynx by typing Lynx at your \$ prompt. At that point you just type in a "G", then one of the web addresses below and press Return. You will soon be at a page that can be used for ftp, gopher, or hot links to other web pages. The Nova Scotia Apple Users Group page is particularly impressive. I think you will be in for a real treat when you see all of the resources that they have organized for you.

Sun Remarketing
<http://www.sunrem.com/>

Nova Scotia Apple Users Group
<http://www.cfn.cs.dal.ca/Technology/AppleUsersGroup/NSAUG.html>

Shareware Solutions II
<http://www.ericse.ohio-state.edu/SSII.html>

PowerGS Home Page
<http://herman.gem.valpo.edu:80/>

~arahimza/
Apple II Resources
<http://www.ugcs.caltech.edu/~nathan/apl2.resource.html>

DigiSoft Innovations
<http://hypermall.com/cgi-bin/ssis/digisoft/digisoft/>

Applebyters Computer Club
<http://www.cs.iastate.edu/~sbeattie/applebyters.html>

The Internex Online Apple II Library Home Page
<http://www.io.org/computers/apple2/>

Caltech Apple II Archive Page
<http://www.ccsf.caltech.edu/~dmz/a2archive.html>

Project Gutenberg
<http://www.etext.org/>

* NOTE that WAP is working on a Lynux connection for Apple II and // / users. Watch for more news in the future! ■

The Apple Blossom is a bimonthly newsletter reviewing new hardware and software for the Apple II computer. During its first year it was mailed free to an ever expanding group of Apple II users throughout the United States, Canada, Europe, and Asia. The newsletter is also available on Genie and America Online.

Using a Zip Drive with an Apple IIe

by Bryce Percival
b.percival@genie.com

I HAVE CONNECTED an Iomega Zip 100 drive (SCSI) to my Apple IIe. I have an Apple Hi Speed SCSI card in slot 5. The parameters of my machine are as follows: Enhanced Apple IIe, 1.5 Meg (AE Ramworks cards in Aux slot), Slots 1 & 2 have an Apple Super Serial card. Pseudo-Slot 3 has an 80-Column Card (AE Ramworks), Slot 4 a Grappler + Printer Card, Slot 6 has an Apple 3.5 Disk Controller Card. Slot 7 is used for power to a Memory Plus Distributors Hard (Disk) Card.

The Apple Hi Speed SCSI card in slot 5 has a SCSI ID of 7 and is connected to the Zip Drive. The Zip Drive is unterminated and has a SCSI ID of 5. The Zip Drive is connected to the MPD Hard Card which is terminated, has a SCSI ID of 6 and a Quantum GLS (2.5 inch) 127 meg hard drive mounted on it.

I did try the ZIP Drive by itself, as the only device connected to the Apple HS SCSI card. The ZIP Drive had a SCSI ID of 5 and the Termination switch on the ZIP Drive was switched on. The machine would not boot from the ZIP Drive. I did not pursue this alternative as I don't plan to use the ZIP Drive as a boot drive. I use the first partition of the Quantum Drive as my boot drive.

The Quantum 127 Meg. disk was formatted and partitioned into three (3) 32 Meg. and one (1) 26 Meg. drives with Apple SCSI Utilities. The drives are identified as being in pseudo slots 5-1, 5-2, 2-1, and 2-2.

I received the Zip Drive and 10-100 Meg disks from MacWarehouse. The Zip Drive came with a medium



size 120 VAC power cube, 1 SCSI (DB-25) cable, ZIP 100 disk with ZIP Tools on it (MAC Format), 2-3.5" floppy disks (1-MAC, 1-MS-DOS). I have not opened the ZIP "Specific" disks as I cannot use them on my machine. The 10-100 Meg ZIP disks are formatted for Macintosh and do not require formatting for Apple ProDOS 8. They do require partitioning for use with ProDOS 8. I used Apple SCSI Utilities to partition three (3) partitions of 32 Meg each. These drives are identified as being in pseudo slots 4-1, 4-2, 1-1. (When I made four (4) partitions pseudo slot 1-2 was added.) All the drives on the ZIP Disk are accessible by ProDOS when the machine is booted with a ZIP Disk in the ZIP Drive. Therefore, if you wish to use 3 or 4 partitions on a ZIP Disk, a disk with 3 or 4 partitions must be mounted in the ZIP Drive on bootup. Of course, you can always re-boot the machine. (Save your work.)

Some programs such as AppleWorks 5 and ProSel-8 Block.Warden could not list (see) all of the drives. (AppleWorks 5 is limited to displaying 9 drives.) But, all drives could be accessed with these programs by using a path name.

I found it interesting that I could use Block.Warden to read the first 32 Meg of the ZIP Disks as received from MacWarehouse.

It takes about 2 minutes, 20 seconds to copy (Copy II Plus, v9.1) my main HD partition to a ZIP Disk partition. Instead of swapping floppy disks I can go to bed and let the machine run.

I did a file transfer using a simple TXT file of 1129 ProDOS Blocks. The devices and times were:

| From Disk | To Disk | Time Min:Sec |
|------------|------------|--------------|
| RAM | Quantum-HD | 00:35 |
| RAM | ZIP-100 | 01:10 |
| Quantum-HD | Quantum-HD | 00:46 |
| Quantum-HD | ZIP-100 | 01:09 |
| ZIP-100 | Quantum-HD | 01:04 |
| ZIP-100 | ZIP-100 | 01:39 |

Apple Disketeria

GSAS-XX - Apple IIGS System Software

GSAS-01 - System 5.0.4 - 2 disk set

GSAS-02 - Hyper Mover v 1.1 (2 disk set (Mac/IIGS))

GSAS-03 - GS Bug and Debugging Tools

GSAS-04 - System 6.0.1 - 6 disk set

GSAS-05 - HyperCard GS v. 1.1 - 6 disk set

Disk #GSAS-01

GSAS-01 - System v 5.0.4 - 2 Disk Set

System Disk v 5.0.4 (first disk in two disk set) contains the software necessary to boot your computer into this version of GS/OS. While this disk doesn't contain all of the files that comprise a full system 5.0.4 System Disk, it should allow you to run most of the applications that are now available. System Tools v 5.0.4 (second disk in two disk set) contains the Installer, Advanced Disk Utility and the rest of the files that comprise System 5.0.4.

The Installer application is a program for updating GS/OS disks

and AppleShare volumes. This application allows you to add additional System 5.0.4 files to your boot disk. The following options are available:

- A.C.E. ToolSet
- Additional Fonts
- Advanced Disk Utility
- Apple Disk 5.25
- Apple Midi
- AppleShare
- AppleShare on 3.5 Disk
- AppleTalk ImageWriter
- AppleTalk ImageWriter LQ
- Aristotle Update
- Card 6850 MIDI
- CD-ROM
- Direct-Connect ImageWriter
- Direct-Connect ImageWriter LQ
- Epson Printer
- LaserWriter
- Latest Sys. Files (No Finder)
- Latest System Files
- Local Network Startup
- Network Printer Namer
- SCSI Hard Disk
- Server Network Startup
- Server Quick Logoff
- UniDisk 3.5
- VideoMix



The Advanced Disk Utility allows you to perform the following functions:

- Zero Volume
- Initialize
- Get Info
- Erase
- Partition

This application will be of use to those GS owners who possess Hard Drives.

These release notes list some of the changes made from version 5.0.2 to 5.0.4 of the Apple IIGS System Software.

When in the Volumes list for "Get" dialogs you can now select a member in the list by using key-strokes.

Fixed bug where multiple volumes could be selected in "Multi" dialogs. You can now only select one volume at a time when in the "volumes" list.

Folders on AppleShare volumes that you do not have enough access privileges to are now displayed grayed out.

When a disk is inserted that GS/OS cannot recognize an alert is put up and the disk is ejected when the user selects OK.

Disk switch events are now being monitored. A disk insert event now causes that disk's list of files to be displayed in the file list. A disk eject, if it is the currently displayed volume will cause the next volume's list of files to be displayed in the file list.

ACE v1.2 (Tool029) has been re-written to improve performance.

SCSI.Manager (5.0.4): Known bug: The SCSI Manager asks peripherals to return 256 bytes of status into an 8-byte buffer in the middle of the code. Most hard disks only return 8 bytes, but some peripherals return more, overwriting some Manager

code and crashing during boot. This is not fixed in 5.0.4.

Designed to support both the old and the new SCSI cards. Modified to add support for the 1 meg transfer rate required by the new card.

ProDOS 8 Version 1.9: ProDOS 8 doesn't handle seedling sparse files correctly.

P8 had problems displaying the "program too large" message. This has been fixed.

P8 could not load large system programs. When checking the size of the .SYSTEM program to be loaded at boot time, the code was comparing the second byte of the file's EOF to a constant \$98. This limited the size of the program to 38K, when it could actually be 39.75K without interfering with ProDOS. The constant value has been changed to \$9F.

A second version of the Quit call handler has been added to the operating system. The new Quit code lets the user select the next application interactively instead of remembering and typing its pathname.

The new quit code is only used on an 80-column Apple IIe or later when ProDOS 8 is booted directly (not when you have booted GS/OS). The original version of the quit code is automatically used on machines that don't have the necessary hardware to support the new code.

Disk #GSAS-02

GSAS-02 - Hyper Mover v 1.1 (Mac & IIGS) - 2 Disk Set

HyperMover 1.1 — HyperCard stack Conversion (Mac - GS)
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HyperMover

HyperMover is a powerful tool facilitating the conversion of HyperCard stacks between

Macintosh 'HyperCard' and Apple IIGS 'HyperCard IIGS.HyperMover should greatly ease the effort and accelerate the time needed to convert stacks between the Mac and the IIGS.

Important!!!

Please note that the functionality of HyperMover does not imply authorization to use HyperMover to dismantle commercial stacks from one hardware platform and turn them into salable stacks for the other platform. Copyrights must be respected.

HyperMover Background

Because of the differences between the Macintosh and the Apple IIGS, stacks created on one computer will not run directly on the other. HyperMover consists of two stacks. One HyperMover stack runs on HyperCard 1.2.5 or later. This stack will be referred to as "Macintosh HyperMover." The other stack runs on HyperCard IIGS and will be referred to as "HyperMover IIGS." Both HyperMover stacks are capable of dismantling HyperCard stacks, creating a folder containing information which the other HyperMover stack can use to rebuild an equivalent stack for use on the other computer.

Using HyperMover typically consists of these steps:

- (1) Decide on a stack to convert.
- (2) Launch HyperCard and open the HyperMover stack.
- (3) Select options for picture, icon, sound and cursor conversions.
- (4) Begin the dismantling process.
- (5) Transfer the intermediate folder HyperMover created to the other computer via Apple File Exchange



or an AppleTalk network.

(6) Launch HyperCard on the destination computer & open the HyperMover stack.

(7) Rebuild the stack.

Macintosh Hardware Requirements

• CPU Requirements

HyperMover will work with all Macintosh models capable of running HyperCard.

• Memory requirements

HyperMover may require up to two megabytes of RAM to dismantle or rebuild stacks. If you are running HyperCard under MultiFinder, allocate at least 1600K to HyperCard. Large stacks with many objects or sounds may require more memory.

• Disk Space Requirements

HyperMover creates the folder containing the parts of the dismantled stack in the same directory as the original stack. This means that you must have approximately one-and-a-half times the size of the original stack free on your disk to successfully dismantle it.

Macintosh Software Requirements

• HyperCard Requirements

HyperMover Macintosh will work with HyperCard 1.2.5 or with HyperCard 2.0v2 or later.

• System Software Requirements

HyperMover will work with all system software supported by these HyperCard versions.

IIGS Hardware Requirements

• CPU Requirements

HyperMover IIGS works with all IIGS models.

• Memory requirements

HyperMover IIGS may be able to dismantle small stacks with 1.5 megabytes of memory. However, two megabytes of memory are highly recommended.

• Disk Space Requirements

HyperMover IIGS creates the folder containing the parts of the dismantled stack in the same directory as the original stack. You must have approximately one-and-a-half times the size of the original stack free on your disk to successfully dismantle it.

In general, Macintosh stacks rebuilt on the IIGS will be slightly larger than the original stack, because HyperCard IIGS supports color paint which takes up more disk space.

IIGS Software Requirements

• HyperCard IIGS Requirements

HyperMover IIGS will work with HyperCard IIGS 1.0 or later.

• System Software Requirements

HyperMover IIGS works with all system software supported by HyperCard IIGS. (5.0.4. or later)

Getting Started with HyperMover

HyperMover contains options which can help you convert stacks. These options control:

a) how graphics and objects are scaled and

b) whether graphics and sounds will be converted.

HyperMover Macintosh has additional options for the conversion of cursors and icons.

Dismantling Your First Stack

For your first try at converting a

stack, choose a relatively simple stack.

Before starting, make sure you have approximately one-and-a-half times the size of the stack to be converted free on the drive that contains that stack.

• Launch HyperCard and Open HyperMover.

• Click Dismantle Stack

You will go to the Dismantle Options card. Leave the options in their default positions for now and click the Dismantle a Stack button. Choose the stack to be dismantled from the resulting dialog box. HyperMover will now go to that stack and begin the dismantling process. You will see HyperMover visit each card of the stack in succession, then return to the HyperMover options card. A dialog box appears and a sound plays, announcing that the stack has been dismantled.

NOTE >> If HyperMover does not return to the options card or an error dialog box is displayed, see the trouble-shooting section of this document. Dismantling a stack can take quite a while on large stacks, expect approximately one minute per card depending on the complexity of the card and the speed of your computer.

• Transfer the Files

After dismantling the stack, you must transfer the files HyperMover created.

This can be done either with Apple File Exchange or an AppleTalk network. If you use a network, both the Macintosh and the IIGS must be physically connected and logged on to a common server. Simply drag the folder that HyperMover created on one computer to a location on the server that you can also access from the other computer.



If you use Apple File Exchange, you must format as many disks as needed to contain the converted files. After formatting the necessary number of disks, use Apple File Exchange to transfer the folder containing the converted files. The files can be transferred in two or more groups if the contents of the folder total more than 800K and are combined into one folder. (When converting from Macintosh to IIGS, the text file with the same name as the dismantled stack may not be a legal ProDOS filename. If this is the case, simply rename the file to a legal filename. Do not rename any of the other files in the folder.)

- Launch HyperCard on the second computer and open HyperMover. (When using HyperMover IIGS, make sure you have slightly more space free on your hard disk than the size of the original Macintosh stack before launching HyperCard IIGS.)

- Click Rebuild Stack. You will go to the Rebuild Options card. Leave the options in their default positions for now and click the Rebuild a Stack button.

Select the text file within the folder HyperMover created with the name of the dismantled stack with ".t" appended.

HyperMover will next display a dialog box prompting you for a file name and location for the rebuilt stack. Choose a location that has enough space for the rebuilt stack. The default file name should be renamed if it is not a valid file name for the file system you are storing the rebuilt stack on.

HyperMover will now create the new stack and begin rebuilding buttons, fields, pictures, scripts, cursors, icons, text and sounds in the new stack. This process can take some time, usually several minutes

per card depending on the complexity of the original stack.

After rebuilding the stack, HyperMover will return to the options card, display a dialog box, and play a sound indicating the stack was rebuilt successfully. See the troubleshooting section of this document for help if this didn't happen for your stack.

Differences between Converted Stacks

Because the Apple IIGS and Macintosh differ significantly in hardware, some aspects of a converted stack will not be identical to the original. HyperMover will pre-scan the original stack and warn the user of features that will not be converted, such as XCMDs and XFCNs.

- Graphics

The most noticeable difference between the original and the rebuilt stack will be in the graphics. The IIGS and the Macintosh have different screen sizes (320x200, 4-bits per pixel and 512x342, 1-bit per pixel). Therefore, graphics moved between the two machines need to be modified to fit and display properly. This is handled by HyperMover in several ways.

- 1) Macintosh graphics to the IIGS. HyperMover contains two algorithms for scaling graphics from Macintosh to IIGS screen resolution. The first routine is best used for line-art types of graphics. The second is preferable for heavily dithered graphics such as those created with HyperScan.

- 2) IIGS graphics to the Macintosh. Moving graphics this direction involves reducing the number of colors available per pixel from sixteen (IIGS) to black-and-white (Macintosh). At the same time, however, the picture must be scaled up

from 320x200 to 512x342. This results in more pixels being available to simulate the colors lost during dithering.

- Screen Coordinates

Just as pictures must be scaled to fit the destination card size, buttons and fields must also be scaled so that they appear in the correct locations on the destination card. However, buttons and fields are objects and they may be scaled with no distortion.

- Scripts

Scripts converted from one machine to another will require modification to function properly if they rely on specific screen coordinates. Because of the differing screen sizes, these scripts will need to be modified by the user.

Scripts that rely on features specific to one machine, such as the color properties of HyperCard IIGS or specific commands in HyperCard 2.0, will also need to be modified by the user to work correctly.

- Animation Sequences

Animation sequences that use system icons and refer to them by ID will need to be modified after the stack is converted.

- Machine Specific Properties

Properties specific to HyperCard IIGS, such as button families and sharedText on the IIGS will not be preserved in stacks converted to HyperCard 1.2.5. Conversion of HyperCard IIGS to HyperCard 2.0 will retain those properties that are common to HyperCard 2.0 and HyperCard IIGS.

Similarly varying card sizes in HyperCard 2.0 will not be preserved in stacks converted to HyperCard IIGS.

to be continued in Sept./Oct. Journal



Apple // Disk Order Form

APPLE II - 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

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

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
__2 disk set = \$3.00

__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
__EDUC-12
__EDUC-13
__EDUC-14
__EDUC-15
__EDUC-16
__EDUC-17
__EDUC-18
__EDUC-19
__EDUC-20

Forth
__3 disk set = \$4.50

__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

Internet
__15 disk set = \$22.50
__INTE-01
__INTE-02
__INTE-03

__INTE-04
__INTE-05
__INTE-06
__INTE-07
__INTE-08
__INTE-09
__INTE-10
__INTE-11
__INTE-12
__INTE-13
__INTE-14
__INTE-15

Logo
__2 disk set = \$3.00
__LOGO-01
__LOGO-02

Miscellaneous
__25 disk set = \$37.50

__MISC-01
__MISC-02
__MISC-03
__MISC-04
__MISC-05
__MISC-06
__MISC-07
__MISC-08
__MISC-09
__MISC-10
__MISC-11
__MISC-12
__MISC-13
__MISC-14
__MISC-15
__MISC-16
__MISC-17
__MISC-18
__MISC-19
__MISC-20
__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

__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
__UTIL-14
__UTIL-15
__UTIL-16
__UTIL-17
__UTIL-18
__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

Apple //gs Disk 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

- ___ 2 disk set = \$5
- ___ GSDC-01L
- ___ GSDC-02L

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
- ___ GSFT-12
- ___ GSFT-13
- ___ GSFT-14
- ___ GSFT-15
- ___ GSFT-16
- ___ GSFT-17
- ___ GSFT-18
- ___ GSFT-19
- ___ GSFT-20
- ___ GSFT-21
- ___ GSFT-22
- ___ GSFT-23
- ___ GSFT-24
- ___ GSFT-25
- ___ GSFT-26
- ___ GSFT-27

Fonts - TrueType

- ___ 30 disk set=\$90
- ___ GSTT-01
- ___ GSTT-02
- ___ GSTT-03
- ___ GSTT-04
- ___ GSTT-05
- ___ GSTT-06
- ___ GSTT-07
- ___ GSTT-08
- ___ GSTT-09
- ___ GSTT-10
- ___ GSTT-11
- ___ GSTT-12
- ___ GSTT-13
- ___ GSTT-14
- ___ GSTT-15
- ___ GSTT-16
- ___ GSTT-17
- ___ GSTT-18
- ___ GSTT-19
- ___ GSTT-20
- ___ GSTT-21
- ___ GSTT-22

- ___ GSTT-23
- ___ GSTT-24
- ___ GSTT-25
- ___ GSTT-26
- ___ GSTT-27
- ___ GSTT-28
- ___ 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
- ___ GSGM-10
- ___ GSGM-11
- ___ GSGM-12A
- ___ GSGM-13
- ___ GSGM-14
- ___ GSGM-15
- ___ GSGM-16
- ___ GSGM-17A
- ___ GSGM-18A
- ___ GSGM-19A
- ___ GSGM-20
- ___ GSGM-21
- ___ GSGM-22
- ___ GSGM-23A
- ___ GSGM-24B
- ___ GSGM-25B
- ___ GSGM-26A
- ___ GSGM-27
- ___ GSGM-28
- ___ GSGM-29
- ___ GSGM-30
- ___ GSGM-31
- ___ GSGM-32
- ___ GSGM-33
- ___ GSGM-34
- ___ GSGM-35A
- ___ GSGM-36
- ___ GSGM-37A
- ___ GSGM-38
- ___ GSGM-39
- ___ GSGM-40
- ___ GSGM-41
- ___ GSGM-42A
- ___ GSGM-43
- ___ GSGM-44
- ___ GSGM-45
- ___ GSGM-46
- ___ GSGM-47
- ___ GSGM-48

- ___ GSGM-49
- ___ GSGM-50
- ___ GSGM-51
- ___ GSGM-52
- ___ GSGM-53
- ___ GSGM-54
- ___ GSGM-55
- ___ GSGM-56
- ___ GSGM-57
- ___ 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
- ___ GSGX-11
- ___ GSGX-12
- ___ GSGX-13A
- ___ GSGX-14
- ___ GSGX-15
- ___ GSGX-16
- ___ GSGX-17
- ___ GSGX-18
- ___ GSGX-19
- ___ GSGX-20
- ___ GSGX-21C
- ___ GSGX-22B
- ___ GSGX-23
- ___ GSGX-24
- ___ GSGX-25
- ___ GSGX-26
- ___ GSGX-27
- ___ GSGX-28A
- ___ GSGX-29
- ___ GSGX-30
- ___ GSGX-31A
- ___ GSGX-32A
- ___ GSGX-33
- ___ GSGX-34
- ___ GSGX-35
- ___ GSGX-36
- ___ GSGX-37
- ___ GSGX-38
- ___ GSGX-39
- ___ GSGX-40

- ___ GSGX-41
- ___ GSGX-42
- ___ GSGX-43
- ___ GSGX-44
- ___ GSGX-45
- ___ GSGX-46
- ___ GSGX-47
- ___ GSGX-48
- ___ GSGX-49
- ___ GSGX-50
- ___ GSGX-51
- ___ GSGX-52
- ___ GSGX-53
- ___ GSGX-54
- ___ GSGX-55
- ___ GSGX-56
- ___ GSGX-57
- ___ GSGX-58
- ___ GSGX-59
- ___ GSGX-60
- ___ GSGX-61
- ___ GSGX-62
- ___ GSGX-63
- ___ GSGX-64
- ___ GSGX-65
- ___ 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
- ___ 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
- ___ GSHS-13
- ___ GSHS-14
- ___ GSHS-15
- ___ GSHS-16



Apple //gs Disk Order Form

- ___ GSHS-17
- ___ GSHS-18
- ___ GSHS-19
- ___ GSHS-20
- ___ GSHS-21A
- ___ GSHS-22
- ___ GSHS-23
- ___ GSHS-24
- ___ GSHS-25
- ___ GSHS-26
- ___ GSHS-27
- ___ GSHS-28
- ___ GSHS-29
- ___ GSHS-30
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- ___ GSHS-36
- ___ GSHS-37
- ___ GSHS-38
- ___ GSHS-39
- ___ GSHS-40
- ___ GSHS-41
- ___ GSHS-42
- ___ GSHS-43
- ___ GSHS-44
- ___ GSHS-45
- ___ GSHS-46
- ___ GSHS-47
- ___ GSHS-48
- ___ GSHS-49
- ___ GSHS-50
- ___ GSHS-51
- ___ GSHS-52
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- ___ GSHS-57
- ___ GSHS-58
- ___ GSHS-59
- ___ GSHS-60
- ___ GSHS-61
- ___ GSHS-62
- ___ GSHS-63
- ___ GSHS-64
- ___ GSHS-65
- ___ GSHS-66
- ___ GSHS-67
- ___ GSHS-68
- ___ GSHS-69
- ___ GSHS-70
- ___ GSHS-71
- ___ GSHS-72
- ___ GSHS-73
- ___ GSHS-74
- ___ 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
- Internet**
- ___ 8 disk set =\$24
- ___ GSIN-01
- ___ GSIN-02
- ___ GSIN-03
- ___ GSIN-04
- ___ GSIN-05
- ___ GSIN-06
- ___ GSIN-07
- ___ GSIN-08
- 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
- ___ GSMU-12
- ___ GSMU-13C
- ___ GSMU-14
- ___ 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
- ___ GSMU-29A
- ___ GSMU-30A
- ___ GSMU-31A
- ___ GSMU-32A
- ___ GSMU-33A
- ___ GSMU-34A
- ___ GSMU-35A
- ___ GSMU-36A
- ___ GSMU-37A
- ___ GSMU-38A
- ___ GSMU-39A
- ___ GSMU-40A
- ___ GSMU-41A
- ___ GSMU-42
- ___ GSMU-43A
- ___ GSMU-44A
- ___ GSMU-45
- ___ GSMU-46
- ___ GSMU-47
- ___ GSMU-48
- ___ GSMU-49
- ___ GSMU-50
- ___ GSMU-51
- ___ GSMU-52A
- ___ GSMU-53A
- ___ GSMU-54A
- ___ GSMU-55A
- ___ GSMU-56A
- ___ GSMU-57A
- ___ GSMU-58A
- ___ GSMU-59
- ___ GSMU-60
- ___ GSMU-61
- ___ GSMU-62
- ___ GSMU-63A
- ___ GSMU-64
- ___ GSMU-65
- ___ GSMU-66
- ___ GSMU-67
- ___ GSMU-68
- ___ GSMU-69
- ___ GSMU-70
- ___ GSMU-71
- ___ GSMU-72
- ___ GSMU-73
- ___ GSMU-74
- ___ GSMU-75A
- ___ GSMU-76
- ___ GSMU-77
- ___ GSMU-78
- ___ GSMU-79
- ___ GSMU-80
- ___ GSMU-81
- ___ 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
- ___ GSSN-25
- ___ GSSN-26
- ___ GSSN-27
- ___ GSSN-28
- ___ 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 Commu-
nications**
- ___ 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 /// Disk Order Form



5-1/4" DISKS:

Accounting

___ 3 disk set =
\$4.50
___ 3ACT-01
___ 3ACT-02
___ 3ACT-03

Apple Software

___ 3 disk set =
\$4.50
___ 3APL-01
___ 3APL-02
___ 3APL-03

AppleWorks/3

Easy Pieces

___ 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-12
___ 3AWZ-13
___ 3AWZ-14
___ 3AWZ-15

Bloom Programs

___ 27 disk set =
40.50

___ 3BLM-01
___ 3BLM-02
___ 3BLM-03
___ 3BLM-04
___ 3BLM-05
___ 3BLM-06
___ 3BLM-07
___ 3BLM-08
___ 3BLM-09
___ 3BLM-10
___ 3BLM-11
___ 3BLM-12
___ 3BLM-13
___ 3BLM-14
___ 3BLM-15
___ 3BLM-16
___ 3BLM-17
___ 3BLM-18
___ 3BLM-19
___ 3BLM-20
___ 3BLM-21
___ 3BLM-22
___ 3BLM-23
___ 3BLM-24
___ 3BLM-25
___ 3BLM-26
___ 3BLM-27

Business Basic

___ 20 disk set =

\$30.00

___ 3BSB-01
___ 3BSB-02
___ 3BSB-03
___ 3BSB-04
___ 3BSB-05
___ 3BSB-06
___ 3BSB-07
___ 3BSB-08
___ 3BSB-09
___ 3BSB-10
___ 3BSB-11
___ 3BSB-12
___ 3BSB-13
___ 3BSB-14
___ 3BSB-15
___ 3BSB-16
___ 3BSB-17
___ 3BSB-18
___ 3BSB-19
___ 3BSB-20

Disk Catalog (ASCII TEXT)

___ 4 disk set =

\$4 or \$1 per disk

___ 3CAT-01 -
Disk 1
___ 3CAT-02 -
Disk 2
___ 3CAT-03 -
Disk 3
___ 3CAT-04 -
Disk 4

Disk Catalog (3 EZPC's)

___ 3 disk set =

\$3 or \$1 per disk

___ 3CAT-05 -
Disk 1
___ 3CAT-06 -
Disk 2
___ 3CAT-07 -
Disk 3

DA -

Datatypes

___ 11 disk set =

\$16.50

___ 3DAD-01
___ 3DAD-02
___ 3DAD-03
___ 3DAD-04
___ 3DAD-05
___ 3DAD-06
___ 3DAD-07
___ 3DAD-08
___ 3DAD-09
___ 3DAD-10
___ 3DAD-11

Emmulation

___ 9 disk set =

\$13.50

___ 3EMM-01
___ 3EMM-02
___ 3EMM-03
___ 3EMM-04
___ 3EMM-05
___ 3EMM-06
___ 3EMM-07
___ 3EMM-08
___ 3EMM-09

Fonts

___ 6 disk set =

\$9.00

___ 3FNT-01
___ 3FNT-02
___ 3FNT-03
___ 3FNT-04
___ 3FNT-05
___ 3FNT-06

Games

___ 6 disk set =

\$9.00

___ 3GAM-01
___ 3GAM-02
___ 3GAM-03
___ 3GAM-04
___ 3GAM-05
___ 3GAM-06

Graphics

___ 35 disk set =

\$52.50

___ 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
___ 3GRX-17
___ 3GRX-18
___ 3GRX-19
___ 3GRX-20
___ 3GRX-21
___ 3GRX-22
___ 3GRX-23
___ 3GRX-24
___ 3GRX-25
___ 3GRX-26
___ 3GRX-27
___ 3GRX-28
___ 3GRX-29
___ 3GRX-30
___ 3GRX-31
___ 3GRX-32

___ 3GRX-33
___ 3GRX-34
___ 3GRX-35

Information

___ 15 disk set =
\$22.50

___ 3INF-01
___ 3INF-02
___ 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

Internet

___ 15 disk set =
\$22.50

___ 3INT-01
___ 3INT-02
___ 3INT-03
___ 3INT-04
___ 3INT-05
___ 3INT-06
___ 3INT-07
___ 3INT-08
___ 3INT-09
___ 3INT-10
___ 3INT-11
___ 3INT-12
___ 3INT-13
___ 3INT-14
___ 3INT-15

Miscellaneous

___ 12 disk set =
\$18.00

___ 3MSC-01
___ 3MSC-02
___ 3MSC-03
___ 3MSC-04
___ 3MSC-05
___ 3MSC-06
___ 3MSC-07
___ 3MSC-08
___ 3MSC-09
___ 3MSC-10
___ 3MSC-11
___ 3MSC-12

Pair Software

___ 2 disk set =
\$3.00

___ 3PAR-01
___ 3PAR-02

Pascal

___ 20 disk set =
\$30

___ 3PCL-01
___ 3PCL-02
___ 3PCL-03
___ 3PCL-04
___ 3PCL-05
___ 3PCL-06
___ 3PCL-07
___ 3PCL-08
___ 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

___ 12 disk set =
\$18.00

___ 3REP-01
___ 3REP-02
___ 3REP-03
___ 3REP-04
___ 3REP-05
___ 3REP-06
___ 3REP-07
___ 3REP-08
___ 3REP-09
___ 3REP-10
___ 3REP-11
___ 3REP-12

Shareware

___ 9 disk set =
\$13.50

___ 3SHR-01
___ 3SHR-02
___ 3SHR-03
___ 3SHR-04
___ 3SHR-05
___ 3SHR-06
___ 3SHR-07
___ 3SHR-08
___ 3SHR-09

Source Code

___ 3 disk set =
\$4.50

___ 3SRC-01
___ 3SRC-02
___ 3SRC-03

System Software

___ 7 disk set =
\$10.50

___ 3SYS-01
___ 3SYS-02
___ 3SYS-03
___ 3SYS-04
___ 3SYS-05

___ 3SYS-06
___ 3SYS-07

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

___ 6 disk set =
\$9.00

___ 3UTL-01
___ 3UTL-02
___ 3UTL-03
___ 3UTL-04
___ 3UTL-05
___ 3UTL-06

WAP Articles

___ 10 disk set =
\$15.00

___ 3WAP-01
___ 3WAP-02
___ 3WAP-03
___ 3WAP-04
___ 3WAP-05
___ 3WAP-06
___ 3WAP-07
___ 3WAP-08
___ 3WAP-09
___ 3WAP-10

Word Processing

___ 8 disk set =
\$12.00

___ 3WDP-01
___ 3WDP-02
___ 3WDP-03
___ 3WDP-04
___ 3WDP-05
___ 3WDP-06
___ 3WDP-07
___ 3WDP-08

Note: Some disks may contain Shareware. Please remit to the author of the program the requested amount if you use that program.



Macintosh Disketeria

by Dave Weikert

New Disks

WE FEATURE eleven disks this month including an update of the Disketeria Catalog, additions to the Education Series and an update of the Troubleshooting Tools series. Single disks are available for \$4.00 each and quantity purchases are priced at \$3.50 for five or more. See the Disk Order Form and following paragraphs for the prices for sets not otherwise listed herein.

Disketeria Catalog Update

Our Disketeria Catalog—in Easy View viewer format—permits fast browsing of the contents of our Disketeria collection. You can search for specific file names or disk numbers. The three Easy View windows make it easy to see the overall organization of the Disketeria collection as well as see the detailed descriptions of the contents of each folder or archive. The catalog disk costs \$4; you can trade in an older version of the Disketeria Catalog disk for the current version for \$1 (plus postage if by mail).

Education Series

Grace Gallagher follows last month's Teacher Tools disk with three sets of disks for the students. This set of shareware and Program Notes was specially assembled for the NOVA Tec 96 conference. Each program in this collection is indicative of the wide variety of new, high quality software available for the classroom through shareware. Three disk sets are provided: **Fun**

with Math, a two disk set for \$8; **Language Arts**, a three disk set for \$10; and **Out to Think**, a three disk set, also for \$10. All disks in the set are 1.44 MB. In addition, we repeat the description of the Teacher Tools disk that Grace updated last month.

All three sets of disk are available for \$20. As a special inducement for purchase of the three sets, we will throw in the Roger Wagner's HyperStudio Preview CD ROM. This CD contains a fully functional version of HyperStudio that permits you to create an unlimited number of four card projects. The CD also includes over 100 MB of sample projects and a tutorial.

Troubleshooting Series

The entire System Utilities Series was revised this month. There are now two disks in the series designated 20.XXB. The first disk contains 'essential' programs that may assist you in troubleshooting your Mac. The second disk includes some additional troubleshooting 'goodies' that you may find useful to complement the essentials.

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 # 3.01 TOOLS FOR TEACHERS

Award Maker 1.02e: By Steve Bandit. An award certificate creator. The program is fairly intuitive. Most menus and tools are pretty standard Mac items. There is on-line help under the Apple Menu.

Chiron 2.4: By Rob Cummings. The problem reference for your Mac. Get help with Sad Mac faces, System Error Codes, and tips on how to avoid a crash. Freeware

Color Simple Text 2.1: by Allesandro Levi Montalcini. Freeware

CWAdmin: By Berta Cardoza Middle School. Includes five ClarisWorks databases that are designed to increase the productivity of public school administrators and their staff. They require ClarisWorks 2.0 or newer. **Shareware - \$50.**

Desk Planner 3.5: by John Barber. A program that allows teachers to keep lesson plans electronically. Information is entered by clicking in the appropriate space and typing when the cursor appears. **Shareware - \$10.**

Disk Copy: By Steve Christenson; Apple Computer, Inc. It can duplicate all Macintosh floppy disk formats, Apple II ProDOS, and 1 and 2 meg MS-DOS disks. You can also use it to create disk images of operating system software when the original is on a CD-ROM or from an on-line service.

Disk First Aid 7.2: By Apple Computer, Inc. a utility to verify or repair the directory structure of any Mac (HFS) disk or hard drive. It gives you a chance to rescue student work on a sick disk, etc.

Fast Formatter 3.0: By Beyond, Inc. A disk-initializing utility. Set the disk name once and format a whole box of disks, with the least amount of hassles. It will also alert you if you insert a disk that is already initialized, locked or has problems.

Font Clerk 4.1: By Robert Chandler. An easy way to see what a font looks like so you have an idea of how it will look in your text. **Shareware - \$10.**

MacGradeBook: By Lawrence Goerzen. A grade book program for teachers. It keeps track of students, assignments, and marks. It generates report cards, class lists, etc. **Shareware - \$15.**



Matt Paint 1.9.2: By Matt Battey. A neat small color paint program.

Quill 2.0: By Sergio Villone. You can display text and pictures from documents generated by a word processor program you don't own or from documents that are somewhat corrupted and won't otherwise open. It can be installed as either a desk accessory or an application. *Postcardware.*

Quizzer 2.0: By T. J. Compucon. A combination review program, Jeopardy game, dictionary/thesaurus and more. *Shareware - \$20.*

Screen Capture Utilities: A utility to capture the screen of your Mac so that you can use the resulting picture. A good one allows you to capture all or a portion of the monitor screen and save it to the Clipboard. You can then paste it into a document, save it on your hard drive or print it. We have included two of these on this disk: PICTify and Flash-It.

PICTify 1.5.1: By Scott Johnson. Simple to master and use.

Flash-It 3.0.2: by Nobu Toge. A full featured, a bit more to learn to master fully. *Shareware - \$15.*

Test Tools 1.5: By Ryan Koopmans. A pair of programs that makes it easier to give and grade tests, whether they be multiple choice, fill-in, true/false, essay or matching, or any combination of these. Tests created with Test Tools can either be printed out or given directly on the screen. Test Tools also lets you add pictures and sounds to your tests.

Twilite 7.2.1: By R. J. Lukassen. A nice little screensaver, if you feel you need one. *Postcardware.*

Vocabulary Quiz 1.4: By Mike Gleason. You can choose from one of seven built-in tests, 14 SAT style tests, or create your own quizzes. Instructions are found at the front of the create option. *Shareware - \$1.*

Vocabulary Quiz does just that. You can choose from one of seven built-in tests, 14 SAT style tests, or create your own quizzes. Instructions are found at the front of the create option. *Shareware - \$1.*

MAC DISK # 3.03-1 FUN WITH MATH 1

MacPuzzle: By Bill McQuitty. It works just like a real jigsaw puzzle

For each puzzle, you will be given a number of puzzle pieces which must be placed into a puzzle outline. In order to complete a puzzle, the entire puzzle outline must be filled without any overlap of puzzle pieces.

Short Circuit: By Carl Cimsico. An action puzzle game where quick thinking is a must. The goal is to clear the board of all tiles within the allotted time. There are a total of 33 levels, divided into nine different worlds. Each world has a different operating characteristic. *Shareware - \$10.*

Be Fruitful & Multiply: By Robert Schenk. Program is designed both to drill in multiplication and to show the logic of multiplication. *Shareware - \$5.*

Quick Turtle: By Alder Ellis. A computer graphics application whose primary feature is a simple scripting language in which you can write short programs that generate drawings. These few commands can produce a great variety of designs when framed in the basic structures of a computer programming language. *Shareware - \$10.*

ScreenRuler: By Jesse Carneiro. A great virtual ruler ready to be dragged around on the desktop. It is useful to measure things (vertically or horizontally) on the computer screen in pixels, inches, picas and centimeters. *Shareware - \$10.*

Color Simple Text: By Allesandro Levi Montalcini. A wonderful addition to the Simple Text that came with your Mac. Two menus are added; one gives access to coloring selected text and the second adds some useful functions such as Find, Replace and windowing.

MAC DISK # 3.03-2 FUN WITH MATH 2

Fraction Fonts: By Douglas Lindster. Enables you to view and print true fractions. There are two different font styles from two different companies in this archive: Helvetica and TimesRoman. Fraction Fonts Helvetica is a PostScript Type1 font. It consists of two parts: a screen (bitmap) and PostScript component. You must have Adobe Type Manager® installed if you want to use the PostScript component. Otherwise, you can use the screen (bitmap) font with other bitmap or TrueType fonts. Be aware

that the screen portion of a PostScript font is not as complete a font as a full bitmap font. TimesRoman is screen(bitmap) only. *Shareware - \$10 (Helvetica) and - \$5 (TimesRoman).*

Rubik's Warp: By Dennis Johnson. This is a two dimensional version of the famous Rubik's Cube puzzle. *Shareware - \$5.*

MacEmatics: By Neil Schulman. Test yourself in addition, subtraction, multiplication, division, percentages, and fractions at ten levels of difficulty. *Shareware - \$15.*

Slider: By C. K. Haun and Ravenware Software. A game of thought, dexterity, and speed. Your goal is to slide key blocks over flashing goal squares, unlocking the door to the next room. Time counts; your score is better the faster you can finish, and if you take too long you'll lose a valuable player life.

Sokoban: By Scott Lindhurst. You are trying to get treasure chests through a maze to their proper locations. The chests are so heavy that you can only push them one at a time. Be careful that you don't get a chest trapped in a corner; the chests have no handles so they can't be pulled. There are 85 different levels, and you can make your own levels, too.

MAC DISK # 3.04-1 LANGUAGE ARTS 1

Color Simple Text: By Allesandro Levi Montalcini.

X-Words: By Andrew Trevorrow. A word game for one to four players. Anybody familiar with other crossword-like games should have no trouble learning how to play. *Shareware - \$20.*

WordSmith: By Carl W. Haynes III. A word game played kind of like solitaire. The goal is to use up all your tiles by spelling words. The longer the word, the more points you receive.

MAC DISK # 3.04-2 LANGUAGE ARTS 2

Crisscross'm: By Larry Jacobson. A crossword puzzle game. It can generate a virtually unlimited number of puzzles. Second, you can use the puzzle to build your vocabulary. It contains approximately 5000 words, including over 3500 SAT-type words. As in all crossword puzzles there are



clues across and down. However, you can access an additional hint for each "SAT" type word—in the form of a contextual sentence. **Shareware - \$15.**

Unscramble Fat: By David Bagno. An exciting spelling game for one or two players. This game offers a challenging and creative way for kids to learn spelling and a host of other important phonic skills. Unscramble has been designed to allow players to draw from two different banks of questions; thus, players of different ages and levels to play against each other. "Player One" can use the words from Bank A, which may consist of easy words, and "Player Two" can use the words from Bank B, which may consist of harder words. Registered users will be able to quickly paste type or import custom word list into the question banks. **Shareware - \$20.**

Word Find: By Brett C. Helbig. A program that creates Word Find puzzles — those things made of several words hidden in a matrix of letters. Some people call them "Word Search" puzzles. The program is simple. You create a new puzzle, enter the words you want, set up the parameters of the puzzle (like size). Once the puzzle has been created, you can print it or store it to a file.

Crab: By Guy Jacobson & Andrew Appel. Scrabble in glorious black and white.

**MAC DISK # 3.04-3
LANGUAGE ARTS 3**

Word Breaker: By Bob Uskali. One of the best word based games available. Advance levels by guessing a hidden 5-letter word which the computer has chosen. Detailed graphics, scoring and a 3000 word dictionary make Word Breaker fun and challenging. Also includes automatic letter marking, game saving, a high scores list, and built-in instructions. **Shareware - \$10.**

Spell Tutor: By Roger Clary. A simple yet full-featured program to assist students of any grade level with spelling lists. It will handle up to 30 words per list. Lists are created, (a Mac microphone is required to input spoken words) edited, printed, and tests are given and scored all from within the program. **Shareware - \$7.**

Which Word Does Not Rhyme: By David Bagno. Find which one of four

words does not rhyme. There are 10 lists of words from which to select. Very colorful interface. **Shareware - \$15.**

Wild West Hangman: By Mike Radosevich. This is intended to be a fun and exciting way to learn spelling list or just spelling in general. **Shareware - \$10.**

Cryptogrammer: By Lawrence Snyder. Designed to make solving cryptograms easier and cleaner by automating everything except the thinking. It encodes a randomly selected quote into a cryptogram and allows you to solve it on your Mac. Erasing is easy, and you can change your mind and try out hunches easily without having to scribble all over a piece of paper. When you've solved a cryptogram, Cryptogrammer even tells you the source of the quote. **Shareware - \$5.**

WordSmith: By Michael D. Speir. You are given a random array of letters with which to form as many words as possible, usually within a given time. The game is simple, yet challenging. It requires a different perspective and an unusual way of thinking. A sharp mind will master the skill quickly. The free demo gives you a feel of the game, but lacks the implementation of some of WordSmith's more important features. Registration get you the fully-implemented version. **Registration - \$10.**

**MAC DISK # 3.05-1
OUT TO THINK 1**

Lunar Phantom: By Rolf (Rex) Staflin. Test your ability to land a space craft without crashing into the moon. User must pinpoint landing area successfully situating the lunar module at pre-determined locations. This program tests the user's ability to coordinate the rocket's thrust, gravity and fuel to successfully land before it crash — which it will do frequently. This program is a flight simulator in reverse. **Shareware - \$10.**

Square Lake Crossing: By Saratoga Publishing. You and another player compete to be the first one to build a bridge across Square Lake. **Shareware - \$15.**

MacPipes: By Federico Filipponi & Factor Software. A tetris-type game where you must construct a continuous pipeline from a random supply

of pipe shapes. The object is to have water flow through your pipeline. **Shareware - \$10.**

Simple Text Color Menu, by Allesandro Levi Montalcini.

**MAC DISK # 3.05-2
OUT TO THINK 2**

DeadEnd: By Wolfgang Thaller. A Sokoban-type strategy game. You have to develop a strategy and move the pieces to find a path out of a dungeon by pushing massive blocks of stone out of your way. Like Sokoban, it is also possible to design your own levels. **Shareware - \$20.**

Single Number: By Yoshimitsu Kanai. The puzzle itself is familiar in puzzle books or is found in puzzle pages of weekly magazines. Numbers (1-9) are given in several cells in the 9x9 matrix. Place the rest according to the following restrictions: "Each number (1-9) should appear only once in the 9 cells of each vertical line, horizontal line, and 3x3 matrix surrounded by the thicker boundary."

Factory: By Patrick Calahan - 7 O'clock Software. A game where you are the assembly line worker who must make sure that the raw materials leave the factory in good condition. **Shareware - \$15.**

Follow Me: By Michael Guzzo. A version of the classic 'Simon' game. The computer will generate a pattern of flashing lights and sounds, and you, the lowly human, must repeat as many steps as you can until you (eventually) lose. Don't worry, you will. Trust me.

Logic Sim: By Arnaud Masson. A simulation game to teach the design of logic circuits and test whether they work as expected. Comes with an on-line manual to guide your steps. **Shareware - \$25.**

Slider: By C. K. Haun & Ravenware Software. A game of thought, dexterity, and speed. Your goal is to slide key blocks over flashing goal squares, unlocking the door to the next room. There are many kinds of blocks, and many kinds of puzzles that you have to think through to solve each room. Time counts, your score is better the faster you can finish, and if you take too long you'll lose a valuable player life.

**MAC DISK # 3.05-3
OUT TO THINK 3**

Short Circuit: By Carl Cimsico. An



action puzzle game where quick thinking is a must. The goal is to clear the board of all tiles within the allotted time. There are a total of 33 levels, divided into 9 different worlds. Each world has a different operating characteristic.
Shareware - \$10.

Concentroids From Plant X: By 3G Software. A concentration type game where you can control the size of the grid. Nice graphics and decent music. Wild card pieces are a different extra to this old stand by.
Shareware - \$10.

Sokoban (v2.2): By Scott Lindhurst. In Sokoban, you are trying to maneuver marbles through a maze to their proper locations. You can only push them one at a time. Be careful that you don't get one trapped in a corner; they have no handles so they can't be pulled. This new version has several Sokoban games with it, each with a different level of difficulty.

DISK #20.01B
TROUBLESHOOTING AIDS - ESSENTIALS:

Apple HD SC Setup 7.3.5: By Apple Computer, Inc. Use this application to update drivers on Apple branded SCSI HDs and to reformat them when necessary.

Disinfectant 3.6: By John Norstad. Check files for invalid resources. Detects and repairs files infected by all of the currently known viruses. Check out the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE or later.

Disk First Aid 7.2.2: By Apple Computer, Inc. Use to verify and/or repair directory structure of HFS disks. Volumes to be repaired cannot be the boot volume.

Drive Setup 1.0.3: By Apple Computer, Inc. Use this application to update drivers on selected Apple branded IDE drives (some desktop and PowerBook internal drives) and to reformat them when necessary. May also be used for Apple branded SCSI drives.

Easy Errors 1.1.1 By Dave Rubinic. When you get an error number, type the number in, and the program displays (if available) the result code word and a longer description. Errors Info is in text format.

GURU 1.2 By Newer Technology. Test memory and show memory and other characteristics of different

Mac models.

SCSIProbe 3.5sq: By Robert Polic. Displays status of SCSI drive in control panel; mounts SCSI disks and disks that have been dragged to the trash. Also reads drive PROMs and reports back vendor, product and version numbers. System 6 and 7 compatible.

TechTool 1.1.1 By Robert Sanders and Jeff Baudin. Rebuild the Desktop or zap the PRAM (Parameter RAM) the easy way with this simple utility. Also creates and prints a profile of important System Information about your Mac. Read the included Help dialog to see why you may want to do this.

DISK #20.02B
TROUBLESHOOTING AIDS - GOODIES:

BootMan 1.1 By Bill Steinberg. Use this handy utility to set the System Heap Size, Maximum Number of Open Files and Maximum Number of Operating System Events. For System 6.0.8 and earlier.

Check 32! By Brandt Despain. An application that checks to see if a program is 32-bit clean. **Shareware - \$1.**

Data Fork Opener 1.0: By Joe Zobkiw. Allows you to quickly open the data fork of any file so that you may retrieve data in text format. Often useful in retrieving text from corrupted word processor or other data files. For System 6 and 7.

Desktop Terminator 1.0: By Robert C. Best III. Provides a quick and easy method to rebuild the desktop files of mounted drives without restarting. Requires System 7 or later.

Disk Charmer 3.0.2: By Fabrizio Oddone. Locks out 'bad' sectors on floppy disks. This is imperative if you want to use disks with bad sectors with Systems earlier than 7.0 (down to 4.3). The program even has some utility with System 7 and later as it locks out bad sectors more efficiently than the method Apple uses with System 7. **Shareware - \$10.**

File Buddy 3.4.4: By Lawrence Harris. A file utility to perform a wide variety of 'Get Info' type file functions including creating custom icons, aliases, file type, creator, etc. Also copies and moves files, deletes resource forks and rebuilds desktop. For System 7.0 and later. **Shareware - \$25.**

Font/DA Mover 4.1: By Apple Com-

puter, Inc. Create suitcases and move fonts and DAs from suitcase to suitcase. Reconciles font ID conflicts when all fonts are moved into the same suitcase.

Mac FAQ: From the Internet comes this collection of Frequently Asked Questions (FAQ) and their answers. This is an excellent starting point for troubleshooting your Mac and Mac OS.

MacErrors 2.0.1: By Marty Wachter. Ever wondered what an "error type -34" means? Well, now you can find out using this handy utility.

PaperClip 1.0: By Ben Hellstrom. A next-to-last resort for ejecting floppy disks when the drive-1 floppy cannot be ejected within the Finder or another application.

SCSI Evaluator 1.07: By William A. Long. Tests the performance of any Small Computer System Interface (SCSI) device. Tests include read and write seek times and data transfer (Kbits/sec.) rate. Note the author's caution "Joy riding with SCSI Evaluator can be dangerous!" **Shareware - \$20.**

SIMM Stack 4.7: By Apple Computer. A HyperCard stack that provides the SIMM (Single Inline Memory Module) configurations of the majority of Macs. A logic board layout, memory alternatives, memory speed and other pertinent data are shown for each computer. Requires current version of HyperCard or HyperCard Player 2.2 or later.

Spy 2.1.7: By Pascal Cardon. Examine the launch time, CPU time and Heap space of processes and programs that run in the background. **Shareware - \$10.**

TattleTech 2.12: By John Mancino. Collects very complete information about your computer and its system related software. You may view information on screen by category, print it, write to a standard text file in standard or a special Bug Report format, or output it in database readable format. Requires System 6.0.4 and later; Mac Plus and later. **Shareware - \$15 (level 1) or \$30 (level 2).**

Test Pattern Generator 1.0.6: By Larry Pina. Run this program after installing screen and memory upgrades to test screen alignment. **Shareware - \$20.** ■



Macintosh Library Order Form

New disks in this issue!

- Teacher Tools- 1 disk; \$4[†]
- Fun with Math- 2 disks; \$8[†]
- Language Arts- 3 disks; \$10[†]
- Out to Think - 3 disks; \$10[†]
- New Education series + R. Wagner
HyperStudio CD- 8 disks; \$10[†]
- TroubleShooting Utils, 2 disks; \$8[†]

Disketeria ValuPaks[†]

- Best of the 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
- Telecom Essentials & Goodies,
2 disks; \$8
- Internet Basics/ Add-ons/Tools;
6 disks; \$20[†]
- Calc/Clock Utils, 5 disks; \$15
- Pers Management Utils, 5 disks; \$15
- System Utilities 4, 5 disks; \$15
- Fun/Games 1, 10 disks; \$25
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- TroubleShooting Utils, 2 disks; \$8[†]
- LAN Tools, 3 disks; \$12
- PowerBook/Duo Utils, 4 disks; \$15[†]

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- System 7.1 Update 3.0 - 2 disks; \$8[†]
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- System 7.5 Update 1.0 - 4 disks; \$15[†]
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- QuickTime 2.1; \$4[†]
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- Network Software Installer 1.5.1; \$4[†]
- TrueType Fonts & Software; \$8
- CD ROM Setup 5.1.1; \$4
- StyleWriter II; 4 disks; \$15
- Network Access (universal boot); \$4[†]

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- .01 Mac Disketeria Catalog
- .02 New Member Sampler & Catalog

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- .02M — .03M

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- .05E — .06E — .07E — .08E

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- .05^{(3)†}

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5.XX - ImageWriter Fonts[†]

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6.XX - PostScript Fonts[†]

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- .05B — .06B — .07B — .08B
- .09B — .10B — .11B — .12B
- .13B — .14B — .15B — .16B
- .17B — .18B — .19B

7.XX - TrueType Fonts[†]

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- .09A — .10A — .11A — .12A
- .13A

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- .09A — .10B — .11B — .12A
- .13[†]

9.XX - INITs & cdevs[†]

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- .05C — .06C — .07C — .08C
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- .09C — .10C — .11C — .12C
- .13C — .14C — .15C

16.XX - System Utilities[†]

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- .13F

17.XX - Word Processing Utils[†]

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- .05A[†] — .06A[†] — .07A[†] — .08A[†]
- .09A[†]

19.XX - QuickTime Series[†]

- .01[†] — .02[†] — .03[†] — .04[†]

20.XX - Mac Troubleshooting

- .01B — .02B

21.XX - LAN Tools[†]

- .01 — .02 — .03

22.XX - Fun & Games Series[†]

- .01 — .02 — .03 — .04
- .05 — .06 — .07 — .08
- .09 — .10 — .11[†] — .12[†]
- .13[†] — .14[†] — .15[†] — .16[†]
- .17[†] — .18[†] — .19[†] — .20[†]

23.XX - PowerBook/Duo Series[†]

- .01C — .02C — .03C — .04C

26.XX - Update Series

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- .33A - DrawPro, Impact, Frontier,
1 disk; \$4
- .34A - Now Utilities 5, 1 disk; \$4[†]
- .35A - Quicken 4 & 5, 1 disk; \$4
- .36A - QuarkXpress 3.31r3->3.31r5,
1 disk; \$4
- .37A - ATM ->3.8.2, RamDblr ->1.5.2
& PM 5 WP Filters, 1 disk; \$4

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- 24 disk set; \$50
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- .05 — .06 — .07 — .08
- .09 — .10

[†] all files compressed

[‡] on 1.44 Meg diskette(s)

^(#) number of disks in set

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Classified advertisements can be placed by mailing copy to the business office of Washington Apple Pi, Ltd., 12022 Parklawn Drive, Rockville, MD 20852. Be sure to include your WAP membership number and indicate area codes with your phone numbers. Ads must be received by the ad copy due date listed in the calendar page for that month in order to be included in the appropriate issue. Any ads postmarked after that time will be included at the discretion of the editor. Cost is \$2.00/line (40 characters per line), maximum 12 lines. Members of Washington Apple Pi, Ltd., may place ads up to three lines at no charge. The editor reserves the right to refuse any ads deemed inappropriate.

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I currently subcontract to many local Mac schools. Hire me directly and save. I teach: Excel, Word, Quark, PageMaker, Illustrator, MS Project, and more. References available. Alan Stillman: 703-548-8794.

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—**Need Educational Games** for Mac Plus, System 6.08, 800K disks. For granddaughters, 9 and 11. Call 301-654-1577. ■

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Please answer a few questions for us regarding your computer use. Check the computers/equipment that you use on a regular basis.

- | | |
|-----------------------------------------------|-----------------------------------------|
| <input type="checkbox"/> Apple II, II+ | <input type="checkbox"/> LISA |
| <input type="checkbox"/> Apple IIe, IIc | <input type="checkbox"/> Mac II |
| <input type="checkbox"/> Apple IIc+ | <input type="checkbox"/> Mac IIci, cx |
| <input type="checkbox"/> Apple II GS | <input type="checkbox"/> Mac IIsi |
| <input type="checkbox"/> Laser 128 | <input type="checkbox"/> Mac IIfx |
| <input type="checkbox"/> Franklin | <input type="checkbox"/> Mac VX |
| <input type="checkbox"/> Apple III (SARA) | <input type="checkbox"/> Mac PowerBook |
| <input type="checkbox"/> Mac Plus, 512e | <input type="checkbox"/> Mac Duo |
| <input type="checkbox"/> Mac SE | <input type="checkbox"/> Quadra (all) |
| <input type="checkbox"/> Mac SE30, Mac IIfx | <input type="checkbox"/> Centris (all) |
| <input type="checkbox"/> Mac Portable | <input type="checkbox"/> PowerMac |
| <input type="checkbox"/> Mac LC (series) | <input type="checkbox"/> Newton |
| <input type="checkbox"/> Mac Classic (series) | <input type="checkbox"/> Performa (all) |
| <input type="checkbox"/> Other _____ | |

WAP has many Special Interest Groups (SIGs) and activities. Fill in letter next to area of interest.
J=Join Group, V=Volunteer

| | |
|-------------------------|----------------------|
| AppleWorks SIG _____ | HOTLINE _____ |
| Apple II GS SIG _____ | HypterTalk SIG _____ |
| Apple III SIG _____ | Mac Programmers |
| Art SIG _____ | SIG _____ |
| CAD SIG _____ | Music SIG _____ |
| Database SIG _____ | NOVA Educators |
| Disabled SIG _____ | Mac/Apple |
| Desktop Publishing | Users SIG _____ |
| SIG _____ | QuickTime SIG _____ |
| Disk Library _____ | Stock SIG _____ |
| EdSIG (education) _____ | Telecommunications |
| Excel SIG _____ | SIG (TCS) _____ |
| Federal SIG _____ | Women's SIG _____ |
| Game SIG _____ | |

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For other options please add correct amounts

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 WAP Bulletin Board System (TCS)** with e-mail \$25
 WAP Bulletin Board System (TCS)** with Internet \$186
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 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)

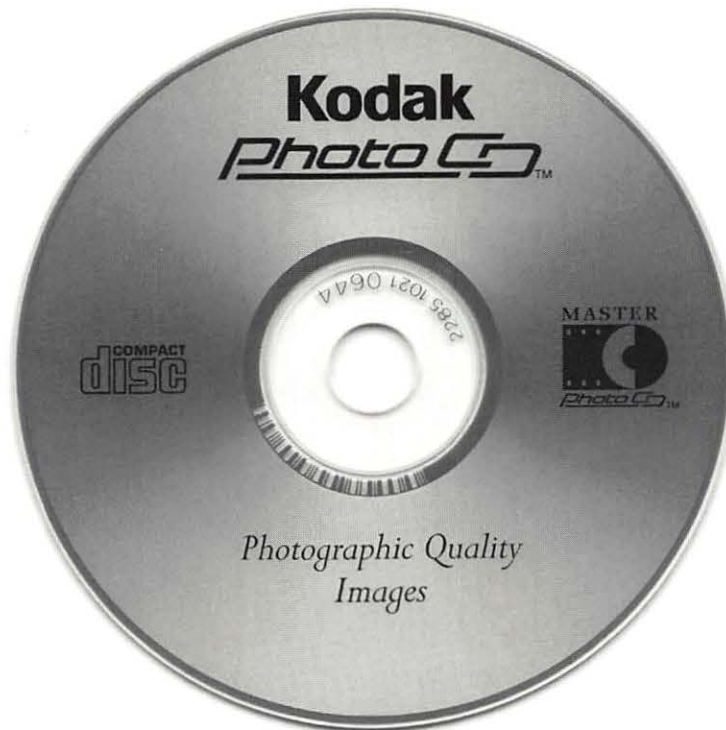
- Apple II
 Apple II GS
 Apple III
 Mac 400k
 Mac 800 k
 Mac 1.44 k

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

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