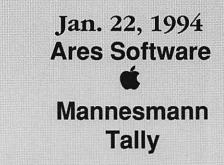


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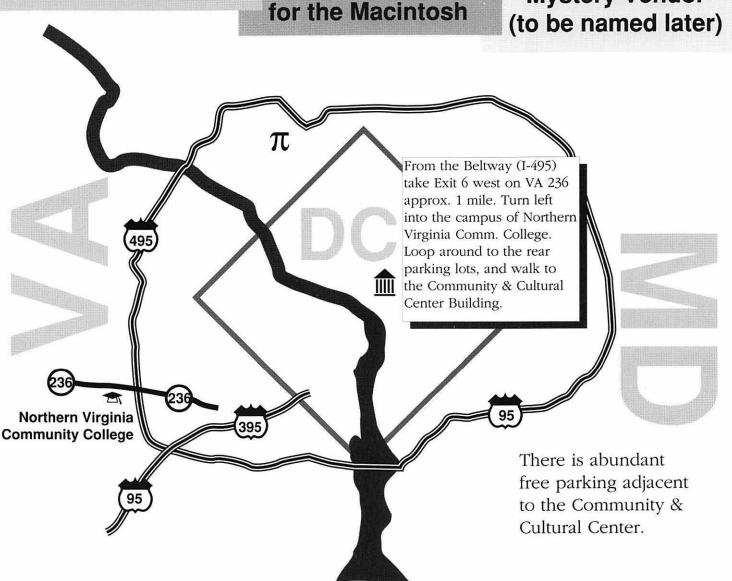


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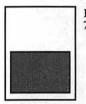
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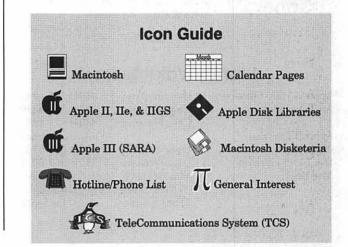
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Writers Needed

by Lorin Evans

ne of the strengths of Washington Apple Pi is the diversity of experience found among our members. We are a lot of smart people who have a wealth of knowledge in using Apple and Macintosh computers, and broad experience in running the many applications available for those two platforms.

The nature of our membership is changing and the Journal needs to address these changes. Many of our new members have not acquired the innate feel for the reasoning processes that make using an Apple or Mac appear so simple. It is not found in the packing or the manuals they threw away. It is something we have acquired—it something we must pass on to the new generation of users. It must be a conscious action on our part. Of course, some people will more easily acquaint themselves with the look and feel of their computer and move quickly to embrace it. But many others will not, and find the experience daunting.

This Journal can make the world of computing more enjoyable for both these groups.

- We are looking for people to explain how to operate a Macintosh or Apple, no matter what the program. We are in need of written first hand experience in using the many applications out there. Isn't there someone out there who can explain why Shrink It and StuffIt are not Thanksgiving dishes?
- We know from calls to the office from satisfied hotline users, that the members who offer hotline support provide great service to our members. You know the machine and the programs you operate on them. You convev the information well over the phone. We would like some of that converted to written form to share with the rest of the Pi. Surely, the caller you helped is not the only one with that problem.
- You purchase new programs or a piece of equipment. Write a short review of it. Compare it to similar programs you have used in the past or

the equipment it replaced. Explain how this device or application solves a particular need you had.

- You work for days to master some aspect of your hardware or an application and (of course) you succeed. Tell us the how and why of what occurred.
- Those of you who use the TCS have access to a wealth of information on the USENET feed (Conferences 5. 6 & 7). You already read it; would you be willing to sift through the material you read and organize it in short topical paragraphs? You will be surprised at how conveying this to others will aid your own grasp of the information. Remember, about half of our members are not on the TCS!
- We are looking for a couple of people who would be willing to do a theme issue: compare and contrast works programs, desktop publishing programs, word processors, telecommunications or other classes of applications. It does not have to be anything fancy: a compilation of essential features would be very nice, thank you.

Submitting articles is very easy. You can either mail them to the office or upload them to the TCS in the Journal Submission file area. We will even take care of the editing for you.

Our goal is to have a Journal that has articles in it that are interest to all levels of user—and to get YOU involved.



StockSIG

by Morris Pelham

ur November meeting was on the 11th, Veteran's Day. Icalled the office as usual to remind Beth Medlin that we needed the room set up that night, but our President Lorin Evans answered the phone. Lorin told me the office was closed for the federal holiday and Beth was not there, and then offered to set the room up for us himself. Thanks, Lorin!

At the meeting we talked about our beating the Dow strategy, Quicken, Personal Hotline, and our newest strategy using the Fidelity

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Mark Pankin brought in his usual updates of our beating the Dow project and passed around copies of both the '93 portfolio and the possible '94 portfolio. For the 1993 portfolio, price appreciation alone from 12/31/92 to 10/31/93 has been 34.7%. For the 1994 portfolio. well, we don't quite know yet what it will be. When I ran my Excel worksheet to sort them out last July 5. the five stocks to purchase were Union Carbide, Woolworth, DuPont, Philip Morris and IBM. When Mark ran his Excel worksheet on October 31 the five stocks sorted out as Union Carbide, Woolworth, Merck, DuPont and Philip Morris. Then Mark ran

> it again the day before our meeting and the stocks chosen were Union Carbide. Woolworth, American Express, Merck, and DuPont. So it seems that this year we may not know until late in the year what stocks our beating the Dow strategy will pick to be winners in 1994. That means we can't buy them until late, perhaps after their prices have gone up. At our November meeting no one had yet purchased a 1994 portfolio.

Moving along to Quicken 4, there is good news and other news. The good news is that there is a way to keypunch in the 30 Dow stocks only once and still keep records of three separate portfolios, the 5 beating the Dow stocks, the 10 high yield stocks, and the all 30 stocks. So I did that. More good news, Quicken makes several useful reports of investment

performance. I printed four, took them to the meeting and passed them around. Mark found a mistake in the data of one report, and I had Quicken running with the data on the club's Mac IIci so I fixed it and ran the corrected report. All present were impressed with how quickly and easily a change can be made and a new report prepared. More good news, Quicken runs acceptably on my old Mac Plus, but slowly. I often have to wait a few seconds when updating prices and a minute or two when it needs to recalculate something or prepare a report. Quicken also prints reports just fine on my old Imagewriter. So if you have an old Mac lying around it can still do useful work. On the other hand, a faster machine sure is nice. With the new, much lower prices I am tempted to splurge and buy myself a new one.

Now for the other news. Quicken crashes a lot. It does not handle stock splits or distributions very well. It does not keep a good, clear record of price updates and it graphs prices without showing which are real and which parts of the graph are just lines drawn between the real prices. So I called Intuit Technical Support to see if there is anything I should be doing different or better. Their machine accepted my call with a recorded female voice that said "please wait" and then played me some elevator music. The female voice came back on five more times to say "thank you for your patience, please continue to hold" before my patience ran out and I hung up. So my phone bill for this month will show a ten minute or so call to California but I wasted my money because they accepted the call but never answered it. And I can't tell vou wheither Quicken crashes because my Mac is old or because the program has bugs. I can tell you that it crashed three times while I was preparing for the

November meeting and I now haul out my backup set and do a backup every two hours or so of keypunching.

Barry Creech brought back his Trendsetter Personal Hotline technical analysis software and tackled the questions when to buy the '94 portfolio at the lowest price and when to sell the '93 at the highest. We hope to show this through the fall, month by month, and see if it really helps. As of November 10 the Trendsetter software had no opinion on our portfolio. It had recommended buying and selling several Dow stocks for small profits during the prior 13 months, but had not held any. Barry promises to come back and do it again. Thanks, Barry!

Our newest project involves using the Fidelity Select mutual funds to beat our beating the Dow strategy. Mark Pankin has done some preliminary work that indicates that a 3 week moving average is better than a 5 week one. and that yes, this strategy can be a winner. Mark is going to print out some of what he is doing and give me a copy so I can tell you. I am going to try to put some of this in Quicken and see how that works. It sounds like it should work, but there are added costs involved in using a mutual fund and higher taxes on short-term profits. We will see. Here I would particularly like to thank Mark Pankin for all of his help this past year. Mark has shared many of his Excel projects with us, been a regular at our meetings, and I hope he continues.

Since this is the January column, all of us at StockSIG would like to wish all of you a Profitable New Year. If any of you have made a New Year resolution to be more profitable in '94 you are welcome at our meetings.

StockSIG welcomes both

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experts and novices at our meetings. Anyone using the *Quicken 4* software is particularly welcome while we are trying to figure it out. StockSIG meets the 2nd Thursday of each month at 7:30 PM at the WAP office.

Women's SIG Meeting

The next meeting of the Women's SIG will be Thursday, January 20, 1994 from 6 to 8:30 p.m.



Paula Shuck is back by popular demand. Paula will talk about and demonstrate templates for Excel, Filemaker Pro and Quicken and how to use these programs for home and business. We'll talk about good financial practices and how these programs can help. She will also demon-

strate and share her favorite shareware games and programs. If you have any experience with any of these software packages or have a special shareware program you like, then please bring it.

Grace Gallager will cater dinner for us and we'll chat over dinner before the meeting. R.S.V.P. to Grace at 703-222-4570, so that we can plan.

The meeting dates for the rest of the year are: March 24, May 19, July 28 and September 22. All will be at the WAP office from 6 to 8:30 p.m. Hope to see you there.

If you want to be on the mailing list please contact Ann Aiken at 301-530-1990.

November General Meeting

by Lawrence I. Charters

record (for the past couple of years, at least) crowd turned out for the November General Meeting, held at Northern Virginia Community College in Annandale, Virginia. Aside from the crowd, the meeting was noteworthy for two other reasons as well: a record amount of confusion, and a record number of people coming up and saying it was "the best meeting ever."

Since this is the nation's seat of government, maybe that isn't so strange: confusion and popularity often go hand in hand.

The meeting was supposed to feature Hewlett-Packard, showing off their large (and growing) line of Macintosh peripherals, and Microsoft, debuting their new Microsoft Home products. Hewlett-Packard had contracted with an audio-visual firm to show a multimedia presentation, and the setup required the technician get in early. He did — and proceeded to erect a tower of remote-controlled auto-focus slide projectors, a reel-to-reel tape deck, a couple dissolve units, speakers, mixers, amplifiers, etc. This tower effectively prevented display of the Pi's usual computer-generated slide show. End of Plan 1.

Microsoft, meanwhile, was planning to show their new Home products on an "MPC," according to E-mail sent in the weeks prior to the meeting. This alarmed me, since "MPC" is Microsoftspeak for a Windows machine with sound and video support — not the sort of thing you normally expect to see at an Apple user group function. The alarm was compounded when they mailed us a digital image of the Microsoft Home logo on diskette — a Windows image on an MS-DOS diskette.

Fortunately, while talking about an MPC, they actually arrived with a Macintosh Performa 600 with a built-in CD-ROM drive. Unfortunately, the motherboard of the computer came loose in transit, and it wouldn't boot. Fortunately, Tom Witte, the Pi's Vice President for Administration, succeeded in reviving it through emergency repairs. Unfortunately, the Pi's Acoustic Research Powered Partners speakers were left at the Pi office. Fortunately, holding a microphone against the Performa's speaker worked reasonably well. Unfortunately, the projection panel loaned to the Pi for the meeting did not include the required video cable. Fortunately, Microsoft brought their own projection panel. Unfortunately, the setup delays caused an End to Plan 2.

After a few brief remarks by the Hewlett-Packard team, the multimedia presentation was to begin, except the H-P engineers were out in the lobby, setting up their equipment and answering questions. The audio-visual technician, meanwhile, switched the "synch" track with the audio track on his tapes, so the multi-media presentation appeared to consist of nothing but a darkened auditorium filled with strange shrieking noises (perfect for Halloween). Erin McClelland, H-P's marketing coordinator, pointed out that the multi-media shrieking session "did not use any Hewlett-Packard equipment." With a laugh, this brought an End to Plan 3.

While all this was going on Tom Witte joined me in conducting a series of Question and Answer sessions as we tried to make good use of the unexpected pauses. By this time, all the equipment necessary to show Microsoft's presentation had been repaired, set up, and dragged into place, so the H-P presentation was postponed and we saw -- Microsoft Musical Instruments, the first of three CD-ROM-based titles presented by JoAnn K. Nulsen. This is, in my view, one of the best uses of CD-ROM to date, using the massive, inexpensive storage to present information in a way not possible in book form or video form or through some other medium. In essence, Microsoft Musical Instruments is an encyclopedia of the musical instruments of the world, complete with an atlas, extensive histories of not only individual instruments but related types of instruments, and well done sound samples. Not only would this be valuable in a classroom, or for teaching my eight year old, but heck, even I could learn something, and have fun.

The second title was Microsoft Art Gallery, which as the name suggests is a CD-ROM-based gallery of classical art. The art in question comes from a London museum (sorry, I don't know which one), and is vividly reproduced in color pictures. Each picture comes with a history of the painting and the artist who painted it, and often includes a sound file or two so you can hear how to pronounce the artist's name or some obscure term. Timelines and an atlas allow you to track art styles through time and space. Another winner.

Microsoft Dinosaurs was a sur-

prise: I thought it was the name of the next upgrade to Microsoft Windows. But no, this is a CD-ROMbased encyclopedia of dinosaurs, complete with the time lines, atlas, pictures and text elements found in the first two offerings. But Dinosaurs offers something else: QuickTime movies! There is a certain irony here: the only CD-ROM with animation covers the only prehistoric topic. But this will probably prove to be a blast with children, with enough real content to attract adult attention, too.

Last up was the only package that didn't require a CD-ROM drive: Microsoft Creative Writer. This is a combination brainstorming, letterwriting, page layout, banner-making package with great support for color, sound and clip art. JoAnn joked that the package is so flexible and so easy to use that "some companies were thinking of making it a corporate standard [for word processing]." A splendid mix of fun and function, Creative Writer seems perfect for everything from preschoolers letters to Grandma to creating banners for church garage sales.

[MacUpgrades produced some flyers offering special prices on these package, but all the flyers - and every piece of Microsoft's literature - was consumed by the horde. As a result, I may be off a bit on the exact titles of these packages, and have little idea of their cost. If you have questions, leave me an E-mail message and I'll pass them on to JoAnn, or reach her direct on the Internet at joannn@microsoft.com.]

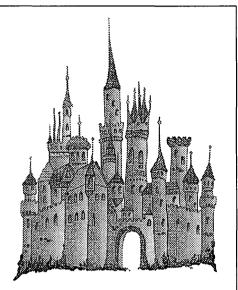
Erin McClelland returned at this point to introduce the Hewlett-Packard engineers flown in for the meeting: Eric Killian (Desk Writers, Vancouver, Washington), Kathleen Sutch (Technical Graphics [Plotters], San Diego, California), and James B. Smith (LaserJet Printers. Boise, Idaho). Outside the auditorium they had set up a DeskWriter

550C color ink-jet printer, a DeskJet 1200C/PS color PostScript printer, and both a LaserJet 4ML and LaserJet 4MP laser printer. (A massive DesignJet 650C color inkjet plotter was shipped to the meeting, but never arrived). The engineers answered a few questions and encouraged everyone to stop and see the peripherals outside, then ceded the floor to the multi-media presentation —Which wasn't worth the pain and suffering. Several people said they really liked the sound track, and that the slide show gave an excellent overview of H-P's wide product line for the Macintosh. Personally, a spirited question and answer session on how to use Hewlett-Packard peripherals with Macs (and Apples) would have made me just as happy, and cost less money, too. Taking this a step further, we might consider banning Kodak Carousel slide projectors from all Pi meetings; if you want to bring something with Kodak's name

on it, make it a PhotoCD. Even without the "multi-media"

presentation, Hewlett-Packard's presentation was outstanding, with a large crowd gathered around to play with the peripherals and drool and think of ways to plead with Santa. If you want to "try before you buy," the Pi office already has a Hewlett-Packard LaserJet IIID, a LaserJet 4M, and a ScanJet IIc color scanner. To close the meeting, Hewlett-Packard added to this wealth by donating a DeskJet 1200C/PS color PostScript printer to the Pi; expect an almost immediate improvement in the various signs posted around the Pi office.

Hewlett-Packard's generosity was not limited to the Pi office, as you'll see below.



Desktop Publishing Graphic Design

Greencastle Graphics Nancy Seferian

(202) 333-5244

1425 Foxhall Road, NW, Washington, DC 20007

December 1993

There will be no meeting in December, but the Pi will hold what promises to be their largest Computer Garage Sale - ever. Scheduled from 9 a.m. to 2 p.m., rain or shine, on December 4, the usual bargains, wheeling and dealing will be supplemented with a series of tutorials, including an "all day" Question and Answer session, complete with a Macintosh and projection system so you can actually see what everyone is talking about. There is a combination poster and map in the Journal, plus a copy saved as a GIF (Graphics Interchange Format) image, posted in Area 5. Pi Documents, on the TCS, with details on who, what, when, and where.

!!REPAIRS!!

Apple/Mac/I*M Motherboard Repairs from \$45.00 + S&H Apple/Mac/I*M Power Supply Repairs from \$45.00 + S&HApple/Mac/I*M Drive Repairs from \$45.00 + S&H Apple/Mac/I*M Monitor Repairs from \$60.00 + S&HApple/Mac/I*M Keyboard Repairs from \$12.50 + S&H Apple/Mac/I*M Upgrades Available!

> Used Apple/Mac/I*M CPUs, Disk Drives, Monitors, Keyboards available for resale

Warranties to one year on most repairs! Same day turnaround on most repairs! Arminius 8519 Orchard Avenue Merchantville NJ 08109 (609) 662-3420

January 1994

Ares Software. postponed from October, will be at the General Meeting on January 22, joined by Mannesmann Tally. Ares will demonstrate some outstanding font utilities, and tell you more about the mysterious world of fonts than you imagined. Mannesmann Tally will be demonstrating a portable PostScript printer and, unlike a preview shown during the past summer, this time they will demonstrate it using a Macintosh. And they'll give a printer away.

February 1994

WordPerfect Corporation, creators of the world's most popular MS-DOS word processor, is making another run at dethroning Microsoft Word in the Macintosh world. And they have a powerful contender: WordPerfect Macintosh 3.0 is a gem, and it will be on display for all to see at the February 26 General Meeting. All those attending will receive a coupon allowing you to purchase this \$495 word processor for just \$49.

May 1994

MacWorld Washington, DC is scheduled for May 10-12 at the Washington Convention Center, and Washington Apple Pi will be the "host" user group. Volunteer now to help out; in addition to the usual booth volunteers, we need both people and ideas to make this MacWorld special.

Drawing Winners:

MacWorld: MacWorld Beach Party ballcap — Dennis Dimick Intuit: Quicken T-shirt — Benis M. Frank

Intuit: Quicken T-shirt — Ralph B. Lingeman

Symantec: GreatWorks — Virginia Shannon

Microsoft: Creative Writer -Carolyn Lingeman*

(*Carolyn donated the package to Grace Gallager, a local public school teacher, for classroom use)

Hewlett-Packard: LaserJet 4ML — Ambrose Liao

Supporting Cast:

Setup and emergency repair: Tom Witte

Question and Answer support: Tom Witte

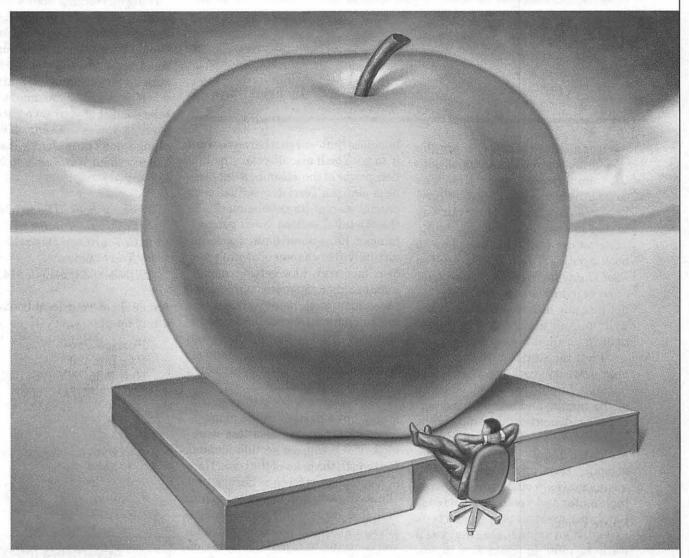
Apple "MPC" (Performa 600CD): loaned to Microsoft by Apple Computer Corp. ■

Apple Phone Numbers

Apple Business Lease		
Program800-624-69	14	
Apple Customer Assistance		
Center800-776-23	33	
Apple Dealer Referral Line		
800-538-96	96	
Apple Disability Solutions		
408-974-79	10	
Apple Fax—Data Sheet Fax		
Line800-IMAGE	96	
Apple Missing Items Dept		
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Apple Multimedia Program		
408-974-48	97	
Apple Applelinkhelpline		
408-974-33	09	
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Apple Support/		
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Apple User Gro	up Information -538-9696 ex 500	
Apple User Gro Fax line		
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Basic Tech		
Apple Education	n User Groups	
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Hewlett-Packard suggests you look beyond the obvious for your next Mac printer.



Don't miss out on one of the best things going. Made-for-Mac HP LaserJet printers. The new LaserJet 4MP completes a family of LaserJets built specifically for your Macintosh.

Choose from 300- or 600-dpi print quality, and prices ranging from \$1,279 to \$2,399. Setup is easy. And with built-in PostScript™ Level 2 software from Adobe, you'll be ready to roll with the latest features in Mac printing. LocalTalk means built-in Mac compatibility.

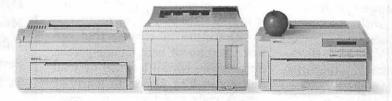
And a RISC processor means fast printing from start to finish.

These printers have standard memory that ranges from 4 to 6 megabytes. That's plenty for your graphics. For documents with zip and zing, you'll have 35 built-in PostScript Type 1 typefaces. And, thanks to HP's automatic language and I/O switching, LaserJets work simultaneously with Macs and PCs. In fact, HP leads the industry in crossplatform compatibility.

When you choose HP LaserJet, you'll have a printer with a legendary reputation. For quality. And reliability. For more information call 1-800-LASERJET, Ext. 7685.

If it isn't a LaserJet, it's only a laser printer.





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Book Review

Working Solo

by Fred Showker

ror all those who yearn for the freedom and flexibility of self-employment, your time has come. An exciting new book by Terri Loniercan now help you forge your way to real success as an entrepreneur.

How can I call a business how-to book exciting? "Working Solo —The Real Guide to Freedom & Financial Success with Your Own Business" is not like any other how-to book ever written. And yes, for that entrepreneur in us all, it is exciting.

I left the world of the employed nearly twenty years ago. With Working Solo, I would have avoided many of the bumps and scrapes, and perhaps even done a few things differently.

Working Solo is a fresh and wellpresented handbook on starting, developing, running and growing your own business. You'll want to keep a highlighter and a pad of post-it notes handy because this is not just a book to read. It's a manual. One that you'll want to refer to again and again. Mine already has bits of post-it notes sticking out all over to mark the places I want to keep handy! Aside from a monumental section listing more than a thousand solo businesses for you to choose from, Terri takes you from the first inspirations of deciding to take the plunge, all the way through to an understanding of what it takes to actually make it happen. Nowhere else will you find a single source so replete with good, nutsand-bolts information.

Working Solo starts with the basics. A candid self-evaluation takes you step-by-step through the process of matching personal interests with a

business that will go where you want it to go. You'll also discover the hidden power of the all-important business plan, as Terri demystifies each crucial step of its development. In the "Details" section you'll get coolhanded, hard-nosed details covering virtually every aspect of owning your own business, like getting money, maximizing deductions, minimizing taxes, insurance, painless bookkeeping, computers, purchasing decisions, and even the use of employees and contract help. You'll steer in the direction of things to go for, and clear of things to watch out for.

This is not a book to read and forget, but a partner in the management of day-to-day business workings. The resources section alone is well worth the price of the book. Here is a complete reference library that shows you how and where to tap into valuable directories, books, magazines, and associations that can help you continue to expand and stay on top of your new-found success. Terri has even included a free trial subscription to the quarterly Working *Solo* newsletter.

Working Solo is unbiased, straightforward information that you put to work now. Throughout the book are tips, tricks and words of wisdom from successful independent entrepreneurs who have been there—information that would take years to accumulate on your own.

There are no schools that can teach you about being a one-person business — it's all learned by trial and error. The key is to learn by other's trials, and thus avoid as many errors as possible. Toward this means, picking up *Working Solo* will be your most important first step. Although I've been in the driver's seat for many years, Terri's book has taught me some new tricks. It's a joy, and I'm sure I'll pick it up again and again.

If you think you might like to take control of your own success, or even if you've already taken the plunge, don't go it alone — and don't leave without *Working Solo* by Terri Lonier.

Working Solo: The Real Guide to Freedom & Financial Success with Your Own Business by Terri Lonier ISBN 1-883282-40-3, \$14.95

Available at your local bookstore or direct from:

Portico Press P.O. Box 190 New Paltz, NY 12561-0190 800-222-SOLO (7656)

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Correction to article in the November 1993 Journal.

David P. Eliot of MacWorld Exposition would like to clarify the following information that was incorrectly reported by Mr. Siblo in his article on MacWorld in the November 1993 Journal.

"Apple may or may not be surrounding themselves with only the big names in the computer industry, however they do not do that at MacWorld Expo. Apple does not and has never been allowed to coordinate whose booths are around them.

Neither Apple Computer nor Mitch Hall Associates together or separately require exhibitors who want to be in the World Trade Center (referred to in Mr. Siblo's article as Exposition Hall) to have a minimum of a 20x20 booth this year or a 40x40 next year.

Exhibit space pricing is no different in either the World Trade Center or the Bayside Exposition Center." ■

Save Your Giant and Safeway Receipts!

We are collecting receipts from Giant and Safeway and donating them to Washington area schools. Please save yours and send them here to the office. We'll then be able to assist schools in purchasing computer equipment.

Vendor Phone Numbers

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After Hours	800-800-3967	MacAcademy	800-527-1914
Aldus	206-628-2320	MacConnection	800-800-4444
America Online	800-227-6364	MacWeek	800-688-0448
Berkeley Systems	800-344-5541	MacWorld	800-234-1038
Casady & Greene, Inc.	800-359-4920	MacZone	800-248-0800
Central Point	800-964-6896	MECC	800-685-6322
Chip Merchant	800-426-6375	Microsoft	800-426-9400
Claris	800-325-2747	Nisus	800-922-2993
CompuServe	800-848-8199	Peachpit Press	800-283-9444
Dataviz	800-733-0030	Prodigy	800-759-8000
Davidson & Assoc	800-545-7677	Proxima	800-447-7694
Disney Software	818-567-4027	Quark	800-788-7835
Eastman Kodak	800-242-2424	Sun Microsystems	800-624-8999
Fifth Generation	800-873-4384	Syquest	800-245-2278
Focus Enhancement	800-538-8866	U.S. Robtics	800-342-5877
GCC Technologies	800-422-7777	WordPerfect	800-451-5151
Genie	800-638-9636	Xante	800-926-8839
Heizer Software	800-888-7667		
Hewlett Packard	800-752-0900	This is a partial listing of the	

800-538-3373

800-624-8742

800-777-4045

800-999-0143

in VendorDA 1.42 a shareware program that is available on the TCS or directly from Bill Baldridge at FourArts, P.O. Box 936, Riverdale, MD 20737-0936. Please make the check for \$15.00 payable to Bill Baldridge.

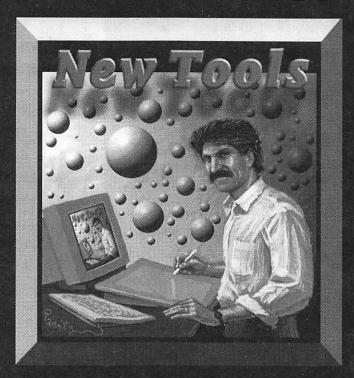
Intel

Intuit

Lacie

Iomega

PAINTING ON THE COMPUTER



A lecture-demonstration by Larry Ravitz THE SMITHSONIAN ASSOCIATES RESIDENT PROGRAM

Wednesday, January 19, 1994

7:00-9:00pm

S. Dillon Ripley Center Lecture Hall (on the Mall)

Will high-definition computer monitors replace canvas in the painter's studio? Advances in computer technology now allow artists to "paint" on pressure sensitive electronic sketch pads with a palette of over 16 million colors and a full range of "brushes" and tools. This fascinating lecture-demonstration will illuminate and demystify what is arguably the most significant new artist's tool of the century. Larry Ravitz illustrates the computer's ability to imitate traditional painting tools, one of the most complex and necessary tasks for a computer painting system. He also demonstrates new techniques and software that are enabling artists to create 3-D and animated works.

Larry Ravitz, a traditionally-trained realist oil painter, attended the Schuler School of Fine Arts in Baltimore. He is an experienced computer graphics teacher whose work has been exhibited in area galleries.

For information contact: The Smithsonian Associates, Resident Program at (202) 357-3030

\$12 General Admission • \$9 Washington Apple Pi & Smithsonian Associates Members

ACTIVITY TITLE	CODE	Member Tickets	Non-Member Tickets	Senior Member Tickets	Total Number Tickets	Total Price
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Book Excerpt

Steve Wozniak hacker and humanitarian Designing a Life

Man is still the most extraordinary computer of all.

John F. Kennedy

you know you've arrived when you can go by a single name like Madonna or Cher. Among early personal-computer owners, Steve Wozniak (age forty-two) is simply known as Woz. His name is associated with the magic and romance of the Apple I and Apple II because he and Steve Jobs are the legendary "two guys inagarage" who started Apple Computer.

Three people were responsible for Apple's early success: Steve Jobs, Mike Markkula, and Woz. Jobs was the charismatic leader who came up with the idea of selling preassembled, ready-touse computers. Mike Markkula, a rich and semiretired investor who made his millions at Intel, never worked for Apple but provided capital, credibility, and industry know-how. Woz was the engineer. He liked to build cool computers to impress the members of the Homebrew Computer Club, an eclectic group of renegades interested in microprocessors and computers.

This chapter is about the early days of Appleand choosing your life's work. Woz and I met for this interview in his offices in Los Gatos, California. Lab would be a better way to describe this facility, because it is jammed with Macintosh computers and printers as well as audio and video equipment. Almost anyone's mom would faint at the disarray here, and just about

anyone's dad would faint at the cost of the equipment lying around.

The Start of Apple Computer

When Woz was designing the AppleI, henever thought that the product would launch a multibillion-dollar company. He was just having funapplying his engineering skills to build gadgets for himself and his friends.

Apple was a total accident of history. I was building projects like terminals for Hewlett-Packard and heard about a club starting up. I designed the Apple I in a closed room in my lab at Hewlett-Packard and in my apartment in Cupertino. I just built it for myself and started showing it off at the Club [the Homebrew Computer Club] by passing out schematics. It was like a science project I was showing off to friends. It wasn't done to be a product to be sold.

Steve Jobs came to one of the club meetings, and he saw that people were interested in my schematics. He came up with an idea—he had worked in surplus-electronics stores—Why don't we make a PC board for \$20 and sell it for \$40? I didn't know if we would make our money back, but I finally went along with his idea. When you are young, it is a neat, thrilling idea that you could have a company. It didn't have to be for money.

We never knew exactly what the next step was. What was right in front of you was obvious, but you could never look three, four, or seven steps ahead. We thought we were going to sell PC boards for \$40, and maybe we'd make \$1,000 back. We wound up getting orders for \$500 computers right away, but it was a total surprise.

All the designs and all the software for the Apple I were my ideas. The electronic features—how many chips did what and right down to how many slots—were all my choices. What the computer looked like, how it would be sold, and how it would be presented to people were Steve's. Working with Mike Markkula, he came up with ideas to make the Apple II a salable device.

Why did Woz and Jobs cause the birth of the most important industry since automobiles, while other companies missed it? Maybe it's because Woz and Jobs were beatniks and hippiestrying to start a revolution, not build an industry.

Apple came about from a couple of kids with an idea of building a little cheap product, trying to hawk it, finding sales, and stepping into magic. I came from a group that was what you might call beatniks or hippies-a lot of technicians who talked radical about a revolution in information and how we were going to totally change the world and put computers in homes.

If people who were smart in business had looked at us in the category of small computers and thought Apple was going to become a huge company, they would have started something insidetheir companies. Mike Markkula told us a company like Apple—a brandnew, little company that is just starting up—can get in and hold on to a certain amount of the market and grow with the market. He turned out to be right, but at first I thought he was just making up the hugest number possible.

Wozand Jobs were not completely alone in their dream of creating a computer revolution. Two companies,

User Group

Get Hindsights and UnderWare for \$29.95; save 64%!

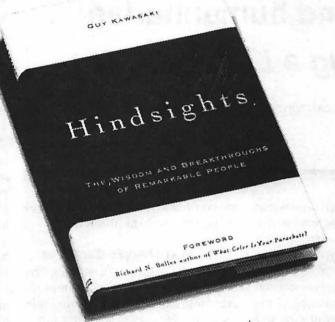
Hindsights—The Wisdom and Breakthroughs of Remarkable People

When I got to be thirty-eight years old, I realized that half my life was over, and I started reflecting on the lessons I had learned. Initially my idea was to write a book of my own hindsights, but my wife quickly burst my bubble: "Who cares what your hindsights are? Go get the hindsights of remarkable people." So I did. I spent two years interviewing more than one hundred people from varied economic, social, and racial backgrounds. I used over ten miles

of tape and burned out three transcribers and three editors in the process. The interviewees include musician Herbie Hancock, Apple-

co-founder Steve Wozniak, entrepreneur Mary Kay, management guru Tom Peters, supermodel Rene Russo, and football coach Bill Walsh. Beyond Words Publishing—a true Macintosh Way kind of company—and I now bring them to you in a book called *Hindsights: The Wisdom and Breakthroughs of Remarkable People.* It is the book I wish I could have read when I started reflecting on that old cliché: The meaning of life.





UnderWare—The Fun of a Screen Saver While You Work

Why is a serious book like Hindsights bundled with a product like UnderWare? Because if learned anything from writing this book, it's that you have to make time for fun in your life-even when using a computer. From its very first boot, Macintosh was a fun computer, and with hindsight, this was one of its keys to success. W I thought I had seen everything that could make Macintosh fun to use. Then I met "four guys in a garage," and they showed me UnderWare. It's the wackiest, hottest, and wildest screen entertainment utility you'll ever see. It combines screen saver, desktop animation, and desktop-pattern customization functionality. & Call now and get a screaming deal on Hindsights and UnderWare, because nowhere is it written in Stone (or Palatino or Garamond) that using a computer can't be fun.

Thanks, and have a great holiday season.

GUY KAWASAKI

Order Information

The suggested retail prices of Hindsights (\$22.95) and UnderWare (\$59.95) total \$82.90. Now you can get both for only \$29.95—a 64% discount. You can also order only Hindsights for \$19.95—a 13% discount.

Call our order department at 1-800-528-8886 24 hours a day, seven days a week. There is a \$5.95 shipping and handling charge plus applicable sales tax. Visa and MasterCard accepted. To send a check, call for details. Offer expires 2/1/94.



Imsai and Altair, created computers at about the same time as Apple.

Altair and Imsai approached the world as if there were a lot of technical people that would buy kits of parts because they know how to solder them together. It was so easy for Altair and Imsai to put a bunch of chips in a bag and not have to learn how to manufacture a computer.

Stores wanted a product that they could sell a lot of. A lot of people—even technicians-would walk in the door and want to buy a completely built Altair, so the store would buy an Altair kit, build it in the back room, and sell it at an already built price. We paid a local company \$13 per computer to solder all the parts for us. Why should we give a kit to a customer who is going to make mistakes and force him to spend twenty hours soldering everything together when we can do it for \$13?

With the Apple II, we went a step further and told people they didn't even have to plug in transformers or keyboards or monitors. It came as one complete box, and the only problem was hooking it up to a TV set. There was a second company that had a product to do that.

That was when the terminology started going toward personal computer. Personal meant one computer for one person, but there was also a difference between hobby computer and personal computer: a hobby computer was a kit, and you had to be a technician. It had a bunch of weird binary lights on it. A personal computer had a keyboard that you could type on, and the output went to your TV set.

Building the First One for Himself

Woz designed the Apple II to be a computer that he would like to own and could afford to buy. Experience has taught him that this is one of the best ways to design any product.

There was no market research nobody asking how many characters you should have on the screen or if you should have this mode of color. My approach was to look at the chips that were available and gut-feel the set of features and the compromises as I went along.

Cost was a real issue because I was building the first one for myself, and I had to be able to afford it, so it had to be low-cost. I like things with very few chips because I consider that good design. It came out much tighter than if I had been given a set of specs, because then I would have just designed by brute force by adding on circuitry.

Shortly after Apple was founded, Commodore and Radio Shack introduced ready-to-use personal computers. But they, too, soon failed. (Don't worry about the jargon Woz uses in this section—the message is to build flexibility and longevity into products.)

What I really compare our computer to is two other computers that came out after ours, intended to be prebuilt, ready-to-run computers. They were the Commodore Pet and the Radio Shack TRS 80. Why did we win out over them? The Pet and the TRS 80 were not expandable, and you could not plug cards in them. We were expandable to 48 kilobytes of RAM [random-access memory]. Once you got to a spreadsheet program, it needed more than 8K of RAM, so it couldn't run on the Commodore Pet or the TRS 80, but it could run on the Apple II.

The reason why Apple was a big winner dates back to an earlier storythe IBM 360 computer. It's been called the most successful computer of all time. It had an architecture so that as the machines expanded, every program ever written would always run. You shouldn't tie yourself into a limit on memory that is shorter than what you could maybe see a couple decades ahead. An engineer should think, I don't want my machine to become obsolete. You got to feel like you are the owner, and this is your machine.

Changing of the Guard

In 1983, Steve Jobs recruited John

Sculley from PepsiCo to be president and chief executive officer of Apple while Jobs retained the title of chairman. This was supposed to be Apple's team for the future: the brilliant, young technologist and the seasoned, professional manager. In 1985, Sculley ousted

Steve was a great visionary, but a lot of the things that happened to us at Apple were accidents and luck, and not because we could think things out properly. The world was going to get into small computers, and we had some of the right products at the right time. I think Steve felt that a lot of his thinking had caused the world to get into computers in the year when microprocessors were going to cost \$5 and RAMs were going to cost \$5.

Steve's idea of running the company was to build the best technology, but the market will sometimes choose a worse technology at a higher price for reasons such as familiarity, knowing other people that are getting into it, the way the marketing is done, and sales agreements. He had his purist's ideas. Maybe he was trying to build a machine for himself at a time when we had to build a machine for customers.

Steve was very, very bright—he might have been the brightest person at Apple, but he didn't handle people well. He left bad sentiments all over the company. I think a lot of managers were upset over Steve wanting to direct what they were doing, being very rude, and talking to people in a way that didn't make them feel like they were smart and respected—like they didn't know what they were doing unless they did it his way.

All this came up to John, and I think he started having to take actions to save the company. I am sure he would have left Steve a lot of freedom to create great, great things-to do the kind of work he wanted to do-but John had to save the company and get some things done. I think Steve felt that he couldn't do the great things for the world at Apple and that he'd have to go outside of Apple.

Making It

When Apple made its public stock offering, Woz made several hundred million dollars. After reflecting upon this, however, he realized that he had "madeit" long before Apple went public.

Making it financially is making it. People might say they are successful if they achieve something they really wanted to achieve, but if you were successful at achieving what you wanted to achieve and didn't have the financial success, I don't know if you could say you made it.

Maybe [changing his mind] either fame or fortune is making it. You could, in other words, be an educator and get very famous for what you are doing. You could call this making it, because wherever you go, people would say, "I heard your speech," "Theard your seminar," "I really agree with your points," and "I think you've done a great thing with this project." Maybe you didn't make money, but you could still say you made it.

I had my happiness before I had money. I had a whole big internal religion—no church or anything—but a whole line of thoughts and philosophies of how to live life and how to be happy forever. I had that down. I was a real healthy, pure person. I never used any drugs or smoked marijuana oranything like that. I never even drank wine until I was thirty.

Since his retirement from Apple, Woz has started several companies, but mostly he's been doing philanthropic things like teaching fifth-graders how to use computers, donating computer labs to schools, and providing funds for nonprofit organizations.

I am doing what I grew up being taught was right. I read books to my young children, and in all the books there are good people who are doing things for others—Goofy wins a big race over Big Bad Pete, and he gives the money he won to build a baseball dia-

mond for the orphans. If you are lucky enough to be successful, then try to do something to help your community.

Life After Apple

Many entrepreneurs have difficulty giving up control of the companies they created—partly because their company becomes their *life* and partly because they think no one can do the job as well as they can. Not Woz.

It got to the point where there were enough engineers, so I was just another engineer, and I wasn't really critical. I would talk to the press more than anything, so I went to my boss one day and had him lower my salary below the engineers who were doing the real work.

Also, I had my children and a family. I've got six kids now. They are my first priority in life. There is no way in the world I could be an engineer and take all this time away from my family. Children mean a lot to me because of things I was taught as a child—about how great we were—and the good memories of what fun it was to play and be a kid.

In the sixth grade, I decided I was going to be an engineer, and then I was going to be an elementary school teacher. That's what I've done. I could have had a lot of fun in Apple and been involved in some great things going on in the world, but I really feel better about what I am doing.

It seems that Woz has life all figured out: design a product you love, make a lot of money, retire young, and do something for people.

Find something you are good at, work on it, and eventually you can succeed and make your life. Don't just slack off and think you will just go through life doing a job. You should try to do incredible things—put a lot of hours into making a lot of things very, very good.

When you are young, skip a bunch of parties and just stay up late at night working on programs and technology. If you are starting out in a company, spend the extra hours. Talk to people and get that report just right. You have a lot of free time when you are young, so put it into what you are good at before you wind up with a life with many commitments, meetings, bills, and mortgages. Spend time when you are young, and that will give you a lot more freedom when you are older.

I want to be remembered as a good computer designer who designed things with very few parts and wrote code that was very amazing and tricky and ingenious. I want to be remembered as a good father who cared about children. Every step of my life has been incredible. I have a lot of freedom. I get to do a lot of traveling and see a lot of things. I've got wonderful children. Nobody could have a life better than mine.

Copyright 1993, Guy Kawasaki. Reprinted from Hindsights—The Wisdom and Breakthroughs of Remarkable People with the permission of Guy Kawasaki and Beyond Words Publishing Inc. (ISBN: 0-941831-95-7; \$22.95 suggested retail) The article is one of thirty-two chapters in the book.

User-group members can take advantage of a special bundle of Hindsights and UnderWare for \$29.95 plus \$5.95 shipping and handling and sales tax where applicable. UnderWare (suggested retail \$59.95) is software product that provides screen saver, desktop animation, and desktop-pattern customization. Call 800-528-8886 to order.

November General Meeting Survey Results

t the November 1993 General Meeting we had a "Washington Apple Pi Survey & Drawing Ticket." If you wanted to be eligible for the drawing (a lengthy list of clothing, software and a PostScript laser printer donated by Hewlett-Packard) you had to fill out a survey. These incentives allowed us to get a better than average response: 266 surveys. After discarding duplicates (one person filled out nine surveys) and blanks, we had 241 valid responses. When looking at the list below, keep in mind that not all surveys were completely filled out.

And what was the purpose of the survey? We (we?) wanted to find out why we have over 4000 members, and only a tiny percentage attend meetings. What do we need to do to make the meetings more attractive?

response is actually the completion of a question that starts:

"Ithink more people would attend Saturday meetings if:"

- ☆ Keep meetings in VA
- ☆ Were back at USHS
- ☆ You're doing a good job. It's hard to please everybody
 - ☆ Offer free coffee?
- ☆ Closer to Pi office in MD or in Bethesda
- ☆ I was the Apple VP as elected, so that there were more and better Apple II programs
- ☆ Meetings were located in Bethesda area as well as VA
 - ☆ Met in Bethesda
 - ☆ There were breakfast
- ☆ They were in Bethesda/ Rockville/Gaithersburg; check your

membership list and see where MOST members live!

- ☆ I'm satisfied and too new at this to have good ideas. I can only suppose a lot of people aren't interested in the product you're demoing if they don't come.
- Advertise in local media, e.g. Post Weekend, local radio, Journal np, posters in local food stores
 - ☆ If they knew about them.
 - ☆ Have meetings in Maryland.
 - ☆ They start later!
- ☆ If their schedules weren't so cluttered (ha ha). Important topics.
 - Aware of its existence.
- ☆ Conduct telephone survey like this one. More recruitment through SIGs. Location, location, location.
- ☆ More presentations of familiar software.
- ☆ Q&A questions and answers might be a bonus for the Journal perhaps a column?
 - ☆ Not familiar enough to say.
- ☆ Supposed to be general; SIGs can be more advanced.
 - & Free beer.
 - A Really started on time and

The Results

Member? Yes: 186; No: 24

Number of Saturday monthly meetings attended in last year: 184 responses (average of 5 meetings)

Are the Saturday meetings:

- too basic: 17
- too advanced: 2
- fine as is: 143

Would you like:

- help for novices: 49
- advanced topics: 70
- no change: 53

The last question was a "complete the sentence" question, and since the responses are interesting I'm going to list all but two [the two missing ones are very personal criticisms of a former officer].

Many of these look like nonsequiturs. Keep in mind that the

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were less disorganized.

- ☆ A little description on the BBS
 or in the Apple Pi magazine which gives a highlight on the next meeting
 this session was excellent.
- ☆ Have informal Questions and Answers, give away good stuff, get rid of TV.
- ☆ You paid us, actually, gave more detailed info and provided access to tech support if necessary.
- ☆ Are vendors eligible for other vendor's prizes?
- ☆ They were scheduled for Saturdays I don't get called into work.
 - ☆ More meetings in MD
 - ☆ My first meeting
 - ☆ I just signed up.
- ☆ They didn't have many other things they have to do. Meetings held in MD. I for one have no real problem driving from Laurel, MD, to No. VA.—many people do.
- ☆ Good vendors to offer specials that were only available to those who attended.
 - ☆ They're attractive enough.
- ☆ Did more prior advertising of mtg. topics in the community.
- ☆ They knew how good they are BUT—they have to move faster. They start too slowly. SUGGESTION put a solid reminder on the front [Journal] cover [submitted complete with a mock Journal cover.]
 - ☆ Were at USUHS
 - ☆ Advertise.
- ☆ More information on subjects kids and teenagers would be interested in.
- ☆ Give more information about the agenda—better description of the subjects to be covered. Keep meetings moving faster. Less mellow chatter. (Note, though, that these two items are not critical to my not attending Saturday meetings. We are sailors and skiers—Saturdays themselves are the difficulty.)
- ☆ I think the Q&A is excellent; more detailed stuff is almost impossible without access to a machine. The meetings seem much

more harmonious and well thought out.

- ☆ This is my first meeting so I'm not familiar with how many people attend Saturday meetings. The turnout on 20 November seemed pretty good.
- ☆ Apple II group is getting small enough to have a "club like" feel. I like hands on. Multiple machines showing "old" software.
- ☆ I am an Apple and Mac user. I am helping my school learn on Apple IIes and a few Apple IIgs. Any help in being the school computer teacher would be helpful.
- ☆ This is my first meeting in 3 years. I have been out of the country.
 - rs. I have been out of the country. ☆ Flyers on 3rd party upgrades.
- ☆ Had meets in MD (didn't some of them used to be in Bethesda?)
- ☆ What happened to computer slide show?
 - ☆ More publicity
- ☆ There were a forum where novice users could ask their questions without being intimidated by the 200 or so super power users.
- ☆ Why didn't you show your usual slide show?
- ☆ They are all techies—I attend few, but continue to be a member and read WAP Journal to "keep up" for daily office use (and some hobby use)
 - ☆ They woke up earlier
- ☆ It's good to use the Saturday meetings as "show and tell." Your class schedule is good, but suffers the same problem the meetings once had: they're all in Bethesda. If there is a way to move them occasionally it would be OK. Another idea: corporate people offer "free" classes.
- ☆ Could talk about getting down to the real business.
- ☆ What happened to your penguin slide show?
- ☆ Convenient location and had the time.
- ☆ Info was in local papers, local computer stores.
 - ☆ Had more in VA
 - ☆ More hands-on demos (HP did

it right).

- ☆ I have a hearing problem and cannot follow the speakers. I could use a note taker or oral interpreter (I do not sign).
- ☆ The program were described in more detail.
 - ☆ They remain in NOVA CC
- ☆ The top vendor companies usually attract the best crowd. The NOVA comm. college meeting place is great!
- ☆ Use "teasers" in Journal for most recent and next upcoming meetings.
- ☆ What happened to the penguin announcements?
 - ☆ Fine as is.
 - ☆ I missed the penguins
- ☆ Gave away a PowerBook at each meeting!
 - ☆ Show slides on new TCS listings
- ☆ New member. Have more meetings in NOVA
- ☆ Why did you not show your computer slides?
- ☆They could get together in small groups related to special interests (e.g. learning about printing & fonts). Not a substitute for other regular special interest programs.
- ☆ Give away a "Best of Pi" disk set at each meeting.
- ☆ Had a more structured Q&A session.
- ☆ Q&A and presentation balance is excellent.
 - ☆ Doughnuts!
 - ☆ Great meeting place currently
- Δ Perhaps some improvement in clarity of projections onto screen I know I have trouble sometimes.
 - ☆ Held in Bethesda
 - ☆ Get down to business sooner
- ☆ Your slides were better than Hewlett-Packard's
- ☆ I'm glad that they are in Virginia
- ☆ Maybe you should do HP's slide show; yours works.
 - ☆ Maintained same mtg. area.
 - ☆ Controlled the riff-raff
 - ☆ I attend whenever I can. Unless

something comes up you can count on me being here. You have great programs and I appreciate the work that goes into putting them together.

- ☆ Meetings seem too long without a time schedule.
- Are those bozos with fliers members?
- ☆ You didn't meet in Northern Virginia
- ☆ Had the meetings in Maryland; always gave away the product demo'd.
- ☆ More of them were held in Maryland
- ☆ If they were more dedicated to their Mac.
 - ☆ In Greenbelt
- ☆ Q&A is helpful and interesting. In general I like the meetings.
- ☆ You should act on your idea to hold a paper airplane contest with the fliers.
- ☆ How to get started with QuickTime as well as which Macs to buy w/o being abandoned because they are not made 6 mo. — 1 yr. later.
 - ☆ Publicize to other Mac groups?
- ☆ Don't change location. A great job is being done by all, but like my hard drive I try to fill my mind to capacity.
- ☆ You were more centrally located to the DC Metropolitan area.
- ☆ You continue to feature the information on the front cover of "Apple Pi."
- ☆ I get tired of the strange men with handouts
- ☆ Moved closer toward the middle of the area.
- ☆ Don't really know. I have too many time conflicts.
 - ☆ Had some in Maryland
- ☆ More giveaways from rich computer companies we support.
- ☆ Your MD meetings were closer for those of us in PA
- ☆ Brand new; no opinions since I just joined.
 - ☆ More demos
 - ☆ I missed the penguins
 - ☆ I think its great
 - ☆ They were held in Maryland

- ☆ They were held at my house.
- ☆ Better Apple II programs
- ☆ New Apple II programs
- ☆ Meetings started at 10 a.m.; more giveaways
 - ☆ Stop the leafleteers.
- ☆ Recycle the guy passing out flvers
- ☆ Meet closer into the area; prefer Maryland
 - ☆ Meet in Maryland
 - ☆ More presentations
- ☆ Closer to Montgomery and PG county
- ☆ Pretty good since we only have 10 meetings and 2 garage sales [claimed to have attended 12 Saturday meetingsl
- ☆ Move back to MD. I'm from Gettysburg; do you really get people from Richmond?
- ☆ Have a bulletin board at NOVA meeting
- ☆ Hard to say. Maryland is out for me. VA is OK but Saturdays are
- ☆ Provided more specialized interest group hype of items. Weekday night SIGs are hard to make in a wide spread area as Wash. metro area.
- ☆ The Mac VP were better looking...

Closing Comment

For those confused about the repeated references to a slide show and penguins, the General Meetings since July 1993 have featured a Microsoft PowerPoint "slide show" highlighting recent accomplishments, upcoming events, projects, and important dates. These slide shows also happen to feature drawings of penguins. At the November meeting, due to the complexity of a Hewlett-Packard slide show using real slide projectors, we couldn't set up the computer-generated "penguin" slide show, and apparently it was missed. It didn't help that the contractor hired by Hewlett-Packard had severe difficulty getting their presentation to work.

Mac Care & Feeding © 1993 Tom Witte

Tip 1

Question: How do I turn on my Mac?

Answer: Lower-end models have a switch in the back. Upper-end models, with extended keyboards, will start by depressing the power button on the upper section of the keyboard.

Some Mac power switches (upper end models) can be set so that they are always on. This will cause the Mac to restart after shutdown or power loss.

Tip 2

Question: How do I clean the case and the monitor?

Answer: Use a soft, clean damp cloth. That will take off the static-bound dust that covers the screen and or fingerprints. Avoid strong cleaners.*

*Some screens are covered with an anti-glare coating that can be wiped off with strong cleaners.

Question: How do I avoid getting static shock?

Answer: Increase the moisture in the air. Use your ring or a key to touch a ground before you touch your computer.

Buy and use anti-static products.

Rub your chair, rug, clothes with one of the fabric softener sheets that are used in dryers.



New Macintosh Files on the TCS

by Lawrence I. Charters

n the first three months of operation (Aug. to Nov. 1993), the new TCS (Telecommunications System) managed to accumulate 3,600 files totaling 660 megabytes of information, answered slightly less than 25,000 calls, and handled 40,000 downloaded files. This is far, far more than any other multi-user Apple II and Mac-based bulletin board in the world. Of course, we aren't aware of any other multi-user bulletin boards based on Apple II and Mac computers, but that is mere detail.

As of this date, at least two people had managed to download over 700 files apiece. One very organized user managed to download 94 files — in one day. When reading statistics like this, some are inclined to say, "yeah, but these are the hot-shots with fast V.32bis modems, not the run-of-themill user with an ordinary 2400 bps modem like mine."

Wrong. One individual managed to nab 74 files in a single 120-minute session on the TCS, using a 2400 bps modem. While fast hardware helps, organization, and following directions, help far more.

Make sure your modem and software are set up properly. Virtually all the "I can't download anything from the TCS" complaints are solved through proper setup of your telecommunications software. In a few rare instances, a bad

- modem or a bad cable are the culprit, but by far the most common problem is improper setup of your software.
- Use the ZMODEM transfer protocol. This is far more efficient than any flavor of XMODEM, and less prone to errors than YMODEM. If your software doesn't support ZMODEM, get an update that does, or trash it and get something else.
- Use the TCS Batch download command. You weren't aware there was a batch download command? Well, first you Mark files you want to download (press the? key to see how to do this), then download them all at once as a Batch (again, press the? key for details).
- In case of doubt, take a look at the TCS FAQ (Frequently Asked Questions) file in Area 2, TCS Help Files. This text file, which can be read by any word processor or text editor, covers the most common questions on how the TCS works, and how to overcome common obstacles.

And now for the disclaimer: this listing represent only a small portion of the constantly changing library of files available for downloading. Call the Pi Office at 301-654-8060 for information on how to subscribe to the Washington Apple Pi Telecommunications System, the Pi's "24 hour a day General Meeting."

Area 3: Apple System Software

AT.EASE.201.UPD: update At Ease 2 to version 2.0.1

AUX.302.SIT: update Apple's AU/X to 3.02 from 3.01.

MACCHECK. 105A1: latest version of the utility found on the Software Utility Update v.1.0.1 disk (File #86) to diagnose Mac problems.

SYS.ENABLER.088: version 1.1, for the AV Macs.

SYSTEMENABL.LIS: contains a list of the models which do use System Enablers, and the appropriate versions of each Enabler for a given Mac model.

TCPUPDATE.SIT: update a "virgin" (unused) copy of MacTCP from version 2.0 or 2.0.2 to version 2.0.4.

Area 6: Misc Documents

BLACKBAG. TXT: text listing of health care electronic resources (bulletin boards and the like).

GERMANXMASS.SIT: text of German Christmas songs, in German. **HEALTHPLAN.SIT:** Clinton's Health Plan; 12 linked, indexed Word files.

INTERNETPRI.SIT: privacy on the Internet, or lack thereof and how it could possibly relate to you and what you can do to ensure the privacy of your communications.

OSCARS19279.SIT: list of Oscar winners and nominees from 1927 to 1991, with 1992 nominees.

Area 7: GIF Graphics

BABLYON5.GIF: after the first four giant Babylon craft are destroyed by mysterious means, Humanity builds a fifth. Alien races everywhere are asking, "Why? Haven't we suffered enough?" KATHY2.GIF: Kathy Ireland redux MSHOME.GIF: logo of new Microsoft Home division. Microsoft sent this to us as a Windows BMP file on an MS-DOS

diskette. I think they're confused. POW034.GIF: nice looking color GIF of "The Old Village Store' Imperial gas station.

WORLD.IR.GIF, WORLD.VIS.GIF, UK.IR.GIF, UK.VIS.GIF, EUR.IR.GIF, EUR.VIS.GIF, ATLANTIC.IR.GIF, ATLANTIC.VI.GIF: series of satellite images of the world, the United Kingdom, Europe and the Atlantic, taken by a European satellite in infrared and visible light. These were transferred from a European computer (at the University of Edinburgh) and posted on the TCS within minutes of



their receipt from space. Isn't science wonderful?

Area 9: MOD Music

STRKR2.SIT: version 2 of the SoundTreker MOD player for the Mac. Program, dialogs and documentation are all in the original German. But Mac people never read this stuff, anyway.

Area 11: Newton

- FORTUNE.DEMO: demo version of the Fortune Guide to American Business, an information tool produced by Apple Computer and Fortune magazine.
- MRADVISADOR. 142: a PDA, a Personal Digital Advisor. If you are having troubles in your life and just don't know where to turn, ask Mr. Advisador and he will gladly offer advice.
- NEWT.TURTLE: turtle graphics programming environment, using Newton Script (instead of Logo), Newton's object-oriented implementation language.
- NEWTPACKAGE.SIT: Newton Package Downloader
- PICOFERMIBAGLES: "Pico Fermi Bagels," v. 1.0d2, is a number guessing game.

Area 13: DOS/Windows/OS2

- DCBB1193.ZIP: "Focke's List," an application and several databases designed to create custom lists of bulletin boards, sorted and selected by several criteria, for the Washington Metro area.
- HOMECOLR.BMP: logo for the new Microsoft Home division, in Windows .BMP format. Why Microsoft sent an Apple group a logo in this format - on an MS-DOS disk, no less — is a mystery.

Area 14: Mini/Mainframes

ARNS.TAR.Z: runs LocalTalk over a PPP or SLIP TCP serial connection.

Area 21: MAC Essentials

- CPRO. 1.34.SEA: Compact Pro 1.34 is an archiver that can be used to compress or decompress CPT archives and multisegment archives.
- DISINFEC.33.CPT: version 3.3 of John Norstad and Northwestern University's superb virus detection utility.
- TRANSLATOR.FIX: StuffIt Lite BinHex4 Translator bug-fix.

Area 22: Mac Applications

ALPHA.5.55: powerful, multi-purpose editor that allows any program- or userdefined function to be bound to any

- keystroke, or placed into user-defined menus
- BLACKBOARD.SIT: used for creating stand-alone applications for documentation
- DIGSIM2.8.SIT: design circuit boards and all that other esoteric hardware stuff.
- DOCMAKER3.96: create stand-alone documentation files.
- FAMILYEVENT.SIT: genealogy program

"Use the TCS Batch download command. You weren't aware there was a batch download command?"

- with flexible report writing capabilities. LATLONGCALC.SIT: can return lat. and long. of a spot given map edge coordinates from U.S. Geological Service maps.
- LOGMASTER30.SIT: track and log time spent with clients and generates billing reports.
- MACCHEMTAB2.SIT: Table of Elements program
- MACCONFEREN.SIT: multi-user conferencing application which allows multiple people on a network to chat and carry on a discussion, much like you could have on a computer bulletin board.
- MICROWORLD1.SIT: molecular display program for three dimensional model renderings (Dreiding, Ball&Stick, Space Fill) from atomic space coordinates.
- NEWS.EDIT.1.0: very simple text editor. It only take 50 KB of memory (less than Teach Text), and doesn't have Apple's licensing restrictions.
- PLANET40.CPT: determines viewing information for sun, moon, and visible planets for any location on earth and for any time within plus or minus several thousand years.
- TREKQUOTER2.SIT: dispense random Star Trek quotes from TOS, TNG and DS9.

Area 23: Mac Utilities

- AUTOCLOCK14.SIT: utility and extension that will automatically call and set your Mac's clock to a multitude of atomic clocks worldwide.
- DOWNER.SIT: shut down Mac after a predetermined amount of inactivity.
- INSOMNIA102.SIT: wake up your PB/Duo at predetermined (and multiple) times to perform certain operations (e.g., batch

- fax in the middle of the night) and then put the PB back to sleep.
- LANTEST.SIT: test your network's efficiency (LocalTalk, EtherTalk or token ring).
- MACGZIP.SIT: will encode and decode gzip (.gz) files starting to really gain in popularity on Unix sites. Will also Unix Compress files (.Z).
- MEMMAPPR111.SIT: visually display memory usage in a bar chart with each application marked.
- MONITORD.SIT: robust, small utility to keep track of disk space in real-time, monitor memory, etc. Neat.
- MOOVSNDTOOL.SIT: two System 7 Drag and Drop utilities allow you to convert QuickTime audio tracks to AIFF format sound files or to System 7 sound files.
- MTOKFH.SIT: patches the 7.1 (only!) Finder to allow the space displays to be displayed in k's instead of megabytes.
- MUSISAVER. 1.1: small, free, screen saver application.
- NAFF: Not Another File Filter is a nofrills, quick-and-dirty utility for converting between Mac, MS/DOS, and Unix text file formats.
- NETWORKSECU.SIT: AppleTalk based utility that will scan multiple zones for the presence of Macintosh servers and compile reports on the security of those servers.
- OPENFOLDER7.SIT: utility that allows you to open any folder without digging through volumes & folders.
- QABENCHMARK.SIT: nice utility for measuring system performance.
- RESCOMPARE.253: programmer's utility that compares resource files. Use it to find differences between two files.
- REVRDIST1.4.SIT: synchronizes remote Macs local software to that of the Server.
- RIPEMMAC85.SEA: Ray Lau's fileencryption utility, using the RIPEM standard. '020+ only.
- SEARCHFILES 1.3: utility for performing file searches
- ULTRAFIND1.CPT: 'Professional-Strength' File Scanner for System 7. Locates files/folders by many criteria, including contents of files.
- UPSMON.SIT: monitor UPS' status if the UPS has a serial-out line.
- UULITE.1.5: used to encode and decode Mac files, using the Unix to Unix (UU) scheme.
- ZIPIT1.2.SIT: ZIP/ UnZIP files using the latest PKZip compression levels.
- SYSTEM7PACK.CPT: includes System 7 Pack Extras Control Panel which gives you instant hot key access to an accelerated Empty Trash command. plus Finder Safe Shutdown, Restart, and Sleep hot keys; plus other goodies.



Area 24: Mac Extensions

- AD.BATSIGNAL.11: After Dark screensaver module with Batman theme.
- AD.SAW.1.1: After Dark power saw cuts strips off of your screen.
- ADCLOUDS.SIT: After Dark module that draws active, animated, fractal clouds. ADDIMWATTS.SIT: After Dark module

for PowerBooks

- ADMODULES4.SIT: four After Dark modules: Blank, SnowBall, SnowBall2 and Pipe; all from the same author (Don McClelland).
- ARTIES 1.1.SIT: After Dark module builds roads
- BOMBSHELTER.CPT: extension that enables the 'Resume' button in all crash dialogs that most applications don't have enabled.
- CACHEOUT.CPT: automatically turn off the '040 cache with programs that can't handle it.
- COLORSW2.2.: quick access to the basic features of the Monitors control panel, i.e. changing video depth.
- DECOR1.1.2.SIT: allows you to replace the standard desktop pattern with a PICT or StartupScreen picture of your choice.
- DEFAULT. FOLDER: lets you assign, for each application you run, a default folder in which to store documents.
- DISCOLOR102.SIT: colorize floppy icons. By Ted Turner...er, Andrew Welch.
- FORWARDDELE.SIT: extension that enables the forward delete key on Apple's extended keyboard.
- LETTERHEADE.SIT: allows you to add a letterhead or other graphic to a printed (or faxed) document at print time.
- OTHER.MENU.124: creates a system-wide hierarchical menu somewhat similar to the Apple menu.
- PLANETMAKER.2.0: After Dark module draws elevation view of planet, like Earth, from several hundred miles up.
- PWRSWITCHER.SIT: allows you to switch between active applications with either your power key or Esc key (handy for PowerBooks).
- SCRIPTDAEMO.SIT: when Telneting into your Mac, to sign on to your AppleTalk network as Owner via AppleScript.
- SEAVIEW.SIT: movie resource for Zipple 1.7 (or later) simulates the multicolor panel on the submarine 'Seaview' of the TV show "Voyage to the Bottom of the Sea."
- THEBAR21.SIT: application switcher that puts a floating bar of your open applications wherever you want it.
- WHOSTHERE.SIT: nifty little Chooser extension that lists all the people, machines, printers, processes on your network.
- WRAPSCRN1.3.SIT: allows your mouse to

- wrap across your screen and come out the other side.
- ZIPPLE1.8.SIT: animate your apple and other icons. v1.8

Area 25: Mac Font

- ASCIICHART.SIT: display, save, print entire font map.
- BRUSHSTROKE.CPT: paint brush typeface useful for headlines and flyers. FC50.SIT: Font Clerk 5.0; display, print
- sample sheets and convert Mac
 Truetypes to Windows Truetypes.
- FONTCASCADE.SIT: display a font in large, even very large, sizes, on screen or printed.
- FONTCATALOG.CPT: "Electronic Catalogue" from The Underground Phont Archive. Three pages of scanned fonts (150 or so!)
- MIDDLETON: unabashed knockoff of Florentine; both PostScript Type 1 and TrueType versions are included.
- PACKERE: an italic TrueType font which can be used in reports and other items where a big, clean font is needed.
- POSTCRYPT. Type 1 PostScript font based on the old "Tales from the Crypt" comic books.
- POTSDAM: whimsical font.
- RICKSHAW: Roman (English) characters made to look like Chinese brushstrokes. Both TrueType and PostScript.
- ROGERS: Art Nouveau font.
- ROMULUS: TrueType font is similar to the Star Trek Romulan and Vulcan alphabets.
- ROODCAPS: TrueType font is a bold, eccentric, curvy display typeface for headlines, ads, and casual design.
- RUBICON.POSTSCR: 3 PostScript fonts: ISOTYPE, a medium weight serif typewriter face; CLASSIC, a serif face; NOVA, a sans serif face matching Classic, with a rounded bold. Classic, Nova, and Isotype are based on the Computer Modern designs from the TEX typesetting system.
- RUBICON.TRUETYP: 3 TrueType fonts, versions of the PostScript originals.
- RUDELSBERG: Type 1 PostScript Art Nouveau font.
- SAINT.FRANCIS: TrueType version of Apple's venerable San Francisco font.
- SALOON.EXTENDED: bold display typeface with an "Old-West" feel. Both PostScript and TrueType versions are included.
- SAPIR.SANS: elegant, sans-serif TrueType font for International Phonetic Alphabet.
- SAVES.AND.SALES: each letter is actually the whole word "Save" or "Sale." Each letter shows the word in a different, arty construct.

- SEDIMENT.ARROW: two TrueType fonts:
 1) Sedimentary, which has symbols for common sedimentary structures
 (troughs, ripples, etc.), fossils, and other features (logs, carbonaceous debris, etc.), and 2) Arrow, which has directional fonts in 5 degree intervals from 0 to 355 degrees and is intended for use on stratigraphic columns as paleoflow indicators.
- SLABFACE: very bold but nice PostScript Type 1 font.
- SMILEY.FACE: a font of... you guessed it.
 SNYDER.SPEED.BR: display/headline
 font of hand-lettered, brush-stroke used
 by commercial artists and sign painters
 to create eye-catching copy for signs,
 banners, posters.
- STARGOROD: simple and elegant Cyrillic (Russian) TrueType font.
- STARSANDSTRIPES: all-caps TrueType display font; "Lower Case" letters appear as capital letters filled with stripes. "Upper case" letters are filled with stars.
- TECH.GRAPHA: bitmap, Type 1, and TrueType versions of a symbol font for plotting. A favorite of Oliver Stone.
- TECH.PHONETIC: an IPA (phonetic symbol) font.
- TELEPHONE.REG: type a phone number in letters, then display it in the Telephone-Regular font. It will appear as numbers.
- THOMAS: PostScript and TrueType font that is a slightly antique looking book face, based on Caxton.
- TNG.MONITORS: inspired by the tall, thin font used on the monitors for U.S.S. Enterprise NCC-1701-D on Star Trek: the Next Generation.
- TOULOUSE.LAUTRC: looks like the font used to title "Murder She Wrote."
- TRAINS: TrueType font which has all sorts of pictures of locomotives, freight cars, cabooses, old engines, and so on.
- TREEFROG: looks like its been squeezed from the pen of some fanciful, woodsdwelling type designer; both TrueType and PostScript Type 1 formats.
- VISAGE: a "font" of peoples' faces. Both PostScript and TrueType versions are included.
- WINDROW.HAND: font of artist's hand drawn letters; both PostScript and TrueType versions are included.
- WIZZYFONTS.0.5: INIT (System Extension) which shows entries in font menus in the fonts themselves.
- Z: fairly simple PostScript font for the Z specification language. It is based on the notation used in Hayes' Specification Case Studies.
- ZACHARY: font simulating a child's handwriting.



Area 26: Mac Sound

ALADDIN.SIT: mounds of sounds from the animated movie.

BIGSOUND.SIT: simple sound player. ENDING.SIT: Homer and Marge combine for a great shutdown sound.

JAZZHORNS.S.SIT: jazz horns sound. MACINTOSHTR.SIT: Macintosh Tracker, for playing MOD files (see Area 9).

PIANO.SIM.1.0: musical instrument simulator (synthesizer). Prerecorded music is included.

PLAYER.PRO.4.09: permits you to play MOD files, edit instruments and partitions, etc.

SPOCK.SIT: Spock says he can't take your

TINKERBELL.SIT: little known fact: Tinkerbell was the illegitimate daughter of Peter and Taco Bell.

WHALES.SND.SIT: whale songs.

Area 27: Mac Graphic Images

ENTERPRISE.SIT: color drawings of the starship Enterprise, done with a rendering package.

EUROPEFLAGI.SIT: color icons in the form of European country flags.

EVILJACK.CPT: evil Jack-o-lantern WallPaper document.

HUGEPPATARC.SIT: huge collection of desktop pattern resources to brighten the look of your Macintosh.

JURASSICPAR.SIT: Adobe Illustrator EPS (Encapsulated PostScript) version of the Jurassic Park logo.

LOTRICONS.SIT: Lord of the Rings icons. MARITIMEFLA.SIT: color icons of maritime flags.

MOREFLAGICO.SIT: color flag icons of Mid-East and Latin American countries. RDISK.PICT: recycled disk image (color/

RECYCLINGLO.SIT: three high-quality PostScript recycling logos, done with Adobe Illustrator and saved in EPSF. STERNICONS.SIT: Howard Stern Icons TURKEYDAYPA.CPT: Thanksgiving theme wallpaper

Area 28: Mac Graphic Utils

COLOURCHESH.SIT: Color Cheshire: this makes much more sense if you've read "Alice in Wonderland."

CREDIMAKER.SIT: designed for making credits for QuickTime movies.

CYBERGIF1.3.SIT: fast, if somewhat picky, utility for viewing GIF (Graphic Interchange Format) pictures.

EPSFILTER2..SIT: utility which can convert some kinds of HPGL files (used by HP printers and plotters in the MS-DOS world) and some kinds of Aldus Freehand EPS files and turn them into Adobe Illustrator files.

FRACTALARTI.SIT: little program draws high-quality color fractals.

GCON2.33.CPT: GIFConverter v.2.33 can open GIFs, PICTs, TIFFs, JPEG files (with QuickTime installed) and save them into other formats.

ICONFAMILYM.SIT: Icon Family Maker 2.3 will create an entire family of icons in various sizes.

MANDLEACID1.0: wild application for drawing Mandelbrots, with a superb interface.

NIHIMAGE 153. SIT: latest NIH Image with new Image Math feature.

PHOTOSHOP.SIT: various and sundry Photoshop goodies.

QUICKTIME. VCR36: QuickTime player done with a VCR style interface, complete with a funny sample movie.

THREE3DOTS.CPT: creates 3d pictures out of random dots. Known as Random Dot Stereograms.

Area 29: Mac Telecomm

ASYNC.APPLETALK: predecessor to Apple's AppleTalk Remote Access product. Works well with System 7 as well as System 6.0.

ASYNC.PEEK: an RS-232 line monitor and tester.

CALLERIDMAN.SIT: CallerID

"Use the ZMODEM transfer protocol. This is far more efficient than any flavor of XMODEM, and less prone to errors than YMODEM."

management application for Supra modems with the CallerID option.

CHARONO.984.CPT: FidoNet mailer to be used in conjunction with CounterPoint/ Obolus or with MacWoof.

HAYES.ARA.SIT: ARA CCL's for Hayes high speed modems, including the Accuras.

INTERNEWS. 1.0: Usenet newsreader, from Dartmouth College.

LEEMAIL.2.0.2: Macintosh mail program which uses the Simple Mail Transfer Protocol (SMTP) and the Post Office Protocol (POP).

MACPPP2.0.1.SIT: implementation of

Point-to-Point Protocol (PPP).

NCSAMOSAICM.SIT: enabling technology that allows the user to easily access networked information from all over the world with the click of a button.

NET.MAC.2.3.29: packet radio (ham radio) program

NEWSWATCHER2D16: Usenet newsreader, from Northwestern University and John (Mr. Disinfectant) Norstad.

TELNET2.6B1.SIT: NCSA Telnet v.2.6B1, TCP/IP terminal package.

THENEWS.231: Swiss army knife Usenet news reader

Area 30: Mac Product Demos

ALDUS.FETCH: demo version of Aldus Fetch image database

AUTOCONTROL.SIT: demo of device control program for the Mac BRUSHSTROKE.SIT: demo of **BrushStrokes**

COMMUNICATE.SIT: Communicate Lite Demo

DESKTAPE.1.6: demo of DeskTape 1.6 DEMO, mount DATs on desktop ENDNOTEPLUS.SIT: EndNote Plus FR.MZDEMODI.SIT: demo of PageMaker

addition for making frames

INSTALLER.MAKER: evaluation copy of InstallerMaker from Aladdin Systems. KALEIDOGRAP.SIT: working demo of

Kaleidograph

NOW.UP.TO.DATE: working demo of Now Up-to-Date v. 2.0.1.

OFOTOVERSIO.SIT: overview of Ofoto, great scanning util

RESOURCR1.2.CPT: demo of Resourcer 1.2 resource editor

WORKING.MODEL: demo of Working Model, mechanical simulator

Area 31: Mac Product Support

C.DOUBLR.202: CopyDoubler 2.0.2 Updater

DATEBOOKPRO.201: Datebook PRO 2.0.1 Update

NOWUPTODATE.2.1: updates Now Up-To-Date to 2.1

QUARK.PATCH.SIT: patcher for Quark Express 3.2

SAMVIRUSDEF.CPT: latest SAM Virus Definitions.

SOUNDEDIT.PRO: SoundEdit PRO Updater

SPACE.SAVER.106: StuffIt SpaceSaver 1.0.5->1.0.6 Update

SPACEMADNESS112: Space Madness 1.1.2 Updater

STUFFIT.DLX.307: StuffIt Deluxe 3.0.6 -> 3.0.7 Updater

SUITCASEPAT.CPT: Updater for Suitcase v2.1.4



SUPERVIDEO.274: SuperMac SuperVideo control panel v2.7.4

TOUCHBASEPRO301: Touchbase PRO 3.0.1 Updater

Area 32: Mac Games

- ARTILLERY15.SIT: two player game in which you set your cannons to blast the other guy's castle.
- BACHMAN.2.0U: Pacman-style game for the Macintosh.
- BLACKJACK.DELUX: Blackjack game and coach
- FASTEDDY.SIT: slot machine game with New Orleans political commentary.
- HEART.QUEST.0.8: nonviolent arcade game with Swedish voice.
- MACANGBAND1.SIT: MacAngBand v.1.0, text-based role-playing game.
- NETHACK313.SEA: legendary singleuser, fantasy role-playing game, descendent of Hack and Rogue.
- TASK.MAKER.2.0: sword and sorcery game.
- TETRIS.MAX.2.1: high quality implementation of the classic game Tetris.
- THREE.TRIS.211: color version of 3D Tetris.

Area 33: Mac Education

INSTANTREPO.SIT: very professional application for creating report cards.

Area 34: Mac Hypermedia

- AT.YOUR.SERVICE: HyperCard toolkit for installing self-contained
- communications capabilities into stacks.

 AVANTGUARDCOMIC: HyperCard demo
 of the comic book AVANT GUARD from
 Day One Comics.
- CARDIOVASCU.SIT: information on the heart and cardiovascular system.
- FACTBOOK93.SIT: 1993 Edition of the CIA's World Factbook HyperCard stack, a compendium of facts on all the world's countries.
- HYPERFTP1.4.SIT: FTP support for HyperCard.
- HYPERMOVIEP.SIT: play QuickTime movies from within HyperCard.
- JFK.SIT: at least one person's view on the "truth" of JFK's assassination. Includes the famous film clip, now in QuickTime format.
- METRORAIL.SIT: HyperCard guide to DC Metro subway system.
- PLAYMODBUND.SIT: HyperCard stacks for playing MOD music
- POORMANS.NEWTON: HyperCard stack that contains address and telephone information and generally behaves like Apple's new Personal Digital Assistant (PDA), the Newton MessagePad.

- POWER.NOTES.2.1: HyperCard stack designed to be an electronic notebook for students and researchers, on a PowerBook or other Mac.
- QLEPISODES.SIT: latest (and probably last) version of stack listing all the episodes of the late, lamented NBC science fiction TV series.
- SIMMSTAK401.SIT: HyperCard stack with details, and pictures, on what kinds of SIMMs (memory modules) are required by the various Macintosh computers and printers.
- VIETNAM.SIT: stack with over 100
 QuickTime-compressed files from a
 soldier's time in Vietnam.

Area 35: Mac Multimedia/QT

- AGE.OF.INNOCEN: interesting, interactive MacroMind movie promotion for the film The Age of Innocence.
- CANITOUCHIT.SIT: clip from Jurassic Park with X-rated title.
- CHEM3D.SIT: rotating 3D model of a molecule
- DANCEMOOV.SIT: dance which was between segments of a PBS/Smithsonian documentary about anthropology & art.
- DDTFILM.SIT: newsreel clip showing DDT in the war against birth defects
- DOUBLEYUDOS.CPT: Our hero is at it again, only he's been spotted by Wall Security. Will he escape? Will he prevail? Is the helicopter really his father? Hmm...
- EARTHFLIGHT.SIT: glorious clip showing the Earth rotating beneath the Shuttle.
- ESCHER3D.SIT: great optical illusion clip GARJUMP.SIT: man doesn't trust plane, jumps
- MACCATALOGQ.SIT: catalog of every
 Mac model, done as a QuickTime movie.
 MATHEMATICA.SIT: animation of a
 Mathematica graph
- MEOOC3D.SIT: rotating 3D model of a molecule.
- MOOSEMOOV.SIT: the Moose from Northern Exposure
- ROBOTTVEYES.SIT: robot TV eyes clip SAFESEXPSA.SIT: safe sex public service announcement
- SKIER.SIT: clip showing a skier (snow type) SUNJANMAY.SIT: the Sun from January to May, 1993, as viewed by soft X-rays captured by a Japanese satellite. It is an incredible sight, one that will give you warm fuzzies or cold chills, depending on how you see this, as our friendly neighborhood star, source of all energy, or as an incredible visualization of Dante's Inferno.
- T2HOGJUMP.SIT: Arnold's double, pretending to be Arnold pretending to be a Terminator, flies off the retaining wall

- holding back the raging Los Angeles River and lands on the riverbed in a shower of sparks atop his Harley.
- TEAPOTQT.SIT: rendered 3D view of a classic teapot.
- VENUS.SIT: wonderful globe of the planet Venus, composed of radar images mapped to a sphere.
- VIDEOEDGEDEMO: interactive demo of Video Edge movie editing software.

Area 36: Mac Information

- CATEGORYSTA.SIT: FileMaker database for keeping track of information categorized by states.
- CLARISFMORG.SIT: FileMaker Pro template for duplicating the function of those over-priced organizers you can buy at expensive bookstores.
- CONTACTSMAN.SIT: FileMaker Pro template for creating contact management databases.
- FMPRO2MARKUNM.S: FileMaker Pro 2.0 template showing how to mark and unmark records.
- FMSECRETARY.SIT: template for a FileMaker Pro secretary. Not so hot on making coffee.
- PRIC1021.SIT: Apple's price list, 21 Oct 93.
- TIDBITS#198 to TIDBITS#202: the weekly electronic Macintosh magazine for Oct. 19, 1993 to Nov. 15, 1993.
- TIDBITS001..SIT: the first 100 issues of Tidbits, dating back to 1990.
- ZTERM.FAQ.SIT: ZTerm "Frequently asked questions" 10/27.

Area 37: Mac Programming

- INSIDECOACH.SIT: information and programming resources for extending Spelling Coach Professional, Deneba's amazing real-time spelling and thesaurus program.
- MACBINARYII.SIT: Think Pascal source for MacBinary II
- OPEN.PROLOG.101: an implementation of the Edinburgh-syntax Prolog programming language. Open Prolog supports most of the features of DEC Prolog or C-Prolog, including Definite Clause Grammars.
- PRETTYC1.51.CPT: format and print readable C code.
- THINKCPP.DEFECT: description of a problem in ThinkC and ThinkC+

Area 38: Mac Technical

- MACCATALOG3.SIT: comprehensive and well-designed FileMaker Pro database includes "every" Macintosh model specs from the 128 and Lisa to the Duo 270c.
- MACMEMORYGD.SIT: Connectix's latest Mac memory guide in DocMaker format.



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 in Excel. 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 program with brochures and fliers. For further information call Beth Medlin at the Pi office, (301) 654-8060.

Macintosh Tutorials

The Macintosh introductory tutorials are a three-part introductory series designed for beginning users or those desiring to brush up 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 the Macintosh. Part I (Course # M011094) 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, hard disk drive, start-up disk, and an unformatted DSDD 800k disk.

Date: Mon., January 10, 7-10 pm.

Introduction to the Macintosh. Part II (Course #M011794) 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, Scrap-

Some Specifics

- Where: Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 7910 Woodmont Avenue, Suite 910, Bethesda, Maryland.
- When: Unless otherwise stated, all tutorials are three hours in length and begin at 7:00 PM on the date listed. The office building is secured at 6:00 PM. To gain access, pick up the telephone located by the glass entry doors and tell the operator where you are going.
- Fees: \$25.00 per class for mem-

- bers and \$35.00 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 canceled by the instructor, all students will be notified of the cancellation. Please check your home answering ma-

- chine if you have not given a work number for notification.
- Student Cancellation: Acancellation must be received by the office 72 hours before a class is scheduled. The only exception to this is a cancellation due to illness.

January Tutorials are the 4 basic ones:

- -Intro to Mac 1 01/10/94 (M011094)
- -Intro to Mac 2 01/17/94 (M011794)
- -Intro to Mac 3 01/24/94 (M012494)
- -Maintaining the Mac 01/26/94 (M012694)



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: Mon., January 17, 7-10 pm.

Introduction to the Macintosh, Part III (Course # M012494) 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: Mon., January 24, 7-10 pm

Maintaining Your Macintosh (Course # M012694) How to maintain and troubleshoot your Mac. Topics will include: organizing and managing your hard disk; backing up and back-up strategies, archiving, disk formatting, defragmentation and optimization; managing start-up resources (including System 7 extensions or System 6 INIT's); avoiding conflicts and incompatibilities; virus protection; memory management; upgrading or replacing the operating system; system enhancements; customizing software installation; cleaning your mouse; and Macintosh "housekeeping" philosophies.

Date: Wed., Jan. 26, 7-10 pm.

Introduction to the Washington Apple Pi Teleconference System (TCS) Course #(T010894) This class is designed for telecommunications novices or new WAP members. This is the perfect seminar for those of you wanting to enjoy the many benefits of

the WAP TCS. Topics for discussion will include how to apply for a password, sign on, configure a user profile, read messages, leave messages, reply to messages, upload, download or transfer files and use of the Librarian.

Course Date: Saturday, January 8,1994 9:00 AM - 12:00 noon

Introduction to Quark, (Course #Q011194) For those with limited experience of Quark, this will be a basic introduction to the powerful desktop publishing program. Topics will be based on student needs: how and when to use Quark, its environment, features, menus and commands.

Materials required: Your Macintosh, external drive or hard drive, startup disk, and a copy of Quark.

Course Date: Tuesday, January 11, 1994, 7:00 PM - 10:00 PM.

Intermediate Quark, (Course #Q011894) This course is designed for people with some working knowl-

Washington Tutorial Registr	Washington Apple Pi 7910 Woodmont Ave., Su. 910 Bethesda, Maryland 20814 301-654-8060 Course Numbers Please fill in the course number of the class(es) that you wish to attend.	
Basic Informat		
NameAddress		
Phone (day) Member Number	(evening)	Class #1 Class #2
Number of Classes x Class Fee \$ Check/Money Order		Class #3 Class #4 Class #5
Card Expiration Signature Can you bring your own computer to the class?		Class #6 WAP Form #CL006 (mod. 7/90). Mail registration and payment to the above address.



edge of QuarkXPress. Using stylesheets and page-grids most efficiently will be covered as will the inclusion of art boxes. Linking, layering, and use of color for interesting effect, and preparing documents for printing and output by a service bureau will also be included.

required: Your Materials Macintosh, external drive or hard drive, startup disk, and a copy of Quark. Course Date: Tuesday, January 18, 1994, 7:00 PM - 10:00 PM.

Advanced Quark, (Course #Q012594) This is for the user with some QuarkXPress experience, This course will cover unusual page grids, effective use of non-standard type treatment and interesting use of both line art and photographic images. We will also discuss newer features such as anchoring of boxes within text, intricate layering of boxes, and blending. If you have samples of unusual projects done in Quark, or projects which you believe could have been done more easily in Quark, please bring them with you for the class to discuss.

required: Your Materials Macintosh, external drive or hard drive, startup disk, and a copy of Quark.

Course Date: Tuesday, January 25, 1994, 7:00 PM - 10:00 PM.

Introduction to Filemaker (FM012794) This is an introduction to the database program Filemaker Students will learn key terminology along with how to create a database, layout a form from input, and create layouts. Additionally students will learn how to enter/edit/ find/sort records.

required: Your Materials Macintosh, external drive or hard drive, startup disk, and a copy of Quark.

Course Date: Thursday, January 27, 1994, 7:00 PM - 10:00 PM.

Introduction to America Online for the Macintosh Course #(AOL012994) This tutorial will give an overview of the America Online information service, emphasizing how to send and receive electronic mail, how to download files, how to minimize online connect time. Two or more Macintoshes will be set up for hands-on practice. If time permits, the class will visit some of the more popular forums and news services on America Online. No prior telecommunications experience required. No materials required.

Course Date: Saturday, January 29. 1994, 9 AM-12:00 noon. Class fee: \$25 for WAP members/ \$35 for non-members.

Special Offers from Apple Computer

The following special offers are available to Pi members from Apple Computer.

There are three pieces of equipment being offered in January under the Performa Purchase Program.

- First is the Performa 600CD (modified Mac VX). It contains a 68030 processor and has 5 megs of RAM and a 160 meg hard drive builtin. Also built-in is the Apple CD-300. A mouse and extended keyboard are included. The monitor is not included; you can connect any of the Apple color monitors or some third-party VGA monitors. This model is one for which Apple has said it plans an upgrade path to the Power PC. Price is \$1,269.00.
- The Performa 405 (LCII) makes a return appearance in the same configuration as offered in December. Included are four megs of RAM, an 80 meg hard drive, mouse and standard keyboard, and the .39 dot pitch Apple Basic Color Monitor. Price is \$659.00. -Finally, there is the Apple 16 inch Color Display. It uses the Sony

Trinitron tube, 832 x 624 pixels, 70 dpi; and has three ADB ports for easy and convenient setup. Price is \$999.00.

- In addition, Apple is making available to schools a special offer on the Macintosh LC-520. This is the all-in-one computer with a built-in 14" Trinitron display. It incorporates the LCIII motherboard (68030, 25 mhz processor). There is room inside the enclosure for the CD300. It comes with 4 megs of ROM, a 40 meg hard drive, a mouse and standard keyboard. The special school price for this offer is \$1,099.00 (a savings of \$199 from the regular school price). This offer is good until December 24, 1993.
- Finally, for those who have or are planning to purchase a Newton MessagePad, there is this offer. If you buy a MessagePad between November 22, 1993 and January 2, 1994, Apple will give you a free Newton Connection Kit (made by Vectra Company) for either a Macintosh or Windows computer. The form necessary to collect on this offer is available in the office or from the Newton SIG.

In addition to the benefit to you, the Pi can gain as well. For every 25 members of Washington Apple Pi who take advantage of this offer, Apple will give the Pi a Newton MessagePad (and connection kit!).

You can order any of this equipment from the User Group Connection in one of the following three ways:

- A Cashier's check made out to USER GROUP CONNECTION INC. and sent to User Group Connection, PO Box 67249, Scotts Valley, CA 95067-7249.
- VISA or MASTERCARD orders by fax to 408-461-5701
- VISA or MASTERCARD orders AppleLink to via sent USER.GROUPS or via AOL to APPLE UGC

Be sure to include your Washington Apple Pi membership number.

See page 56 for order form and special notes



Sign, Sign, Everywhere a Sign

by Deborah Miles-Hoyt

here would we be without signs to direct, inform and guide us? We see them in the market, in the theater, in restaurants, anywhere that we happen to be. Signs play an important part in our lives locally and even internationally. Why just a few decades ago a system for minimizing the confusion associated with interpreting road signs in different countries was undertaken, giving us the international road signs that we use today. A similar system of simplifying signs to make them more easily recognizable has also become part of most of our every day lives. How many of us don't recognize these familiar symbols:







As a matter of fact, a new industry has been created to meet the

needs that society faces today for signage. Yes, that's a real word, and

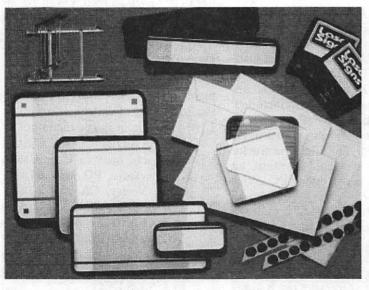


Figure 1—The LaserSigns System Kit enables anyone with a desktop computer to produce four-color, professional-looking signs on his laser printer, and provides all the tools needed to create custom signs quickly, easily and inexpensively.

it is frequently used in conjunction with the needs of the disabled. In the beginning of 1992, laws were passed help meet their needs and among these were requirements for businesses and eateries to supply adequate compliant signage for

the disabled. These were part of the Americans with Disabilities Act (ADA).

But finding adequate signage that doesn't cost a fortune and yet still looks attractive can be a real challenge for business owners-especially those who regularly work with the public. It can be even more of a challenge for the people who sponsor trade shows or fairs.

A Solution Found

Fortunately, there is an answer which is both cost-effective and attractive and can accommodate both the needs of a proprietor/demonstrator and, if your circumstances require, the ADA guidelines set forth by law. I am referring to the new LaserSigns System Starter Kit from PaperDirect. Once again PaperDirect has come through with an original product that helps us to run our businesses, regardless of how large or small, more efficiently. The LaserSigns System Starter Kit includes: LaserSign Templates software and some clipart (for Mac or DOS), a LaserSign Paper Insert set (you can choose your own design from among several popular PaperDirect styles), an assortment of ten frames in varying shapes, sizes and colors, adjustable LaserSign stands and Velcro coins for wall mounted signs (Figure 1).

The LaserSigns are made of durable plastic and each includes a removable lens which serves to protect and hold the sign that you create in place. The lens is easily removed by inserting the accompanying small prying tool between the two tabs on the top of the frame (Figure 2). The lens is also twosided, allowing you to decide which look best fits the desired resultsmatte or glossy finish.

How Did They Perform?

I started out by making simple wall signs and soon began making



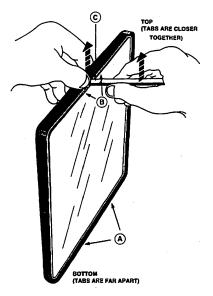


Figure 2—Removing the Laser Sign frame is demonstrated in this line drawing.

more complex signs that were enhanced by the addition of color, us-PaperDirect's Desktop ColorFoil. I tried several sizes and incorporated many of the clipart images that came with the kit. Once I became familiar with how to position the PaperInserts correctly, things sailed along smoothly, but for several of the smaller PaperInsert sheets, I soon discovered that a bit of tweaking was necessary, and so I'll describe to you what I saw as the best way to proceed.

For some of the signs that you will be making, you are not supplied with the generic 8.5" x 11" PaperInsert, and for these you may have to do a bit of a juggling act to have the odd sizes perform as you would like for them to. The sizes in this category are the $2" \times 4"$, $2" \times 8"$, and 4.5" x 4.5" wall sign and desk bar templates. What you have is a PaperInsert that measures 4.125" x 9.25", the size of a standard #10 envelope for the first two and one that measures 5.5" x 8.5" for the last one. This being the case, the easiest way to print out the former is to treat them like an envelope. The latter size proved to be a bit more of

a challenge. Because it measures 1.25" taller than a #10 envelope, it won't work well unless your printer supports custom paper sizes. Mine does not. If your printer doesn't support custom paper sizes, then you will need to find a workaround that is acceptable to you and your printer.

I took the easy way out and changed the page size in PageMaker, taped the PaperInsert on top of an 8.5" x 11" piece of paper, readjusted the template and ran it through the printer. Worked like a charm, but you may think of a more elegant solution. As a matter of fact, check you printer's user manual regardless of which of these two sizes you are working with to be sure how to proceed and always remember to print out a copy on plain paper before you print anything out on the pre-printed PaperInserts.

The custom size of the paper has already been saved in the PageMaker document. And to remind you how to proceed, the file opens up showing you a non-printing note that has been placed on the pasteboard. In order to see the actual template of your PaperInsert, you need to scroll over to the page or choose Fit in window from the Page menu. With my printer, a NewGen TurboPS/880p, I had to also make certain that I had selected "Manual feed" in the paper source section of the print dialogue box. When this option was not selected, I received a PostScript error, so keep it in mind.

You will need to pay particular attention to how you place the PaperInsert into your printer. One problem that I ran across cost me a sheet of the pre-perforated paper. The template was set with the dimensions for an 4.125" x 11" piece of paper that had a 1.96" left hand border and a one-point vertical rule that roughly corresponded to the actual edge of the PaperInsert (the

The LaserSigns Starter Kit includes all of the following:

- Eleven frames in your choice of three colors (black, gray or putty)
 - 2 2"x4" wall signs
 - 2 2"x8" desk bars
 - 2 2"x8" wall signs
 - 1 4"x8" wall sign
 - 2 4.5"x4.5" wall signs
 - 1 6.5"x6.5" wall sign
- 1 8.5"x8.5" wall sign
- LaserSignsTemplates software

Templates for all sizes of signs for Mac (MS Word 4.0 or later: PageMaker 4.2 or later; QuarkXPress 3.1 or later), DOS

(WordPerfect 5.1) or Windows (WordPerfect 5.1 or later; MS Word 2.0; PageMaker 4.0 or later: MS Publisher 1.0 or later).

- Seventy-two paper inserts, pre-perforated to match specific holders, that can come in any of six PaperDirect design styles.
- Ten Monotype and Bitstream fonts

Monotype: Arial, Ellington, Gill Sans, Placard, Rockwell Bitstream: Belwe, Bremen, Brush, Incised, Poster Bodoni

Twenty ADA (Americans with Disabilities Act) ClipArt Images

No Smoking, Handicapped, TDD, Hearing Impaired, First Aid, Amplified Telephone, Stairs, Telephone, Cafeteria, Waiting Room, Lobby, Elevator, Escalator, Information, Restroom, Women, Men, and more.

Fifty Velcro coins to attach holders to walls or other surfaces.



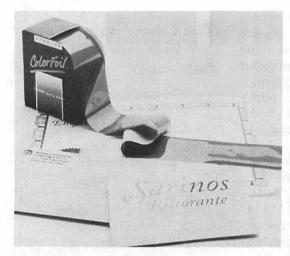


Figure 3—Desktop ColorFoil, available in 16 designs and colors, can transform plain, black lettering or designs into metallic color with a laser printer. It is available in a 16-sheet assortment pack or in single color rolls.

PaperInsert measured only 4.125" x 9.25"). By changing the dimensions in the page set up dialogue box to 9.25" instead of 11" and then going to the master page and removing the vertical line and sliding the master items into the readjusted print area, I was able to correct the problem. As always, don't forget to de-select "Display master items" in the Page menu before you do a final print out on PaperDirect paper.

Now I was ready to put my new masterpiece in a frame. The process was quite straight-forward and I had no difficulty. One interesting feature of the lens which I mentioned earlier is that it allows you to give your sign a matte or glossy finish depending on which side of the lens faces out. Neat. In view of how secure the lens is in the holder, I found it remarkably easy to remove and replace. I have a good supply of the Desktop ColorFoil that PaperDirect also makes and was able to create some stunning and professional quality multi-color signs.

Naturally, all of this sounds very good, but what exactly could you use LaserSigns for? I divided the signs by size and decided on the following as some of the many uses that they can be put to:

2" x 4"

- wall signs—to mark hotel rooms, floor numbers, office doors, neat door mounts for the kids
- desk bars—inspirational quote of the day for the office or home

2" x 8"

- desk bars—use these for employee corporate image and ID
- wall signs—personal ID on cubicles

4" x 8"

- · meeting notices
- · conference room schedules

6.5" x 6.5"

- · department identification
- · restricted areas

• disabled access available (ADA logos included)

8.5" x 8.5"

Trade Show/Fair Booth designations
 With a little thought, I'm sure
that you can come up with many
more to satisfy your own uses.

Other Products to Enhance Your Signage and Your Image

In addition to the LaserSigns, PaperDirect has many other fine products to offer which can enable a desktop publisher or small business owner to produce first rate work that looks like it has been assembled by a professional service bureau working with a reputable printer. I have listed three of my favorites below and Figures 3-5 show you what they each include. Below is a description:

Desktop ColorFoil—enables you to add color and style to



Figure 4—The PaperKit is a sampling of premium papers in various styles, colors, weights and finishes. It is free with first orders of \$30 or more.





Figure 5—Complete Presentation Sets include up to 1,000 different colorful pre-printed pieces (including letterhead, envelopes, business cards, brochures/ mailers, announcements / signs and presentation folders and envelopes) which are available in matching designs.

your laser printouts without having to send your work out of house.

PaperKit-samples of all of PaperDirect's wonderful papers, cards, brocures, business cards, invitations etc., so that you can decide what to order before you pay for it. The kit is free with first orders of \$30.00 or more or is available for \$19.95, plus \$3.00 shipping and handling. This price is credited against any first order that you might make after receiving the kit.

Complete Presentation sets used in conjunction with your LaserSigns, the complete presentation set will help you to exhibit a homogeneous corporate image to your customers.

To introduce customers to this new LaserSigns product line, PaperDirect is offering the LaserSigns System Starter Kit which retails for \$149.00, a savings of \$140.00 off the price of the items sold separately. If you are regularly dealing with the public and in need of signage, you can see how valuable this offer is and how much time and money it can save you in the long run. Paper Direct even offers same-day shipping of orders that are placed before 3 p.m. EST and will ship UPS and Federal Express if requested. To receive a free catalog, just call 1-800-A-PAPERS.

In Summary

I must admit to being genuinely impressed with the LaserSigns Kit. Its hardware and software

were both welldesigned and easy to use. The

one drawback that I noted was that there was some difficulty printing out the 4.5" x 4.5" signs with printers that do not support custom paper sizes, but even this can be overcome with the application of a little ingenuity. I would say that the folks who have brought us customizable greeting cards, Desktop ColorFoil, and Complete Presentation Sets have done it again. Well done, PaperDirect! We asked for a sign that you were ahead of the pack and you gave us many.

Product: LaserSigns System Starter Kit SRP: \$149.00 Vendor: PaperDirect, Inc. Address: 205 Chubb Ave. Lyndhurst, NJ 07071 Telephone:

1-800-A-PAPERS **Platform Requirements:** Macintosh system with enough memory to comfortably run Microsoft Word (no version was specified) or Aldus PageMaker 4.0 or later; PC system running Windows with enough memory to comfortably run WordPerfect 5.1 for Windows, Word 2.0 for Windows or PageMaker 4.0 or later for Windows; or a DOS system with enough memory to comfortably run Microsoft Publisher 1.0 or WordPerfect 5.1. With the latter two platforms, I'm clueless, but if you have one of these, you would know.

Debbie Hoyt owns and operates a small desktop publishing company, The Write Place, in Sterling, Virginia.



Artists on exhibit

by Ann Aiken

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

Artist Info: Marianne Giguere, a fine arts graduate of Dunbarton College, combines computer graphics with traditional painting and silkscreen techniques which gives her work a pleasing line quality. She works out of her studio in Rockville, MD, where she also does desktop publishing and graphic design. This is a follow up report on Marianne's progress since she was last intervieweed three years ago.

Tools: Mac Ilci, PageMaker 5.0, Free Hand, PhotoShop, Illustrator

Techniques: "In my paintings I try to bring together the pictorial and the abstract. I find that the computer is a helpful tool in this process; since I began using the computer my paintings have grown in ways that I never would have imagined. In the last three years, I have added a scanner, upgraded computer, color monitor, and lots of memory to my system. Both FreeHand and Illustrator have added so many features to their programs, that I am constantly trying to catch up. And PhotoShop came along with many more ways to alter my drawings and photos. My digital tablet has been largely replaced by the scanner, though I would like to work with pressure sensitive tablet. My wish list also includes a color printer, a paint program such as Fractal Painter, and lots more time for experimenting!"

In the following pieces,

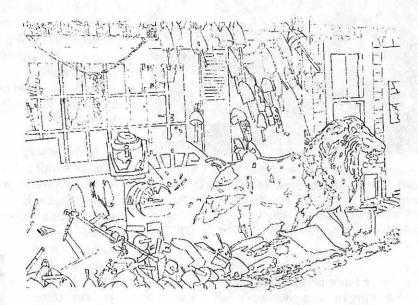


Figure 1—Computer drawing

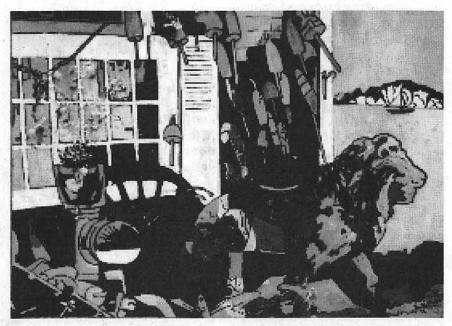


Figure 2—Harbor Views #4



Figure 3—Computer drawing

Marianne creates the compositions on the computer and translates them to paintings and silkscreen prints.

"The Harbor Views #4 started out as a black and white photograph that I took years ago. I was going to make a photosilkscreen print. I decided to play with it first on a light table where I made a pencil drawing. I scanned the pencil drawing into the computer and modified it in PhotoShop. I eliminated pieces of a building and drew in some parts of the harbor areas which I wanted in the painting. Then I exported the file to FreeHand, and printed it tiled it to the size of my canvas. I transferred it to the canvas using a carbon method. (I never did make the photo in print!) This painting was chosen "Best in Category (oils and acrylic)" at a recent exhibition at the Rockville Arts Place.

"Harbor Views #2 was created from a scanned image of a watercolor sketch I did while vacationing in Maine. After

scanning it into FreeHand, I redrew it using the auto trace feature. I modified some areas with the drawing tools, and changed the format from horizontal to vertical. For the painting, I printed the drawing and transferred it to the canvas in the same manner as above. However, I also used this drawing for a silkscreen print. Using FreeHand, I developed the drawing in color. By transferring the layers to the background, I printed each color separately onto sheets of vellum paper, giving me positive transparencies of each. The transparencies were applied to the silkscreen by traditional photographic methods and printed."



Figure 4—Harbor Views #2

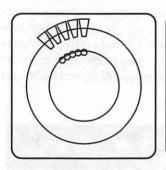


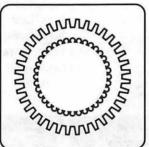
Graphic Tips

by Carol O'Connor

This month, the message is about Adobe Illustrator filters. I must confess that while I thought the new filters were "Terrific" when they first came out, it took months to realize how versatile and useful they really are. It is easy to learn what the filters do: read the

manual. It's more fun to learn how they perform for your own style of illustration. Below, the first two columns show the simplest and fastest direct application of the filter. (In ALL CAPS) The third column, I sincerely hope, has complete directions for the use of the filters

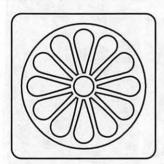




Make the drawing in the first box making sure the large circle is the backmost layer. Continue the rotation of the small objects. Apply the filter, BACK MINUS FRONT.

In Dimensions, extrude slightly. In Illustrator, apply a gradation to the front surface.



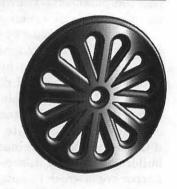


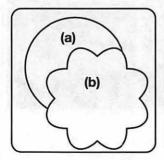


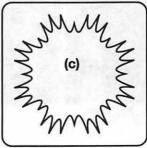
Use the same filter as above.

In Dimensions, extrude with a bevel shaped like this:

I extruded with the bevel extended beyond the edge of the object.

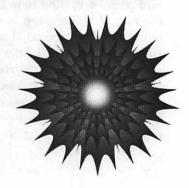






Draw a circle (a) Apply the Filter ADD ANCHOR POINTS twice; apply the filter, BLOAT (b). Reapply the ADD POINTS filter twice. Apply the PUNK filter at 20%(c).

Apply a radial gradient. Resize and copy three times at 80%.





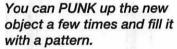
alone (In bold). The last column is an elaboration of the design. The directions for this column are only suggested and are NOT complete (In italics).

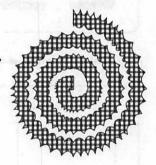
WHERE ARE THE FILTERS? Under the filters menu there are eight categories for the filters. The filters named below, in ALL CAPS, are subgroups of these categories. Use the Quick Reference card or grope around to find the right category.

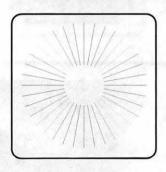




Make the spiral with the **CREATE SPIRAL filter. Make** the stroke as fat as you wish. Then apply the filter: **OUTLINE STROKED PATH.**

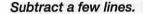




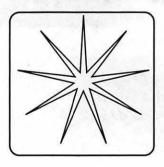




Make the object in the first box by rotating a line at 10° until all the circle is complete. ADD ANCHOR POINTS 5 or 6 times. Apply the TWIRL filter at 360°.









Make the nine pointed star with the CREATE STAR filter. ADD ANCHOR POINTS 5 or 6 times. Apply the TWIRL filter at 360° and at 180°.

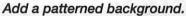


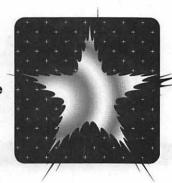






Make the star with the **CREATE STAR filter. ADD** ANCHOR POINTS, Apply the PUNK filter at whatever number of degrees will make your design as punky as you prefer.





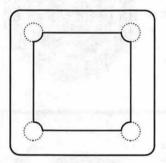


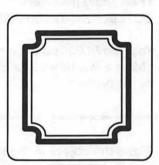


Use the CREATE STAR and **CREATE POLYGON filters at** any position. Put other objects nearby, if you wish. Select all and ALIGN BY CENTER in the ALIGN box.

Fill the individual objects with different gradients.

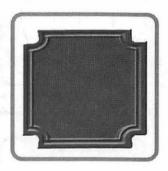


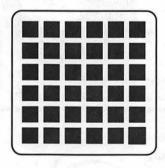


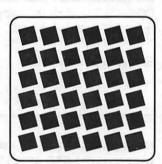


Make the shape in the first box using the BACK MINUS FRONT filter. To make the inside shape, apply the **OFFSET PATH filter. Make** the lines two different weights.

Open in Photoshop and blur, then emboss.

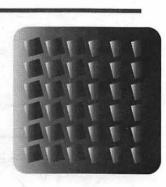






Make the design in the first box. Behind it place a single box of a suitable fill color and no stroke and lock it. Apply the ROTATE EACH FILTER to the entire set of small boxes in one operation.

Add a single gradient to all.



I need feedback from readers to make these articles useful. Please call: 703 430-5881.

I can also be reached at Systems Solutions Group in Crystal City. Call 703 415-3065

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

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January 1994

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31					
2	3 PI SIG	4 TeleComm SIG	Mac Program- mers SIG DTP SIG	6 Columbia Slice Game SIG	7	Intro to the WAP TCS Annapolis Slice Frederick Slice
9	Intro to the Mac-Part 1	11 Intro to Quark	DB SIG WAP BoD	13 Stock SIG	14	18
16	Writer's Deadline 17 Intro to the Mac-Part 2	18 Intermediate Quark	19 Excel SIG HyperTalk SIG	20	21	WAP 22 General Meetin Aw sig
23	24 Intro to the Mac-Part 3 IIGS SIG -NIH	Editor's Deadline 25 Advanced Quark	Maintaining Your Mac NoVa EdSIG	27 Intro to Filemaker	28	Intro to America Onlin

February 1994

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	Mac Programmers SIG DTP SIG	3 Columbia Slice Game SIG	4	5
6	7 PI SIG	8 TeleComm SIG	DB SIG WAP BoD	10 Stock SIG	11	12 Annapolis Slice Frederick Slice
13	14 Intro to the Mac–Part 1	15	Writer's Deadline 16 Excel SIG UM SIG	17	18	19
20	21 Intro to the Mac-Part 2	22	Maintaining Your Mac NoVa EdSIG	Editor's Deadline 24	25	WAP 26 General Meeting AW SIG
27	28 Intro to the Mac-Part 3 IIGS SIG - Va					

Meeting Notices

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

Annapolis Slice

2nd Saturday; 9:30 AM; Severna Park Library on McKinsey Rd (off Rt 2), Severna Park, MD. Answering Machine: (410) 923-6748 CrabApple BBS: (410) 553-6929

Apple IIGS SIG

Monday after the WAP General Meeting; 7:00 PM; McLean Govt. Center, McLean, VA (even months) and NIH (Bldg 31, C Wing, 6th Floor, Conference Rm 9), Bethesda, MD (odd months).

Apple III SIG

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

AppleWorks SIG

8:15 AM on WAP General Meeting Saturday, at meeting site.

Columbia Slice

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

DataBases (Mac) SIG

2nd Wednesday; 7:15 PM; Computer Science Corporation, 3160 Fairview Park Drive, Merrifield, VA (Just inside the Beltway at the rt 50 junction).

DeskTop Publishing (DTP) SIG

1st Wednesday; 7:30 PM; PEPCO Auditorium, 1900 Pennsylvania Ave. NW, DC. Information: Barbara Schull (301) 589-5337.

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; WAP office.

HyperTalk SIG

Meets bi-monthly on the 3rd Wednesday of the odd numbered months (i.e., January, March, May, July, September and November) at the Fairlington Community Center, 3300 South Stafford St., Arlington, VA at 7:30 pm.

Mac Programmers

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

NoVa Education (Ed) SIG

Last Wednesday; 7:30 PM; Walnut Hill Ctr., VA.

Programmer's Interface (PI) SIG

1st Monday (except Mon. holidays). Call.

QuickTime SIG

Every other month; 7:30 PM; WAP Office.

Stock SIG

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

Telecomm SIG

2nd Wednesday; 7:30 PM; WAP office.

UltraMacros SIG

Monthly meetings at various locations and on various dates. Call Gary Hayman, (301) 345-3230, for meeting details.

WAP Garage Sale

June and December.

WAP General Meeting

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

Women's SIG

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

Notice: Plans change! Anyone with calendar information please call the Calendar Editor, Bill Wydro (301) 299-5267 or Beth Medlin at the WAP office (301) 654-8060.

The Hotline service is only for members of the WAP. Please do not call after 9:30 p.m. or before 8:00 a.m.

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GENERAL	(702) (02 507)	Jon Hardis	(301) 330-1422	Norbert Pink	(703) 759-9243
Tom Witte Ion Hardis	(703) 683-5871	John Love	(703) 569-2294	HyperCard	
Dan White	(301) 330-1422 (301) 449-3322	Pascal		Rick Chapman	(301) 989-9708
Art & Video	(301) 443-3322	Harry Erwin (before 10 pm)	(703) 758-9660	Tom Witte	(703) 683-5871
Nancy Seferian	(202) 333-0126	Michael Hartman	(301) 445-1583	HyperTalk	
Borland Products	(202) 333-0120	SMALLTALK-80		John O'Reilly	(703) 204-9332
Doug Ferris daytime only	(800) 826-4768	Harry Erwin (before 10 pm)	(703) 758-9660	Tom Witte	(703) 683-5871
Doug I ciris dayline only	(000) 020-4/00	000000000000000000000000000000000000000	570	File Transfer	
DATABASE PROGRAMS		SPREADSHEETS & CHA	HIS	Mort Greene	(703) 522-8743
Fourth Dimension		General	(201) 072 (2/2	Backfax	
Bob Pulgino	(301) 474-0634	David Morganstein	(301) 972-4263	Mort Greene	(703) 522-8743
Peter Yared	(301) 564-1560	Bob Pulgino	(301) 474-0634	HyperCard Scripting	(300) (33 300)
FileMaker Pro	(011) 511 1511	Tom Cavanaugh	(301) 627-8889	Jamie Kirschenbaum (evenings)	(703) 437-3921
Tom Parrish	(301) 654-8784	Excel	(201) 072 4262	Richard Kozloski SoundEdit	(703) 352-1523
Mort Greene	(703) 522-8743	David Morganstein Mark Pankin	(301) 972-4263 (703) 524-0937		(703) 437-3921
Foxbase	(· · · · · · · · · · · · · · · · · · ·	Iim Graham	(703) 751-4386	Jamie Kirschenbaum (evenings)	(703) 437-3921
Rick Shaddock	(202) 829-4444	Dick Byrd	(703) 978-3440	MAC DISKETERIA LIBRA	ADV
Helix	, , .	Bob Pulgino	(301) 474-0634	Dave Weikert	(301) 963-0063
Jim Barry to midnight	(703) 662-0640	Tom Cavanaugh	(301) 627-8889	Dave Weikert	(301) 903-0003
Harvey Levine	(301) 299-9380	Paula Shuck (Settore 10 pm)	(301) 740-5255	Gene	ral
MS-File		Kirsten Sitnick	(301) 750-7206	Gene	ai
John Spencer	(301) 730-1084	Mort Greene	(703) 522-8743	Assistive Tech	
Mort Greene	(703) 522-8743	Rick Shaddock	(202) 829-4444	Missy McCallen	(703) 323-6079
Omnis 7	,.		(202) 629-4444	Games-Apple II	,
Jeff Alpher to midnight	(301) 630-2036	WingZ Kirsten Sitnick	(301) 750-7206	Charles Don Hall	(703) 356-4229
OverVue		Kirsten Stutick	(301) / 30-/ 200	John Wiegley (uner 2:15)	(703) 437-1808
J.T.Tom DeMay, Jr.	(301) 461-1798	TELECOMMUNICATIONS	3	IBM	(, , , , , , , , , , , , , , , , , , ,
Tom Parrish	(301) 654-8784	General	9	Leon Raesly	(301) 599-7530
Pro-Cite	•	Allan Levy	(301) 340-7839	Math-OR Applns	(002,000.000
Elizabeth Mangan	(703) 750-2710	CompuServe	(301) 340-7639	Mark Pankin	(703) 524-0937
·	• • •	Michael Subelsky	(301) 949-0203	Modems-General	(, 65, 521 656,
DESKTOP PUBLISHING		Wilchael Subelsky	(301) 747-0203	Allan Levy	(301) 340-7839
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ReadySetGo		Tom Cavanaugh	(301) 627-8889	Allan Levy	(301) 340-7839
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Ron Mann	(202) 333-3409	Hebrew Word Processing	(501) 054-0704		(301) 602-2070
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Tom Parrish	(301) 654-8784	Please limit calls	s to reasonable evening and	weekend hours and NEVER after	10 P M.
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Software Review

MacFORMation2

by Greg Price

ooking for new job? How about a change of pace a new opportunity would provide with another position? Well, if you work for the federal government, the possibility to hopscotch between government agencies is very common. The first step in the long bureaucratic process of applying for a position is completing and submitting the Standard Form 171(SF171). When I first started with the federal government, I completed my SF171 form by hand. The result was numerous spots of white-out. My thoughts were that it did not matter how the form looked so long as the information of my work history was complete. That was, of course, not true.

If you are applying for a position within the federal government, chances are you are not going to be the only one applying for it. This being the case, how do you make your SF171 stand out? Everyone submitting a SF171 will have their form evaluated and ranked by a review panel, so the easier you make your form for the review panel to read and comprehend, the better your chances of a higher score. I learned quickly from my tedious experience and purchased a DOS SF171 program. This program was written in Lotus and very limited in its scope (after all there is just so much you can do with cells). Next, I decided to combine the first four pages of the SF171 form with a WordPerfect document. I put an indication to see the attached (WordPerfect) document in places on the official form which lacked sufficient space for my information. This worked well since I could use various formatting attributes like bold, underline, and indent to highlight various parts of my work history. This required me to work back and forth between the two programs. With MacFORMATION2 I was able to get most of the same power and flexibility in one program. MacFORMation2 is one of the latest programs geared specifically towards completing the SF171 and the software I am using for my current revision.

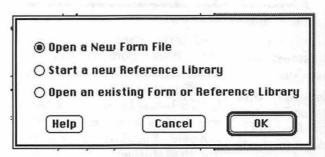


Fig. 1-New dialog box

Program Overview

MacFORMation2 is a "form player," that is, it is a program used to fill out various types of pre-created forms. When you first start the MacFORMation2 engine, you are presented with the following dialog box (see fig 1).

"Open a New Form File" lets you open a New Form file or start a blank form. "Start a new Resource Library" lets you create an empty Reference Library. "Open an Existing Form or Reference Library" lets you open a form or Reference Library that has been saved to disk by *MacFORMation2*.

When you choose "Open a New Form File" you are given a standard Macintosh file open window where upon you choose the pre-created form you want to use. In this case I worked with the SF171, but other pre-created forms are available from Maui Software (more on this later). Once the SF171 form is up and running, the process is rather simple...just use your tab key to move to the next field (or for those die hard mouse users, a click will do). If you are familiar with the



Fig. 2-Page advance

SF171 form, you will find that the program follows the paper version nicely. There are four pages in the

SF171 file and two in the SF171-A file. When you want to advance to the next page you can either click on the page arrows at the bottom of the form (see fig. 2) or use the keyboard equivalent, command-G, then indicate the page number you want to

go to. Although you are able to move around a page by using the scroll bars, you may wish to activate the automatic Scrolling-Hand Tool by holding down the Option key.

The most common type of fields on the SF171 are text fields (other pre-created forms may differ). The contents attributes of the text field can be changed by font, font size, style and justification. Also, fields can be linked to copy-repetitive information. These linked fields are indicated by a grey border around



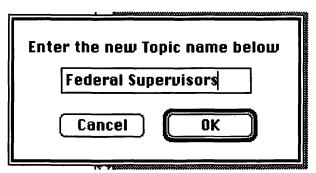


Fig. 3-Topics

these fields. With the SF171 the name, social security number and the job you are applying for are

transferred to each page of the SF171 form. If you have a lot of data to enter you may select Condensed from the style menu or a different font from the Font menu. I found this to be useful for some of the information I entered onto the SF171. You can have

MacFORMation2 do Fig. 4—Reference the resizing automatically for you by selecting "Auto-adjust text size" from the Preferences options.

An interesting feature of this program is the Reference Library. When you select New Reference Library from the file menu (or from the dialog box in fig. 1) you are given the standard Macintosh File Save window. In this example I am creating a Reference Library to store needed information for a future SF171, such as the names of supervisors over the past four years, date of employment, starting and ending salary. After naming the Reference Library I am able to create New Topics within the Reference Library (see fig 3). Once the topic is created, I can start to enter the appropriate inform-ation(see fig 4).

Noteworthy features of the program include the ability to enlarge

the viewing the size of the SF171 by 100%, 110%, 125% and 150%. When viewing your SF171 at 100%, MacFORMation2 displays your form at the exact paper size which makes it truly WYSIWYG. There is also a Tool menu (see

fig. 5). The tools available are: Text Tool— used to enter information into the various fields of a pre-cre-

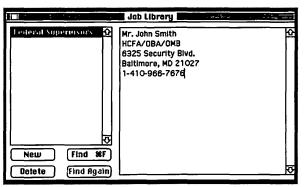


Fig. 4—Reference Library

ated form, Pencil Tool—used to draw lines (more on this later), Scrolling-Hand Tool—used to scroll to different parts of the form, Grabber Tool—used to re-size, delete, or move a line or an imported PICT graphic. Speaking of graphics,

MacFORMation2 allows you to import PICT or PICT2 graphics. This may not strike you as being very useful with the SF171, but I tried to import my signature into the form and it worked quite well. Along with importing text and graphics t n MacFORMation2 forms, you are able

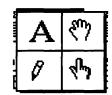


Fig. 5—Tools menu

to export data from a pre-created form. MacFORMation2 does have a Preferences dialog box that allows you to define cer-

tain characteristics of your form (see fig. 6 & 7). Like other Macintosh programs, if you set the Preferences before a form is opened, your selections will be universal throughout this and other related forms.

Printing your SF171 is the last step in the process. When printing a form, you are given the following three choices: 1. Print Document prints the entire document, 2. Print Sample—same as "Print Document" except the words VOID are also printed on the form, 3. Print Data Only—prints only the text entered, not the form. You are also able to print the Reference Library, but only option 1 is available to you. Also if you select to Print Data Only you will be given a window(see fig. 8) that allows you to correctly adjust the printing of data(text, lines, etc.) entered into a pre-printed form. One problem I encountered when printing my SF171 was a warning message (see fig. 9). I chose Don't Print and went to my LaserPrinter Op-

Preferences	
☑ Numeric fields always rig	totals (example: \$123.00)
Default text attributes Font: Times ▼ Justification: Left ▼ Size: 18 ▼ Matto-adjust text size	Style: Plain Bold Italic Underline Condensed
More	Cancel OK

Fig. 6—Preference 1



tions and checked "Larger Print Area..." to remedy the problem.

Verdict Overall

I found MacFORMation2 easy to use. Initially I thought I would be able to make additional forms myself.but MacFORMation 2 is a "form player" used for filling out and printing pre-created forms. The folks at Maui Software have other pre-created forms for all types of professions, such as Legal(Federal Bankruptcy-All chapters), Health Care(HCFA-1500, CHAMPUS),

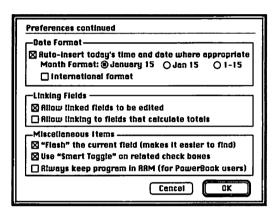


Fig. 7—Preference 2

Banking, and Mortgage Banking forms. Using the linked field took some getting use to. For example, when I needed to add additional pages (SF171-A) I found most of the repetitive information(i.e. name, SSN, etc) did not copy over. I finally realized that I had to go to the SF171 form and choose link data to all open related forms. As pointed out earlier in the article. I like the ability to format various parts of the text in my SF171, especially in the area where job description and duties are listed. I am not able to do this with MacFORMation2. If I choose to bold a phrase or heading. everything in the field is bolded. This was not a major obstacle however, because I found an acceptable solution. First, I capitalized major

headings. When it came time to list duties performed. I used a bullet to highlight each of my responsibilities. Finally, When I wanted to underline a document name or a sub-heading, I used the Pencil tool to create a line and moved it under that document name or subheading. I also found that moving from one page to the next was slow, especially when it came to

> redrawing the screen. The more complex the form. the slower the redraw and print. The folks at Maui Software had

some suggestions for increasing the speed of redraw, such as turning off the color, turning off "Flash Fields" in the Preferences settings and increasing the Memory Cache.

If you're in the federal government already or thinking about applying for

a federal job, you will have to complete the SF171. Filling out the form can be a long and tedious process when done by hand. The use of MacFORMation2 can make the process much less stressful. I think you will find the program easy to use and, with the Reference Library, versatile for storing all types of information. Also, if you are interested in having forms created for vou, Bill Modesitt, President of Maui Software, says Maui has done this for companies and individuals in the past. Maui representatives are available to work with individuals (or companies, agencies) to create forms that are specific to their needs. Any WAP member interested in trying a demo version may download both the Macformation2 "engine"

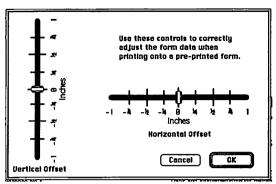


Fig. 8—Print adjuster

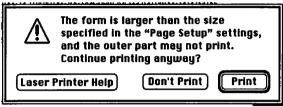


Fig. 9—Print message

and various types of pre-created forms, including the SF171 from both CompuServe and America Online. For both online services, use "MauiSoft" to find the demos. MacFORMation2 can be purchased direct from Maui Software or MacSource in Arlington (703-418-3900).

NAME: MacFORMation2 **PUBLISHER:** Maui Software ADDRESS: 3620 Baldwin Ave, Suite 204, Makawao, HI 96768 **PHONE:** 1-800-955-6284(for sales and general questions)

Retail Price: \$65 **NECESSARY HARDWARE:**

- -MacPlus and System 6.0.5 or higher*
- ---Any Mac-compatible printer**
- *A newer Mac and System 7 are recommended
- ** A PostScript laser printer is recommended

Gregory Price works for the Health Care Financing Administration (HCFA). He has been a member of the Washington Apple Pi for three years.



Fiction

When Mac Died

by Hal Feldman

orry, we just don't carry that item anymore," said the operator at MacMillisecond. Larry Latener slammed the phone down in disgust. Could it be so hard to find memory for his Powerbook 375FX just six weeks after its introduction? Of course, he knew the answer to this rhetorical question even before he asked it. The answer was "yes" and the date was January 24, 1994.

Just ten years to the day after its introduction, mild-mannered consumer Larry Latener condemned Macintosh and put the whole damn product line to death. Throughout its illustrious decade of crowning achievement, the Macintosh line had suckered Larry into purchasing no less than 9 CPUs. From the first Mac 128k, which could barely hold a thought, to his latest Powerbook 375FX, which held the entire Library of Congress on a single chip the size of a pin head, they had all been too slow and methodical for the lifestyle of Larry Latener. Even though he was maxed out on RAM, hard drive space, and upgraded his inits twice daily, Larry knew that he was still behind technology. The countless hours reading MacUser, MacWeek, MacMoment, and Volume 57 of Inside Macintosh told him so.

And so Larry marches on, looking only forward, not where he is. Can't the whiz-bang toys of today be enough for him? Isn't it amazing that what NASA engineers couldn't do last year, Larry does today while riding the subway and listening to

his Walkman. Enough must be When will we "Larry enough! Latener's" be satisfied? I for one am satisfied right now, at this very moment, precisely. Finally, my Macintosh does exactly what I need it to do.

To prove my point, I am writing this article on my Powerbook 170 while I speed along a train track at 70 mph. I am typing into a word processor that is ALWAYS waiting for me, not the other way around. It's clean, logical graphic display lets me view with reasonable accuracy exactly how my output will look. The Powerbook's backlit active-matrix screen allows me to see my typing in glorious blackand-white (isn't that what newspapers used to look like?). And, it lets me work from the brightest light to the pitchest of black. Which, as it turns out, is just what I need, since it's night and none of the overhead lights on this train seem to be working.

What else could I ask for? I am writing a perfectly good article in a place Agatha Christie would be proud of! Now before you mention that I could just as well have brought a pad of paper and a pen on my Orient Express, let me mention one more thing. I did, of course, bring along a few extra MacGoodies.

For instance, as I write this, I don a pair of Walkman headsets. Much like Larry, I am listening to music as I use my Mac. But, one only needs to follow the cord to see that I am not listening to boring FM radio. No, I am listening to my own programming in full Macintosh stereo. Using a program called Sound-Trecker, I am tapping my toes to the latest pop hits, digitized for my listening pleasure, while I word process. I mean, come on, Larry, isn't that worth just a bit more than a yawn?

OK, not enough for you Mr. Latener? Well, let me impress you with numbers...loads and loads of numbers. Irun'my Powerbook 170 at 25 megahertz with System 7.0.1 which has been upgraded by System 7 Tune-Up version 1.1.1. I have 8 megabytes of RAM running at 80 nanoseconds and an 80 megabyte hard drive that seeks at 19 milliseconds. In addition, I have 14 inits and 15 cdevs which balloon my operating system memory heap to 2.6 megs at startup. What do all those numbers mean, Larry? I'll tell you what all those impressive numbers mean. Nothing, absolutely nothing! The content of this article would be exactly the same if I was running System 4.1 and typing into MacWrite 4.5! All that those digits mean is that I spent entirely too much money and time chasing after the same unattainable machine Larry Latener is striving to own. The real question is why...why do I do it?

Why? Because...in the beginning there were feet...then horses, bicycles, trains, cars, planes, rockets, and finally MTV. No matter how fast we traveled, we wanted transportation to get us there even faster. By the way, we can stop wanting now because MTV is the closest mankind will ever get to light speed. Anyway, at some point I decided that one must separate the travel from the vacation. Remember, what's important here is arriving, not how you arrived. And so, I transplant that idea to Macintosh computing.

With this in mind, let's consider the mode of transportation I am using. I'm on a train to visit a friend. I wanted to get from point A to point B,



so I chose an appropriate means to reach my destination. In this instance, taking accessability, cost and speed into account, I chose a train. Sure, a plane, developed years after locomotion, would have been faster, but considering the extra cost and effort involved in getting to an airplane, my train excursion was the logical choice. Much in the same way, I have chosen my Macintosh. Sure, a color Macintosh would be nice, but it just doesn't make sense for a writer; thus, I am sorry to say Larry, I languish endlessly in a hueless world. Let me rephrase that, the logical side of me is not sorry at all...it's that silly, competitive "oneup the Jones" side of me that is. I just don't need color. It's a flashy extra. Much like taking a plane to visit a friend who lives two blocks from a train station, color Macs for blackand-white tasks are hogwash.

Did you notice? Did you notice the difference between the last paragraph and this one? Sure you didn't! Nevertheless, during the time it took you to finish reading the word 'hogwash' and begin reading 'Did' this article went through an astounding transformation. It traveled back in time five years. Amazing, isn't it?

You see, I'm off the train now. I reached point B hours ago. If you'll remember, I'm visiting a friend of mine. She owns a Macintosh too. Her trusty old Macintosh Plus does run System 4.1 (the last operating system to fit on a 400k disk!) and MacWrite 4.5, and, after showing her my article in progress, in order to prove a point, I decided to write this portion of it on her machine. So, after converting this file to MacWrite 4.5 format using the backwards compatibility feature built into my current word processor and saving it carefully on an 800k disk, I was able to work the same article on a machine that was five years behind the times and nearly \$3500 cheaper.

OK, so what does that prove? It

proves several things. The most important of which is that in this instance spending an extra \$3500 and performing countless hours of software upgrading gets you nowhere. Despite the faster processing speed, bigger hard drive, and more impressive 'numbers', my productivity is exactly the same. In fact, with my Powerbook 170 it's actually lower; because, if you'll remember I also wasted time programming my own digitized radio station. And, although it's rather cool to hear Vanilla Ice from a 45k file, it just isn't the right flavor when it comes to getting down to business. It also proves that I have far too much personal time to waste, but that's another article entirely.

Now...I pose questions to all you "Larry Lateners." Could it be possible that the machine you have is overkill? Is it really necessary to be able to auto-dial 781 of your closest friends at the click of just 43 buttons? Can you live without categorized, 3-D pie charts of what money you spent last month? Isn't it just a bit silly that you know the position of the stars and the atomic weights of all the elements without leaving your 'apple menu'? Do you really sleep better at night knowing that all your Microsoft Word documents are sorted not only by name, but also by 256 shades of green?

How long will you stand for greedy software and hardware companies coaxing you out of your shirt? We 'Larry Latener' Macintosh users buy products simply because they're the 'est' product out there. It is not necessary to have the ability to play QuickTime movies within a word processing document, nor is it chic. Most programs we have are YATOTEM (yawn-at-them-oncethen-erase-'em) anyway. If you don't see this joke coming down the pike, too late....here it is. Ya tote 'em for nothing!

Absurdity is the key word here. I have been a personal computer user

for nearly 17 years now. At first, I built them from kits, soldering each 16k RAM board into place...and life was good. Next, I learned to talk to them in programming languages...and status was quo. Still further down the road. I played with them 'til the wee hours of the morning and I lost all my friends. And, finally I learned what to do with one. Use it. That's all! Computers should be used to simplify life. When they are advanced enough to make your life easy, stop! It is not necessary to upgrade constantly. More is not always better. Who cares if you have the Macintosh Alarm Clock, version 7.0.1.2 (which fixes the bug in 7.0.1.1that made the clock one second slow if you were using your Mac with AC power on Thursdays during lunar eclipses)! It's just not worth it. There is a point where being current is just lunacy. It's creates more work than doing the work at hand. Your computer becomes the work, and then, still further, the excuse for not doing the work. Just what did you buy that \$3500 paperweight for?

And now for my big finalé...I am back on the train again. Chugging along at 70mph, I am elated that I am not the one driving, or rushing, or checking bags, or gassing up. I am on the right mode of transportation. So too, am I, happy about using the proper computer. With my trusty new, yet obsolete, PowerBook 170, I have the ability to do all my mundane tasks with efficient speed and tact. I can do them virtually anywhere, which increases my productivity and, as far as I'm concerned, the end product is better on my Mac than doing it the old fashioned way.

Therefore, I refuse to bend. I will not stray....with my current applications, I will stay. They are familiar like a friend, comforting like a lover...with them in a pinch, my butt will they cover. For word

(continued page 60)



The Apple II V.P.'s Corner

by Joan Jernigan

s the duly appointed Apple //e vice president, one of my goals is to meet the needs of the membership. It has been brought to my attention that a recap of the monthly meetings would be welcome on the TCS (not to mention the magazine). Although I am not a regular (daily) TCS user, I agree with this concept and will try to subscribe to its precepts. Please bear with me if I don't get to the TCS as expected on a regular basis. The telephone and the TCS take on a different perspective when just about everywhere you want to call is long distance and you like your house enough not to move.

Murphy is Alive and has been sighted at our last meeting. We had hoped to have the "real demo" tape from Quality (the 90 minute one showing the "real" Appleworks 4.0 in action rather than the 30 minute infomercial showing the developers sitting around a fire on the left coast. (This is jealousy on our part, they really were on the ocean's beach.) Appleworks 4.? is still buggy at this juncture. We had our copy of 4.0 up and running on our system, with all its faults, it still ran on a hard drive. The club had 4.01 and we tried installing it on that hard drive. Actually we installed it and it chose not to run. We have heard rumors of 4.02 but... At least we all had a chance to have hands-on play with it.

A quick review of the TCS revealed some tidbits and we pass these on for your consideration. There was a request for this to be posted on the Open Forum each month after the general meeting. We agree it is nice, now! Do we have a volunteer to attend meetings, write the article and post it?

Lawrence Charters posted the results of the survey from the November meeting. 266 surveys were received, including 9 from the same individual, probably trying for better odds on winning the printer. The majority liked the current format with 49 wanting more help for novices and 70 wanting more advanced topics (143 thought things were fine as is). This includes the // and Mac types but we feel the // meetings support the results. Our format tends to lend itself to three tracks within one meeting.

There were a number of comments about meeting sites. As announced at several meetings, the process is quite simple. You want a meeting closer to you? In your town? At your home? Let the board of directors know that you (or your committee) have talked to the appropriate people and have arranged for parking for 200-300 cars, have cost figures for rental and incidentals, the office staff can get to the site within a reasonable time with their tons of equipment, etc. One can wish for a new site, complain about the current one, reminisce about old ones, but if you aren't willing to do the legwork, the Board of Directors won't change the site.

We are looking into a "Where in the Atlantic Seaboard is Annandale, Anyway?" game to assist those who haven't figured out that Annandale is in Virginia. Ditto for those who think that Bethesda is in Virginia. When everything is long-distance and it takes 75 minutes for us to get to Baltimore, Bethesda, or Annandale, we can't be too sympathetic when someone complains about driving 28 miles. A number of suggestions were made about serving breakfast. We

are willing to support a local pre/post meeting at nearby restaurants—dutch treat. Drop us a line if you're interested.

Apple II Questions and Answers

by Bernie Benson & Phil Shapiro [Many new Apple II members of the Washington Apple Pi are interested in finding out basic facts about their computers. Since novice Apple II users may not have access to the club's electronic bulletin board (The TCS), it make sense to use the WAP Journal as a forum for answering some of their questions.

This new column will attempt to answer questions that new Apple II users might have. Members of the club who are Apple II users are invited to send in their questions. Please send typed, or neatly handwritten, questions to: Phil Shapiro, 5201 Chevy Chase Parkway, NW, Washington DC 20015. (202) 686-5465. Not all questions will be able to make it to print, but a sincere attempt will be made to answer as many questions as possible.]

The following questions were asked recently by new Apple II users in the club:

Q: Can you briefly tell me the historical order in which the various Apple II models were introduced?

A: The original Apple II first came out in 1977. The Apple II+ was sold between 1979 and 1982. The Apple IIe was sold between 1983 and 1993. The Apple IIc was sold between 1984 and 1988. The Apple IIGS was sold between 1986 and 1993. And the Apple IIc+ was sold between 1988 and 1990.

It's useful to know that the Apple IIe, IIc, and IIc+ are functionally very similar. Almost all software for the Apple IIe will run on an Appe IIc or IIc+, and vice-versa.

The Apple IIGS is capable of running all previous Apple II software, along with "Apple IIGS specific" software—which takes advantage of the improved graphics and sound on the IIGS.



Apple II Byts and Pyces

by Gary Hayman

his column includes Apple II information of the hints, techniques, suggestions, helps, information, news, etc. genre. Information which may not, in itself, warrant a separate article in the Journal but would, nevertheless, be of interest to Apple II readers. You are asked to submit your hints, ideas and suggestions to me for monthly organization and publishing. You may do it via the TCS or direct mail to me at 8255 Canning Terrace, Greenbelt, Maryland 20770. Telephone calls to (301) 345-3230. Please note that this column is often submitted for publication 45 to 75 days prior to its appearance in print.

Imagewriter Technical Help

There have been some interesting threads on GEnie dealing with ImageWriter problems and their fixes.

Richard Wagoner started by commenting, "...It will print a few lines, then make a strange noise (sounds like gears slipping) and the print head will either shift to a wrong position, or will move to the far left and lock up (red light flashing on control panel, needs resetting with the "select" button) upon which it again is printing from the wrong position."

Bill Shuff replied, "That behavior is typical of what the IW does when there is too much friction to allow the head to move smoothly on the tracks. Try three things: 1. Put some light sewing machine oil on the track bars that support the carriage assembly. 2. Try setting the head spacing lever back a bit. This will move the head assembly a bit further from the paper and it will rub a bit less. That lever is at the far right inside the case just in front of the platen. 3. Loosen but do not unscrew the two tiny screws that hold the clear plastic shield against the paper on either side of the print head. Push the head spacing lever fully forward and then re-tighten the screws. Finally pull the lever back a few notches to where it offers more clearance for the fatter envelopes.

"If none of the above help, you might investigate the back side of the clear paper shields on either side of the print head. Some have foil that comes loose, bends outward, and drags on the paper. I have fixed this problem by using a razor blade to cut away the peeling part of the foil so it can't rub any more.

"You asked about gears that can slip. I do not know about that, but I have seen the head-movement cogged belt get loose and jump the cogs. At one end of the belt there is a screw you can loosen that will allow the tensioning wheel to be pulled back a bit to tighten the belt. Re-tighten the screw to lock the wheel in position."

Harold Hislop added, "Bill covered the bases quite well, I just wanted to clarify what the source of that noise is that you described as "gears slipping". That noise is produced by the carriage positioning stepper motor when it is mechanically bound. It tries to move (and

does a tiny bit) then the current phase gets turned off and the next one turned on. During the time when no phases have power, the motor moves back a tiny bit, and then jumps with the next phase coming on. (stepper motors are multi phase motors) The noise isn't "the harbinger of doom", in the short term it won't cause any damage to the motor, steppers are real rugged. The belt is another story. Gimler belts (that's what those funny looking toothed belts are called) are designed to handle considerable stress without failure, but they do have limits (and shock loading isn't good for them at all).

"I'd unplug the printer, put a couple of drops of light machine oil (Singer is good, so is Marvel Mystery Oil (Ask Gary about this stuff :)) on the round rail that's near the platen, and then gently move the carriage back and forth (all the way to each end) several times. If you feel any kind of binding then you need to track that down & fix it. Do this with whatever type of paper you use when the printer acts up. (I've run into the foil problem that Bill mentioned all too often.)

"To check the belt tensioning, move the carriage all the way to either end by hand. Put one finger on the middle of the belt nearest the platen (on the wide flat surface). Gently pull towards the front of the printer. If the belt deflects to the point where it is about 1/4 inch from it's other side then all is well, otherwise it should be adjusted. Too loose (where it can jump its sprockets) will result in very fast belt failure, too tight will also cause belt failure but it takes longer.

"(I've been avoiding all the IWII printer questions up till now because I have a history of letting people "talk me into" real nasty jobs... usually removing mailing labels from under the platen... truly a royal pain)"



Monitor Problems

Here is some more 'tech' stuff. Similar questions concerning monitor misbehaving have popped up on the TCS too. Answering a question from Ron (LNU), Harold Hislop penned, "My personal experience (yours will probably vary :) is that once a "pot" or switch assembly has deteriorated to the point that a shot of "cleaner juice" is needed, it will need that shot about every 9 to 12 months until replaced. However, I have seen some that never needed a second shot, and some that needed it in only a few months. (The environmental conditions play a big role in this.)

"If you're not used to getting inside of monitors, TV sets, etc. then be very careful if you open that monitor! Be especially wary of that (usually) red wire that attaches to the side of the picture tube. It is possible to receive a very healthy shock from there even if the unit has been unplugged for a month! (Healthy = can throw you across the room with impunity!)

"If there is a large accumulation of dust (usually quite black and stringy, almost like it has spider webs in it) then feel free to gently brush it out with a small clean paint brush (a vacuum cleaner corner nozzle can come in handy also). Just be real careful not to disturb anything while doing this, and your monitor will most likely thank you with a longer usable lifespan:)"

I Want a FAX Capability

An individual by the name of A. Kent was inquiring about having a Fax capability incorporated into ProTerm (InTrec's renown communications software). He/she really wanted 'direct answers'. Jerry Cline, of InTrec Software was kind enough to respond. Here is a little of the 'electronic' conversation.

[Kent] I requested information about adding Fax capability to the Apple II Version of ProTerm... ... I request a direct answer to my questions.

[Cline] I'm not sure you will like "direct answers" but I will be candid and as direct as I can. This is fair warning that my answers will be rational and not satisfy the emotional needs of some Apple II enthusiasts.

Fax for the Apple II is not one of our immediate objectives. ProTERM A2 (version 3.1) is in the market and successful. Our current and immediate goal (with no time of delivery promises) is to develop product that will make our company successful. Our immediate goal is to publish ProTERM Mac — After that we'll publish ProTERM PC. When those two are in the market and we are satisfied with where they are, and their acceptance in the market, we can consider our next move. A next move may be to take another look at ProTERM A2 and see how it can be improved with the current development expertise at that time.

Direct Answer: Fax capability for the Apple II has a lot of competition. Fully functional new fax machines are cheap, and the price is dropping. Check the classifieds, used fax machines can be purchased for about the same price as a used Apple IIe, and there are LOT more of them to choose from. A great feature of the dedicated fax machine is, like an answering machine, they can left on all the time, don't need special software, sit quietly, work when they are supposed to and they are simple and easy to use. It's hard to compete with that. If you want fax on an Apple II because it will be cheap, cheap does not pay for development.

Is it really practical? Think about the difference. A fax machine is, like a telephone, a device that must be ready to accept a call when it comes. An Apple II would need to be in the fax mode ALL of the time to accept an incoming fax, is that really practical? Unless you wanted it printed out at the time, you would need to spool it to a storage device. If you wanted it printed at the time, a printer would need to be on and waiting. If you were using the computer and a fax call came, and since the Apple II is not exactly a multitasking machine, what would happen then? You would miss the fax reception. A small cheap fax machine sitting quietly in the corner would handle all of this with ease. If you are wanting something less than that, then what you're asking may not be worth developing from a commercial aspect.

An Analogy — Just the Fax: Some people see the possibility of having fax on their computer as the elusive dream. For example, a sedentary person may dream that if they just bought a bunch of exercise equipment, it would be there and handy, and they would be in great physical shape (conjure up visions of CAPTAIN AMERICA!) in no time. Who could fault that kind of rationale. The fax are, a year later its all in the driveway at ten cents on the dollar at their garage sale and they are too sedentary to get up and greet potential buyers. Having it, just did not fill the practical need. The analogy carries to anything - and we're all guilty: boats, camping gear, garden equipment, those new golf clubs that will get us into the PGA and even fax on the Apple II (grin).

Whoever develops fax for the Apple II will be hard-pressed to meet the simplest of good business decision criteria: When you have business expenses to meet and engineers to pay, the immediate concern is keeping the engineers busy with projects that will pay for future products. A bad decision here can mean you are all looking for employment.

(Can you say "Labor of love" boys and girls?)



Direct Answer: If the Apple II market looked like it could pay for the development of Apple II fax. there would already be fax for the Apple II —If and when its done, by whomever does it, it will be a labor of love. If we do it, it will be because we were able to develop it for the platforms that can pay for the engineering and then we were able to "port it over."

Direct Answer: If fax was developed for the Apple II, what would you expect to be the lowest common denominator, an enhanced Apple He with 128K and one drive. The Apple II market is (relatively) a (very) small one. And like a pyramid, after you leave the base of 128K and one drive level, it just keeps getting smaller. It gets even smaller when you involve specialty considerations such as, of those, how many would use this service. Then if you consider just the Apple IIgs, you are getting very close to the top of the pyramid.

[Kent] So, I will repeat my request, but more directly: Will Fax capability be added to the Apple II Version of ProTerm? If yes, when will this occur?

[Cline] So again, I have no direct answer. The most truthful statement I can give you is, whatever we do with Apple II fax will not be in the near future. We're not sure we ever will have fax for the Apple II, but we are not saying we will not have fax for the Apple II. Fax is one of our considerations, and on our list of things to do. This is not a promise, just a current fact, and the fact is, our priorities may even change by the time we get there.

You wanted direct, does that do it? <smile>

It's a Three Dog Monitor Night

Sorry, but I lost the 'real' author's name. He/she was replying to a 'Bill' relative to a 'dropping into the monitor' problem, stating, "What

do you mean by "get out of the monitor"? If you mean "get the computer back to what it was doing before it crashed" then I'm sorry to say that it is almost always impossible to do so: usually when the computer crashes it has jumped to the wrong part of memory and it's very difficult to get back to where it should be. "D0G" sounds like you might mean "3D0G" which will take you into AppleSoft BASIC. (On most Apple IIs you can type Control-C to "warm start" BASIC or Control-B to "cold start" it. But 3D0G should work on all of them, I think.) If you want to reboot, go ahead and press Control-Command-Reset, (Command = Open Apple on older keyboards) Control- Reset will do different things, depending on what program crashed, for example, it might reboot the computer, put you in BASIC, put you in the monitor again, hang the computer, etc. In some ProDOS 8 programs Control-Reset might take you to the ProDOS "Quit" code; the "Enter Pathname" or the 1.9/2.0x program selector. Some other programs (Copy II+ comes into mind) make Control-Reset re-run themselves.

"As you can see, it all depends on where you want to go when you exit the monitor and what you want to do after exiting it. If this is confusing, or what you meant isn't in here, then just say exactly what you mean by 'exit the monitor"

Recycle Disks?

Some recycle information from Bill Shuff answering this question from Lloyd Devries, "Is there any harm to recycling the disks from older versions of programs?"

[Shuff] "No harm, but I would strongly suggest that they be reformatted before use. Besides getting some assurance that they are okay, they will all end up with a 2:1 interleave. That would result in them being accessed and written to

much faster. Older disks and commercial disks are sometimes formatted 4:1 so they will work with both UniDisk drives as well as Apple 3.5" drives. The 4:1 format is required for a Unidisk and will work on an Apple 3.5" drive but performance will suffer noticeably."

[Gary Utter added] "There is no harm in it, but there are certain risks, IMO.

- 1. You may want those older disks at some time in the future (if they are originals). This is far from being unheard of, and just what you will need or when you will need it is unpredictable.
- 2. You should buy a fresh set of good quality disks to do backup on, rather than using old or recycled disks. One or two bad disks can make a backup set unusable. Better not to take the chance."

GSRam Information

Tony Ward asked, "The GSRam and GSRam+, in order to work with a Rom 03 machine, need a different chip installed than they do with a Rom 01.

"My GS-RAM+ came with both chips and an instruction sheet that explains which chip needs to be swapped for a ROM 03 IIgs:

ROM 01: Chip #GSPLD1A ROM 03: Chip #GSPLD1B

"I'm using the ROM 01 chip, but if you need the ROM 03 chip you can have it for the shipping cost. It's been in storage for a few years so there's no guarantee that it still works, that's why it's free:)

"Note that my chip is ONLY for the GS-RAM+. I don't think it will work on any of the other AE memory boards."

Gary Utter, well known for his excellent GEnie help, responded, "The GSRam and GSRam+, in order to work with a Rom 03 machine, need a different chip installed than they do with a Rom 01. I can't describe this correctly, technically



speaking, but in simple terms, the GSRam works in a non-standard fashion, and needs to know how much memory is on the motherboard of the machine in order to tell the CPU where the memory starts on the card. Your card has a chip installed that tells the CPU that its' memory starts at a level immediately above 1.125 megs, which is what is on the Rom 03 motherboard. When you put it in the Rom 01, it is telling the Rom 01 that the top end of memory is out at the 4 meg point (which it would be if the machine were a Rom 03).

"AE may be able to sell you the chip you need to use the card with a Rom 01, but your best bet is probably to just use it in the Rom 03 and get a different card for the Rom 01 machine."

Bad Blocks, Or Was It Leroy Brown?

Wanting to gain a deeper understanding of bad blocks, Chuh Garret asked, "Can someone explain "bad blocks"? I format a disk and verify it and the finder says, "No bad blocks". I then unpack a disk to it and verify it and find that I have a couple of bad blocks. I repeat the process with the same results except that the bad blocks are now different blocks."

Mr. Help (Gary Utter) replied, "Bad blocks are blocks that the OS can't read. They could be caused by a defective disk, dirty heads on your drive, or just a slight synchronization error between two different drives. It is possible (not likely) that you are unpacking a file that has bad blocks in it.

"The first thing I would suspect is that you are reusing old disks, using cheap disks that are a bit too cheap, or both. Try the process you described with a good quality, name brand, new disk and see if you still have problems.

"Otherwise, if you only have this problem with one particular file,

then it's the file. If you have it with disks written on someone else's drive, then the first thing to do is clean your heads. If you still have a problem, try disks from yet another drive. If the problem goes away, the other guy's drive is misaligned. If you have the problem with commercial program disks, then you've probably got a problem with drive alignment on your drive. "(I've been through this. :)"

AW4 Macro Player

Recently, there was a 'seeding' conversation between myself and the famous macro teacher, Will Nelken, regarding how the new Macro Player in AppleWorks 4.0 would be used. This was before AW4 was released to the public.

[Gary] Will, are these 'pre-compiles' macros going to take the form of a Task File, TAPL file, TimeOut Additive or something else?

[Will] Generally speaking, they will be TimeOut Macro Applications, converted by Macros2Menus.

[Gary] Let us in on how the owner of AW 4.0 w/ UM 4.3 can write a 'macro' that an owner of AW 4.0 w/o UM 4.3 can use.

[Will] I'll be doing just that in the next issue of TimeOut Central. It's not difficult, but it requires some special structure and procedure and greater forethought, since the average user (owning the player only) will have no way of adapting the macro. The big thing will be debugging every conceivable keypress the user could make.

[Gary] Tell us more about the 'player', please.

[Will] It is simply UltraMacros, without the ability to record, compile, debug, or save. There is a neat default set built-in to AW 4.0 by Steve Beville. Additional macros or macrosets will be "played" by selecting them from the TimeOut Menu.

Labels Stuck To The Platen

Bill Shuff let us in on his little secret that helps remove labels that have been stuck to the platen, most probably caused by attempting to roll labels out, backwards — a no! no!.

"An excellent solvent that won't hurt the roller is Citra-Solv. It is an orange color (and smell) liquid that works great on grease and goo like that found on labels. The stuff and the smell evaporates with time.

"I have found a trick that makes it safe to roll labels backwards out of a printer. All that you have to do is insert a sheet of paper behind the labels and roll it with the labels until it is fully within the printer with both ends sticking out. The labels now have backing on one side and paper on the other. After releasing the paten pressure, simply hold onto the end of the paper and pull the labels. They will have nothing to hook onto and will slide neatly out of the printer. I've done this dozens of times and never had a problem. If a label should stick to the paper (it has never happened) simply roll both out together and start over."

Understanding The Finder A Little Better

Again, the 'utter' Gary was in a helpful mood and contributed this piece about the Finder.

"It's primarily a matter of understanding the concept of the Finder.

"Finder is a program launcher and a utility program all wrapped up in one, with the whole thing presented as a visual representation instead of a text representation.

"If you were in a P8 (IIe type) application and wanted to open a file inside a folder named MYFILES, you would set the prefix to that directory, catalog the directory (which would show you the names and file types), highlight the file and hit return (or something simi-



lar, depending on what application you were using). With Finder, you would double click on the folder MYFILES, and it would open (equivalent to setting the prefix to that directory), the files inside the directory would be displayed as icons (which tells you the file type, and names go with the icons, so it is telling you the same things as a P8 application), you highlight the file you want to open with the mouse instead of some other key, and a double click opens it.

"You are really doing just the same things in Finder that you do in any file utility on the Apple II, the difference (and it can be very confusing until the concept hits you) is the visual representation.

"I'm sure you already know that folders = directories and the different icons that Finder displays = different file types, but, like learning a foreign language, you have to start to think in those terms before it really starts to work for you.

"The other thing that is confusing is that Finder takes the place of a bunch of different utilities. It does file copying, disk formatting, file deleting, renaming, disk erasing, etc. But, again, it is mostly visual. You drag a file to the trash and it gets deleted. You drag a file to a different disk, it gets copied, but vou never get to enter a "delete" command or a "copy" command, etc.

"The Finder is actually a very complex application, and it goes out of its way to make most of this stuff invisible so you don't have to think about it. Most of the time, that's a good thing, but when you are accustomed to having to think about these things, it can get confusing.

"Once you get a grasp on the overall idea, though, it really is easy."

A Lunatic Takes Over Perry Mason's Job

As you may know by reading this column, there really is a fellow

named Lunatic (legal name) who hangs out on GEnie and helps everyone. Here, he is explaining a mystery.

"The "Infinite loop while walking icon list" error is a kind of "mystery error." The people at Apple don't really know what causes the condition that brings up that error dialog. However, they know that it sometimes happens, and therefore they put in that error dialog in the hope that sometimes it can be recovered from. This same condition would happen in earlier versions of the system software, but instead of giving you an error dialog like this, Finder would simply crash. So the error dialog is an improvement.

"Any time you see this error message, regardless of the end result (stuck on the dialog or getting back to the desktop), I would suggest you reboot ASAP. Something is likely to be a bit screwy in memory. and there's a good chance you'll just get a regular crash, later on.

"If you get this message often, and consistently, and you can always repeat it by going through a specific set of steps, you should contact Apple and let them know, so they can try to track down the cause of this problem. If you get it often, but completely randomly, here's a few suggestions: Shuffle your icon around a lot, both the icons within the files, as well as the files themselves (different directory order, swap them to other disks, etc.). Delete all your DeskTop files. Try deactivating various Finder extensions and see if any one of them is the cause."

Now I bet that Angela Lansbury couldn't solve that one.

[More on the Finder by Lunatic] "...if you have "Save Finder information to disk" checked on in your Finder preferences in System 6, you're always going to lose your desktopicons in System 5. The problem is that the Finder data files changed slightly between System 5 and System 6, and while the System 6 Finder can read the data files from the System 5 Finder, the reverse is not true. So when the System 5 Finder sees the System 6 Finder data files, it checks their internal version numbers, sees that it doesn't know what to do with them, and then ignores them. If you don't have "Save Finder information to disk" checked on, or if you turn it off, you can set up everything the way you want it, while in System 5, and it will stay that way, as long as you don't do anything to make the System 6 Finder overwrite your Finder data files (specifically the Finder.Root files). You may also be able to simply LOCK those files, and then it won't be able to change them. If you want to change the icons you have on the desktop yourself, though, you'll have to unlock those Finder.Root files, go into the System 5 Finder, make the changes. re-save those Finder. Root files, and then lock them again. If you make the changes while in the System 6 Finder, again, it will overwrite your old Finder.Root files with the new version ones, and your icons will disappear from the desktop in the System 5 Finder again."

Byts & Pyces Goes Intermittent

My Byts & Pyces column has been appearing on a monthly basis in the Journal of the Washington Apple Pi for quite a number of years now. Starting with this column, I will continue to collect Apple II information and write the column, but only on an intermittent basis. As I go into 'semi-retirement', I still will most probably be producing Journal articles, but mainly as 'stand-alones' or features. Since my present interests concentrate in the topics of AppleWorks, UltraMacros, Desk Top Publishing, and Telecommunications, I am certain that you will find future 'topic' articles of



mine being published in this spot, from time to time. I still encourage those of you who care to, to contribute short pieces to me that you may not feel are long enough to warrant a separate article. I can collect them and easily place them into a forthcoming Byts & Pyces column, giving you full credit. Of course, I also encourage you to become a contributor to the Apple II portion of the Journal in your own right. ■

The author is currently Chairman of the AppleWorks, Apple IIGS and UltraMacros Special Interest Groups. He is published frequently in the Journal of the Washington Apple Pi. He is also a Beagle-Quality "Buddy", a Seven Hills "Partner" and a TimeWorks "Ambassador" for the WAP. His latest software programs, THE MAGIC NEWS GROUP READER. THE MAGIC FILE CABI-NET and MAGICAL MACROS - THE ABRACADABRA COLLECTION are presently selling internationally.

you might like to contribute, we'd love to have it!

Silent Basic

Our good Canadian friend, Martin Davidson, is always tinkering with Business Basic, and recently came up with this gem:

When the Business Basic interpreter is ready to function, it announces its presence with a loud BEEP and shows a copyright line across the top of the screen. If, like some of us, you hack away in the middle of the night your loved ones may find this interrupts their sleep and may offer to trash your computer to quiet it once and for all. The following is a fairly simple fix which will end this problem and restore peace in the home:

With almost any Block Editor (eg Disk Window ///, DTM's Block Edit module or reasonable facsimile thereof) seek out Block 41, Byte \$1D1 of Basic 1.1's SOS.INTERP or Block 5, Byte \$1AD of Basic 1.23's. It contains \$07 (hexadecimal for 'BEEP'). Replace it with \$00 (hexadecimal for silence).

Thereafter, whenever you boot up a Basic interpreter, you will see the copyright line and you (but nobody else within earshot) will know that it is there.

Paul Campbell Update

We can never go too long without getting an update from our Co-Chair Paul working away for our SARA in Detroit. Recently he relayed another of his continuing experiences with folks on the job who just can't believe a 10 year old computer has much life in her:

It's been an interesting past few weeks here in Detroit. Those of you who have been active on the BBS's may have noticed my absence. This has been due to some changes at work, and a number of changes at home as well. We have a new supervisor who likes paper, even

On the Trail of the Apple III

by David Ottalini Apple III SIG Co-Chairman

BOS3

aving to write this so early, I will not be able to report to you on how well our sale of BOS3 went last month. I hope you got your copy! If there are any left, it is available at the regular price of \$49.95 from the WAP office.

If you have purchased BOS3, how about letting us know how you like it? Drop me a note in the mail, hardcopy or disk, or better yetleave a message on the TCS or on the WAP-///s Co. BBS at 301-593-0024 (its free to use). And thank you! By supporting our efforts you will help us produce even more new software for the /// in the future.

Remember that if we have sold out, you will still be able to get your copy of BOS3 from On Three. See the address below.

We're also interested in hearing from you about what our next project should be. During our discussions last year, the consensus seemed to be that we should look at an upgrade

to Communications Manager. I'm also very interested in having a compression program like Shrinkit developed for us. Please let us know your thoughts on this!

Honor Roll II

I did forget to mention one donor to our SDF last time-Tad Lesczcar. Thanks Tad, and everyone for supporting our efforts! We will continue to accept donations to the fund for as long as there's interest, so if you haven't been able to before, we hope you'll make that one of your New Year's Resolutions!

TCS

We now have TWO areas on the TCS download area for you to use -Apple /// programs and Apple /// Information. We're already got some material in there and hope to start uploading the ///s Co. material soon -if it hasn't already happened. We'd love for you to contribute to - if you have a program or anything else



said so himself. He also likes MS-DOS, so that makes two steps backwards for our Computer Field Support department (grin). The trusty Apple /// has been de-installed from the medical center once again because it "does not comply with our corporate standard".

Unfortunately, our supervisor's claim that the corporation is "nothing but IBM" has one thing going against it: Reality. There are several Apples scattered throughout the Detroit Medical Center which are not documented by the computer support departments. This is because few people bother to call a service technician to plug a Mac into a wall and turn it on. But the number of Apple computers are growing, and the company will be forced to acknowledge their presence eventually. One of the things that may help things along, is that one of the new departments which is being opened got their new computer systems and printers delivered to the loading dock for attachment to our LAN. Every box that came in had the Apple logo on it!

Getting back to the Apple ///, this system was given one last task of performing the database updates for the computer device listings. This was because everyone realized that doing the same task using Dbase on an IBM would be too slow and cumbersome. So, the Apple was chosen to finish the job, and completed the project 3 hours ahead of schedule. If that was not enough of a finale, there was a lead systems analyst in the same office as the Apple. He was using the IBM compatible which shared the same desk, and started laughing when he was told that someone was planning to purchase the ///. He laughed even harder when he was told that the Apple could easily out run his 386 in more ways than one.

Since I'm not the type to leave a response like that unanswered, I setup duplicate files on both the 386 and the Apple after he had stepped out of the office. This particular Apple was not a loaded system either, it had the base 256k memory, no clock or video interlace, and one of the slowest harddrives in existence (180ms access time). The systems analyst was invited back into the office and told that both computers were now going to perform the exact same task using identical routines and duplicate files. The ENTER keys were pressed, and both computers started working on the task. The Apple finished first. We were still waiting on the 386, so I had the Apple perform the function a second time.... then a third time.... then a fourth time while the other computer was still working on round one.

The systems analyst was no longer laughing at this point, and started making apologies after I started to play a game of Sandman on the /// while the "WAIT" message was still flashing on the 386.

The Apple /// still had to go home that day, but it certainly was not due to lack of ability.

Woz on the Apple ///

Back in December 1983, Softalk magazine printed some comments made by Steve Wozniak (one of the founders of Apple Computer) on Cupertino's closed-machine policy as it applied to the Apple /// (comments made originally on CompuServe):

One of the downfalls was that we were too smart. We knew the proper ways to do all sorts of things and we didn't allow hackers to do things their own random ways. I feel we were wrong to believe in our 'religion.' Users should only use a good product (like SOS) if it's better for their application, not because the company feels only one way is right. It's a good lesson to learn."

Troubleshooting

No matter how hard you try (or

in some cases, how little!) your SARA is going to get sick at some point. What to do? First off, be sure you have a set of our repair disks from the PD library; they have some great tips and programs that can help you diagnose many problems you may be happening.

There may also be some initial symptoms that, if you know what they are, can help point you in the right direction. IF you don't feel comfortable doing some of the suggested actions below, let us know and we'll try to help. I have access to many replacement chips.

SYMPTOM: Black screen on Monitor, drive does not boot.

ACTION: Replace ram chips b10b17 one at a time; replace non ram chips at locations d2 and e2

SYMPTON: Monitor screen contains garbage, drive may try to boot.

ACTION: Replace ram chips b2-b9 one at a time, replace the non-ram chips at locations d2 and e2.

SYMPTON: Confidence program loads into memory, displays menu, but will not run.

ACTION: Replace non-ram chips at locations d2 and e2, replace ram chips b2-b17 one at a time.

SYMPTON: Memory test runs, displays ram error message at the bottom of the screen.

ACTION: Replace failed Ram chip.

SYMPTOM: Memory test runs, sections of the memory map are missing.

ACTION: Determine which section of the memory board contains the failed ram. Replace chips one at a time in that section, replace nonram chips at location d2 and e2.

SYMPTOM: Trouble with your Serial Port



ACTION: Replace the 1488, 1489 and 6551 chips on your motherboard.

Word Juggler Tip

Here's a tip you Word Juggler users may find useful-from ///er Barry Downes:

What's an easy way to look through a long Word Juggler document for all occasions of a given word, etc.? Rather than using the Find command (numeric keypad-1) and having to retype what your are looking for each time, use the Change command (numeric keypad-3) and when the "SEARCH FOR" instruction is shown on the bottom of the screen enter what you are trying to find, now when you hit RETURN and are asked for "REPLACE WITH" just retype the same information. Now you can go through the document easily hitting a return each time to see all occasions of the word.

Finally

Apple's announcement in mid November that it had finally discontinued the Apple // production line brings the Apple // family to an "official" close. We mourn its passing, yet we SARAsaurs know what our friends on this side of the Apple family are going through. We hope the efforts made by the ///ers of the world can serve as a small example of what can be done to continue the usefulness of a machine long beyond its "official" death.

As I have said many, many times in the past-a computer remains useful so long as it has something useful to do. The // family, //+, //e, //c, //gs and our beloved///, still has many, many years of life left if we are creative enough to use them in the proper perspective. In a lot of ways, our Apples are more than just machines. They represent a part of us that has learned to work and play in so many more ways because they provided the

tools to show us the way.

I hope the //ers will look on this final event as a challenge, just as the ///ers have over these many years. Get the most out of your machines, your Apple computers let them continue to work for you, to be even more productive and to have more fun. Keep the religion -Apple // and /// forever!

APPLE /// RESOURCES

Bob Consorti

179-B Kent St. Brookline, MA. 02148 (617)-731-0662

On Three c/o Joe Consorti

1174 Hickory Ave. Tehachapi, CA. 93561 (805)-822-8580

Sun Remarketing 800-821-3221 The Lisa Shop 916-668-5637 **Tom Linders** 408-741-1001 Apple User Group Connection 800-538-9696 ext. 500 Apple User Assistance 800-767-

2775

Special Offer continued from Page 29

Product #	Description	User Group Price
M1383LL/A	Performa 600CD: (5/160) (no monitor)	\$1269.00
UGC405	Performa 405: (4/80) (.39 monito	or) \$659.00
M1044Z/A	16 inch Trinitron monitor	\$999.00
Shipping charge	for each product ordered is \$15.00	

User Group M	ember Purchase	e Program	Order Form		
First Name	Last Name		M.I.		
Ship to address:	and accounts to				
(no PO Boxes)		The State of the	de la		
		ate	Zip		
Day Phone#	Evening Phone#				
Type of Payment:	VISA # MC#_	E	хр		
Signature	Cashier's Check #				
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		Subtotal:			
(Only in	the state of CA 8.5%) Sa				
	Shippin	ng Costs:			
		Total:			

Notes:

- * Refurbished products are equipment that has been returned to Apple by existing resellers. It may have been returned for any number of reasons, including discontinuation of that model, a return by customer, or a malfunction in the product. All returns are checked for proper function, repaired if necessary, repackaged, and marked "refurbished" on the box.
- ** Orders will be taken on a first come. first serve basis and only from Jan. 1 through Jan. 31, 1994.
- *** Shipment of all orders will be made the week of February 1.
- ****All products come with a 90-day in-home warranty.
- ***** You must be a member of a user group, such as WAP, to participate.



Apple /// PD Library

by David Ottalini WAP /// SIG Co-Chairman

lowly over time, in secret, the Apple /// PD factory continued to churn. Its production line whirling faster than the hands of Big Ben. It was a cold wind from the North, blowing along the San Andreas Fault and then East that finally brought from the depths of time new disks for Apple ///ers to enjoy. It was a new year, a new world, full of new hope.

Hmmmmmmmm

If you ever wondered just how tinged your /// SIG Co-Chair is at times.. But then, it did get your attention, No?

We have, in fact, been adding disks to our PD over the past few months. IF you watched the back of the Journal, you'd have noticed new numbers popping up on occasion as John Ruffatto completed the copying process and added the disks to our library. My end, to let you know about them, has fallen woefully short-though I have to admit its been more and more difficult to keep these articles especially my Trail Column -going every month. Work and children seem to do that to you.

In any case, we do have a number of new disks in the PD which I hope you'll take a look at. Here's what's in store for you:

Appleworks/3EZ Pieces

Disks 3AWZ 12-15 are called Parishworks and are downloads from Compuserve. They enter our PD due to the donation of a /// system to a Washington DC church a few months ago - and the need to provide them with some church-specific software. These disks will work with any Apple // family machine that has Appleworks or 3EZps. I won't list everything they offer, but suffice it to say that if you need to keep track of everything from baptisms to sheet music, attendance and the offertory, these disks are for you.

Catalog

We've updated 3CAT-04 and 05 -the ASCII versions of our PD Catalog to include all the latest disks. 3CAT.01-03 have the 3EZPs version in database format.

Games

We recently came across the actual manual for our game Cap'n Magneto-disk 3GAM.03- and have not included it on this updated disk. The manual has also been uploaded onto the TCS and our ///s Co. - WAP BBS (301-593-0024).

Information

Disk 3INF.39 is our latest "Best of Ottalini" disk - this being number 8! It includes all my columns from 1993, as well as all the PD articles and additional musings from other ///ers over the year. Menu.Maker is included of course and you can read each article individually and print it or use our famous "Print.All" program to print all the text files from any disk side.

Telecommunications

Disk 3TEL.12 is Easyterm ///, telecommunications program you might like to try. It includes a "manual" of sorts on disk for you to read as well as the program This was a formerly itself. commercial program sold by Sun Remarketing.

Disk 3TEL.13 contains the source code to Gary Kato's XMODEM///(disk3TEL.05)-agreat PD telecom program that you can use to do XMODEM uploads and downloads. The source code is offered in the hopes someone might be interested in doing some upgrades to make this program even more useful.

Utilities

3UTL.49 contains the original Titan ///+// emulation disk, as well as some information about the Titan cards, articles about them, etc. The ///+//emulation disk only works with the single Titan ///+// card.

3UTL.50 offers the Titan ///+// emulation disk with built-in RAM disk. A set of utilities to use on the // side are also included.

3UTL.51 has the Titan ///+//e emulation disk - used with the two card Titan set. It also includes a RAMDISK driver you can use in native mode (that is - use the RAM on the Titan cards as a RAM disk in native mode). The Daryl Anderson drivers tho (on disk 3UTL.18) are much better.

3UTL.52 is another version of the ///+//e emulation disk courtesy of ///er Matthew Thomas. This version has been modified so that it is, in essence, a "double boot" disk you can add a Prodos based program on the disk and it will run automatically after vou've booted into the Titan emulation.

3UTL.53 offers up an autoinstall program to update your disks the 1.3 version with SOS.KERNEL. Easy to use - just boot and follow the instructions if



you have a need to do this. Also included is an Apple // DOS to Apple /// SOS conversion program.

3UTL.54 is the ORIGINAL Apple // emulation disk! Vintage 1980 - it will only allow you to load Applesoft or Integer Basic before booting a 48k (or smaller) disk. To make things interesting for you, we've included an old Apple // game - "Snake Attack" on side two you can run. It does not need a joystick - just the keyboard. You'll recognize what it resembles when you see it.

3UTL-55 is a program called SOSTRAN. A former commercial program, this is a neat little Pascalbased program that will allow you to transfer files from DOS 3.3 format to SOS and back. It will also make some conversions so that, for example, a DOS 3.3 Binary graphic file can be loaded as a SOS Fotofile (in case you don't own On Three's Graphics Manager program). Information about SOSTRAN is on Side One while the program itself is on Side Two. ■

Mac Care & Feeding © 1993 Tom Witte

Tip 10

Question: How do I turn off my Mac?

Answer: Don't turn off your Mac, use Shut Down from the Special menu item in Finder. On many Macs that, this command will also turn it and whatever is plugged into the Mac off.

The Macs that don't do this
will present a dialog box
telling you it is now safe to
reach in back and switch
the power off or unplug.
Turning off without

shutdown=crash.

Basic Instructions for Using the Freeware Comm. System Program on the Apple II

Part I

by Phil Shapiro

- -How to Dial Out
- -How to Set the Baud Rate
- -How to Capture Text and Save It to Disk

ith the price of modems continuing to drop and the pricing of online information services falling to remarkably affordable levels, more and more Apple II users are taking the plunge and making their first modem call. Many first-time modem users are justifiably reluctant to make an investment in a commercial Apple II communications program until they've gotten their "feet wet" exploring the online world.

Thankfully Jim Ferr, a topnotch Apple II programmer from Toronto, Canada, has created a nifty Apple II communications program, "Comm.System," that offers a lot of basic functionality. The interesting thing about "Comm.System" is that it runs on almost every Apple II ever made. You can even use it on and old 64K Apple II+ computer. Here are some basic instructions for using "Comm.System". These instructions proceed step-by-step, assuming no prior experience with using telecommunications software. After you boot the software you'll be greeted with a simple menu screen with several choices. (This opening screen is the main menu for the program.) Each choice corresponds

to a command that you can issue to Comm.System. Commands are issued by pressing the open Apple key along with the corresponding first letter of that command.

Here is what this opening screen looks like:

- B) aud rate (skip to next)
- C) lear recording buffer
- D) ial
- E) cho
- H) angup
- L) ist current directory
- N)ew Prodos prefix
- P)rodos text file lister
- Q) uit Comm. System
- R) ecording buffer on/off
- T) ransfer a file via XMODEM
- V) olume online display
- W) rite recording buffer
- Z)ap (delete) a file ?)
 For this menu

You can bring this menu back onto your screen anytime during your online session by pressing the open-Apple and question mark key, together.

Let's walk through a sample telecommunications session to see the typical ways in which a person



might use Comm.System. The following instructions assume that you've correctly connected your modem to the serial port (or card) on your Apple II, and that your modem is correctly connected up to your phone jack, and that your teenage son is currently not using the phone. The first thing you need to do is to check whether the baud rate of the "Comm.System" software is set to the same speed setting as the maximum baud rate of your modem. The default baud setting for "Comm.System" is 2400 baud. You can change this setting to a higher or lower setting by pressing the open-Apple key and the letter "B" at the same time. Doing so cycles the baud rate to the next baud rate setting.

So if you have a 1200 baud modem, you'll need to press open-Apple-B five times to cycle from 2400 baud to 4800 baud to 9600 baud to 19200 baud to 300 baud to 1200 baud. It takes far longer to describe this step than to actually do it. The current baud rate setting is shown at all times at the left side of the inversevideo "status bar" that "Comm.System" displays at the top of the screen at all times.

Once the baud rate is correctly set, you're ready to dial the electronic bulletin board system (BBS) or information service that you'd like to connect to. To dial, depress the open-Apple key and the letter "D" at the same "Comm.System" will then show the following message to you at the bottom of the screen:

"CS: Enter the phone number to dial, or Return to exit."

This message is typical of several of the messages the "Comm.System" software communicates to you during the progress of various online procedures. The letters "CS" signify that "Comm.System" is the originator of the message that is on the screen.

(As opposed to a message that might appear on your screen from the other computer you're connected to.)

You can then enter the digits of the phone number you'd like to dial. Incidentally, there's no need to separate the digits in the phone number by dashes. And if you're dialing a long distance phone number, don't forget to include the digit one before typing in the area code.

Once you've typed in the phone number that you'd like your modem to call, press the < return > key. You'll then hear your modem dialing out. The dialing tones of your modem are very similar to the dialing tones of a touch-tone phone.

It ought to be noted hear that not all modems have speakers in them. Over ninety-percent of modems do have speakers.

If your modem doesn't have a speaker you will not be able to hear it dialing the phone number you typed in. This does not present any special problems, unless you have trouble connecting to the other computer. The function of a modem speaker is to let you know whether the phone number you're calling is busy or not answering. A busy phone line on the other end signifies that you should try calling back later. If the other end is not answering, then you might want to try calling the system operator of the BBS by voice phone to find out whether the BBS has been taken down or not.

Assuming that you have successfully connected to the other computer, the message "CONNECT 2400" will pop up onto your screen. Following that will be the welcoming message from the BBS or information service that you're calling. Typically, the next thing that will occur is that you'll be prompted for a password. If this is the first time you're calling that particular computer, the customary procedure is to type in the password "guest" or "visitor." Instructions for first time

visitors should be displayed in the welcoming message of any BBS. Or, in the case of a national information service, you'll find instructions for logging on in the registration packet of the online service with which you're opening up an account.

After you have connected to the other computer, you will then be able to navigate around the menus of the BBS or information service. Online help information is often available by pressing the question mark key, or by typing out the word "Help" when the BBS is awaiting a command on your part.

Suppose you receive some electronic mail that you would like to save to disk and print out later with your word processor. How can you tell "Comm.System" that you'd like to "capture" the text that is coming onto your screen?

The way to make "Comm.System" capture text is to activate the program's "recording buffer." The recording buffer is a temporary storage area the program uses to store text that is scrolling onto your screen. If you decide that the text in the recording buffer is worth saving to disk, you can then а command "Comm.System" to "write" the recording buffer to disk.

Once on disk, this text exists as a text (or ASCII) file. You can load this file into almost any word processor, and print out as many copies of the text as you like. It's also possible to send this text via modem to another computer user, regardless of the make or model of the computer he or she is using.

When you activate the recording buffer in "Comm.System," no large fanfare takes place. There are two indicators that show the recording buffer has been switched on. The first indicator is that a capital letter "R" appears in the status, immediately to the right of the baud rate indicator. A second indicator is



that as the recording buffer fills up with text, the percent that the recording buffer is filled will be indicated after the letters "Buf:" in the status bar.

How much text can fit into the "Comm.System" recording buffer? The program can store up to 20 kilobytes of text at one time. Once the buffer becomes filled, further text that comes scrolling onto your screen will simple not enter the capture buffer. If this incoming text is important, you might conceivably lose it as it scrolls off the top of your screen.

To avoid the possible loss of important text, it's useful to keep a watchful eye on the recording buffer indicator in the status line. As the indicator approaches 80 or 90 percent, you would do well to stop what you're doing and "write" the existing recording buffer to disk.

To write the recording buffer to disk you need to press open-Apple and the letter "W". "Comm.System" will prompt you for a file name. You can use any legitimate Prodos file name: 1) Fifteen characters maximum, 2) Must start with a letter, 3) And may not include any spaces.

After "Comm.System" writes your recording buffer to disk, it automatically clears the recording buffer, thereby allowing you to capture more text. If the recording buffer becomes full and you are not interested in saving the captured text to disk, "Comm.System" allows you to clear the capture buffer in an instant by pressing the open-Apple key at the same time as the letter "C".

In my use of "Comm.System," I frequently clear out my capture buffer to keep it open for captured text that I might want to save to disk. How long does it take, typically, for the capture buffer to get filled with 20 kilobytes of text? Using a standard 2400 baud modem, it took me about four to five minutes to fill the buffer. A 1200 baud modem would take twice as long. And

a 9600 baud modem would take one quarter as long.

In Part II of this series of articles I'll be explaining how to send and receive files, how to set the Prodos prefix, and how to use "Comm.System" to list text files from a floppy disk onto the screen.

Obtaining Comm.System

"Comm.System" is found on WAP Disketeria disk "Comm-09." This disk may be ordered from the WAP office for \$2, plus \$1 postage. (Nonmembers of the club may obtain the disk for \$5, plus \$1 postage.) The program can also be downloaded from the Apple II file download areas of the TCS. You will need to use ShrinkIt to unpack the program after downloading it.

Other Recommended Apple II Communications Programs

For persons interested in a commercial Apple II telecommunications program, I can wholeheartedly recommend ProTERM. The current version of ProTERM is 3.1. Older versions of the program, such as ProTERM 2.2, can sometimes be found for on the second hand market for \$20 to \$30. These older versions offer exceptional value for the money.

Two places where you might find older versions of ProTERM are the Apple II software classifieds area on America Online, and the "Apple II Free Trade Zone" in the Apple II Roundtable, on GEnie. Or check with members of your local Apple user group.

The going price for a new copy of ProTERM is about \$85. This, too, is well worth the money for the exceptional quality of software you get.

(The author takes a keen interest in the educational uses of Apple II and Macintosh computers. He can be reached at: (202) 686-5465, or via electronic mail on GEnie at p.shapiro1; on America Online at pshapiro)

When Mac Died

(continued from page 47)

processing, you'll agree, no more color should there be. Black and white is enough, even when the writing gets tough. Don't get me wrong...pictures are nice, graphs even finer...but keep them away, along with outliners. "Keep it simple," is the Macintosh plea. Have as much as you like, but make it work naturally. When you must Option-Shift-Command double-click, it's time to move on. Before we all get sick, and join the IBM throng.

So there you have it. You can all turn the page. Past the bestest and brightest...and the wars that they wage. You know better. Ads are just that. It's vaporware...no more...so sit back and relax. 'Cause soon enough, the real new stuff will be here. And for thousands more and you'll rush out to buy them from fear.

Goodbye Larry Latener...and to your 70-megahertz Mac Ultrex 753. From your competitive hide must I now flee. No longer will I compete with you...when I have enough trouble deciding how to compete with me. It's off to my little, trusty old Mac and System 7.3!

If you enjoyed this article, please drop a note to: Hal Feldman 10 West 66th Street, Apt. 9J New York, NY 10023 or message him at the following electronic mailboxes: Prodigy: MDCS79A AOL: Half Internet: half@aol.com OneNet at node Hal Feldman,NYMUG Software Review

AccuDraw

by Jean Blievernicht

Type of software: General purpose computer assisted design program for floor plans, technical drawings, circuit boards, and other possible uses.

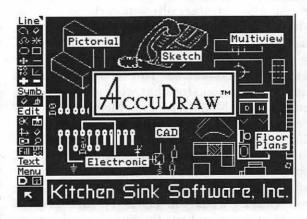
Computers it runs on: Apple IIe, IIc, IIGS, and IIc+. Price: \$99.95 (plus \$2.50 shipping)

Publisher and distributor:

Kitchen Sink Software, Inc. 903 Knebworth Ct, Westerville, OH 43081 (614) 891-2111

[Note: This review first appeared in the August, 1993, issue of "The AppleGram," a publication of The Michigan Apple User Group. Other user groups may reprint the article but please give credit to the author, Jean Blievernicht, The AppleGram Newsletter and the Michigan Apple User Group. Kindly send a copy of any newsletter containing this reprint to The Michigan Apple, P.O.Box 567, Warren, MI 48090-0567.] by Jean Blievernicht]

ccuDraw is not just another drawing program. It is a powerful graphics design program like computer aided design (CAD) programs. You use it to create scale drawings which can be printed on dot matrix printers. This makes the program less costly since plotter output programs are quite complex and expensive. Since it is so powerful, it is also complex. So plan to spend a bit of time getting comfortable using it. You have lots of options, but many of them are grouped and associated with an icon selection. Once you learn how to modify something with one icon, you will know how to do modifica-



tions with the other icons.

Kitchen Sink Software provides you with a very nice 3-ring binder, divider tabs for you to set up as you wish, a keyboard command summary sheet, a Quick Reference

Sheet, a Flowchart sheet and the Primer manual. The Flowchart is something that should be included with all software. The Primer is designed to get you started actually drawing something. It includes 5 exercises with well-explained step by step instructions that I was able to execute immediately.

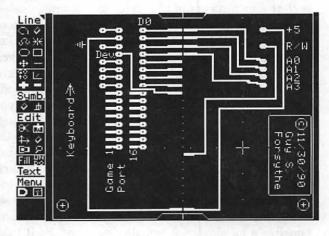
But back to some basics. This

drawing program will work on all Apple II computers except the II+. If you have a GS or enough memory to set up a RAM disk, it will work a lot faster. Even though I was using a GS, once I placed it on a RAM disk, a lot of waiting was eliminated. The manual points out what needs to be configured right away and gives good instructions as to how to do it. You can choose to use the Installer to put it on a hard drive. Then on to AccuDraw itself after reading the "Read Me First" file.

You'll see that the screen is divided into 4 parts. On the left is the

> Main Menu. In the center is the Help/Tool Window. On the right is the Current File Status Window. On the bottom is the Functions Window that is used only when drawing. The options on the Main Menu often take you to another menu. The selections on the sub-menus seem to fit logically—i.e. choices are where you expect

them to be. For example, under the Main Menu selection, Utilities, you have the choice of Configuration, Format Disk, Delete File, and Create Help. Then, under Configura-



tion, you can set information for the data disk, RAM, Font path, Input



Device, Bell level, CPU Speed, and Security. All of your drives are accessible and ProDos pathnames are supported. Is the beep too loud, turn it Fill Even Patterns: 72 NPT Fill UnDo Clipboard

down here. Set your CPU speed for the type of Apple you have including an accelerator if you have one.

Kitchen Sink admits that the security is of a modest level and could be broken by a hacker, but it would still take some time. Since all the Apple computers from the IIe on are supported, sometimes the manual has to point out some differences in how disks or the computer are used. It keeps these intrusions short and to the point. Good use of screen shots helps you follow the instructions. Once in a while I found a reference to a figure that wasn't quite accurate, but you could still figure out what was meant. One big reminder came early on—to use the Open Apple key when the manual said <button>. <button> was not the return key. What should have been added right here, but wasn't, is that <button> could also refer to the mouse button. And that if the mouse stopped responding on the drawing screen, press the Q key to get mouse control back. Fortunately, I found this later in the manual while I was wondering why I kept losing the mouse movement. I found that if you use the cursor arrow keys, the mouse gets turned off, and you have to hit Q to resume using the mouse.

I hope you have a mouse because moving around via the keyboard is a lot slower. After playing with AccuDraw for a while I got a greater appreciation for how it is

put together. Once you have drawing open you can do lots and lots and lots of things. There are a number of tool

icons on the left side of the screen much like the icons in paint programs. There are also 5 words placed strategically within the icon menu: Line, Symb(ol), Edit, Text, and Menu. The drawing tools are selected as in any paint program, by selecting the icon. However, AccuDraw has what are called Tool Modifiers. Tool Modifiers control how drawing tools do their work. For instance, you can draw one line or you can set the multiple for 5 and draw 5 parallel lines. How far apart are the lines? That depends on what you chose for the Step-3 would put the lines 3 pixels apart. Set the Code modifier to another

number and the lines can be dotted instead of solid lines. To make these changes select a drawing tool. The return key will now cycle through the possible modifiers. If you want to change one, type in the new number and hit return. Each icon tool

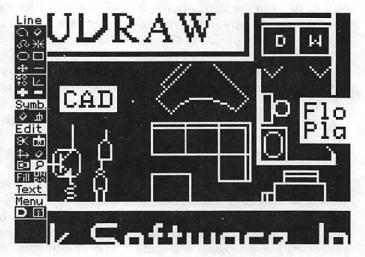
has its own set of modifiers some of which are similar and some different. So it takes a while to learn all about them.

Display modifiers are different.

They control how information is displayed on the screen. For example, do you want 1, 2, or 3 decimal places showing on the screen? Do you want a large, medium, or small cross hair? Do you want a different symbol as your cursor? Do you want to confine your scrolling to just vertical? These and other choices are made from the Settings menu accessed off the Main menu. Earlier I mentioned the Functions window at the bottom of the screen.

Now that you are in drawing mode, this is where you find out what your tool modifier settings are. In the lower left of this area is the Prompt Window which is where you enter your changes in the form of numbers.

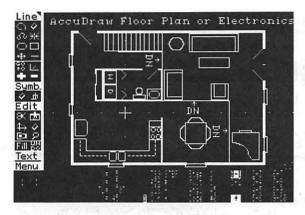
There are numbers and words all across this area. To the newcomer, it is a mystery. True, some of the info is decipherable such as the X and Y readings of the cursor. But what is TL? You have to learn what each of the columns of information represent; then it makes sense. There are some keyboard commands such as using the F key to toggle back and forth between seeing this



Function window or not.

Turning off True Length (TL) speeds up your work because TL shows the actual distance from the 0,0 point to the present position of





the cursor and constantly updating this figure slows down the program. You can set your cursor to move 1, 6, or 24 pixels at a time. When you want to erase, choose between 5 sizes of erasers. Speaking of erasers, there are several on the icon menu. One works in regular drawing, another works when in magnified mode. You can even chose a symbol such as a drawing of a computer and use it as your eraser. You can choose a drawings such as a couch and place it in multiple positions on the screen.

Which brings me to another feature of AccuDraw—the opportunity to use and add more screens even after you've started drawing. I hope 26 screens by 26 screens is enough. Because that's the maximum. You can choose to add one or more screens in any direction from the one you're working on-top, bottom, left, or right. Some things I liked about working in AccuDraw. When drawing radial lines (multiple lines originating from one point), all I had to do was click on the starting point, then each time I clicked a line would go from the start point to where I'd clicked.So I could control both the length and placement of radiating lines. There is an Undo feature which undoes the last action. If you Undo a second time, it reverses and gives you back what you just tried to get rid of.

Circles can be made into ellipses and rotated. I loved being able to make multiples of the line or shape I was drawing and control how far apart the lines were. It's fun and useful to use the symbol charts to make drawings. There are General, Floor Plan, Furniture, Stairs, Landscape, Electrical, Electronic Symbols, Printed Circuit Board Art Work, and Integrated Circuit Symbol charts. These charts give you

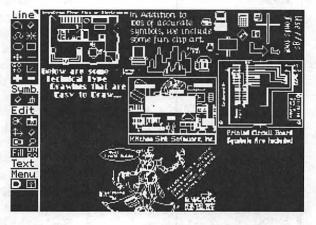
hundreds of symbols from which to choose. There is a Fill option which is a little trickier to use than in most paint programs. Select Fill from the icon menu, click on New Pattern, place your cursor over what you want filled, click to place the fill, go back and click on Fill, then go back to the object you want filled and click again. Too many movements and clicks. On the other hand, you can design your own fill patterns. You can do freehand drawing as well as using the shapes provided.

There is a CalcPad that can be called up for math. A number of scales are provided such as 1/4" = 1' or 1" = 1" or several model railroad gauge scales (HO, N, and Zgauges). Of course, you can set your own scale. If you'd rather design using the metric scale instead of the English scale, it's quite possible. If you're design-

ing something that has several levels, you can keep adding new layers to your design. The only limit to the number of layers is the number of disks you have available. When done you can combine as many layers as you want in 1 drawing. Lest you lose track of what a drawing is, at the bottom of each screen there are several lines where text can be entered.

Accudraw provides its own

fonts, but you can import Print Shop GS fonts and Beagle Bros fonts. Some ability to size and rotate the letters is provided, but this is not a strong point of the program. There is a clipboard where you can store parts of your screens and paste them somewhere else. It is also used to import Apple HiRes graphics. Your drawings can be exported as HiRes graphics for use in another program. Finally, there is a good index. It's a good thing as you WILL be using the index frequently at first. All of this designing is great, but it doesn't mean much if you can't print it out as you want it. You can print out a single screen or the whole drawing. Several sizes are offered-small (about 1/4 page), medium (about 2/3 of a page), large (full page), and poster in 2x2, 3x3, and 4x4 sheets of paper. Tape the sheets together for a good sized drawing. Want to see what you've created first? Preview will compress your drawing so you see 4, 9, or 16 screens at one time.



As you can see, there is a lot to this program. Even though I've spent a number of hours playing with the program, I feel I've just scratched the surface. Site licenses are available if you want to use it in a teaching situation. I would recommend that it be used at the high school or higher levels.



Mac Care & Feeding © 1993 Tom Witte

Tip 7

Question: What do I do after I spill on my keyboard?

Answer: Concerns are shorts to the electronics and sticky keys.

Shut down and turn off computer.

Unplug keyboard. Tilt and drain.

Remove crib sheets or anything that water will hurt. Take to sink and rinse thoroughly with clean water.

Drain and completely dry (for days) before plugging in.

*Missing keyboard? Use Key Caps DA to type.

8 qiT

Question: What do I do if I spill on a floppy?

Answer: Don't try to put it in your drive, it will just mess that up too.

Carefully remove the plastic disk from the floppy case. Rinse off gunk. Carefully open a nice clean floppy and remove disk. Put cleaned disk in new floppy case. Reseal case. Put in drive and make a copy immediately.

Macintosh Disketeria

by Dave Weikert

New Disks

here are 18 new disks this month; an update of the Disketeria Catalog and File List disk, two Anti-Virus Utilities disks and 15 System Utilities disks. In addition, the Online Bible series may be purchased in a variety of configurations—as many as 24 disks. Descriptions of the files on the new and revised disks are included below.

Holiday Pricing Ends

While Holiday prices are in effect, disks are \$3.50 each; if you buy five or more disks, the price drops to \$3 per disk. As of 16 January, our pricing for disk purchases reverts back to the pre-Holiday levels. Disks will then be \$4 each; if you buy five or more disks, the price drops to \$3.50 per disk. Remember to include postage of \$1 per disk (up to five disks maximum) if you are buying by mail.

Value Paks

We have some special sets of disks that we call Disketeria Value Paks. We got the idea for this from the Best of the Pi disk series which have been popular with our members. The files on the Value Pak disks are all compressed so that each disk has more value. Value Paks are available for the LaserWriter Fonts, TrueType Fonts, System Utilities and Fun and Games series. We expect to issue most future Value Paks in five or ten disk sets.

Anti-Virus Utilities

We updated our Anti-Virus Utility series due to the discovery of the new CODE 1 virus and a modified strain of the MDBF virus. The CODE 1 virus was detected at several colleges and universities on the east coast of the United States in November of 1993. The virus infects applications and system files but not documents and spreads under both System 6 and 7. The CODE 1 virus renames the system hard drive to 'Trent Saburo' whenever a Mac is restarted on any October 31. The virus does not contain any other intentionally destructive code but can cause crashes and other problems. The MDBF B virus can infect system and application files. It often causes damage requiring System reinstallation. It may also cause problems with menu related programs such as BeHierarchic.

We revised disks #1.02K and #1.03K and made copies for the Disketeria in time for the November meeting. If you bought the Anti-Virus Utility disk that has a letter K revision, you have the disk that counters CODE 1 as well as earlier ones. If not, update to the latest version of Disinfectant at the earliest opportunity.

Mac Disk #1.02K is a self starting (boot) disk for earlier Macs. This boot disks will not self start with the newest Macs that use System 7.1 and System Enablers (LC III, Centris, Performa 450, Quadra, PowerBook 145 and later and all Duos).

System Utilities



I revised the System Utilities this month; the new collection now extends through Disk #16.15E. The first ten disks mostly include material previously issued. Mac Disks #16.11E through 16.15E include new utilities or revisions to ones previously issued.

Descriptions of the files on the first ten disks are included in the Disketeria Catalog. Descriptions of the programs on the five new disks are included below. William Jones annotated a considerable number of the programs in the System Utilities. Thanks, Bill. We are happy to have your insightful comments on the programs once again.

All of the files in the System Utilities series are compressed with Stuffit so you receive more value per disk. The disks are also available for purchase as three sets of Value Paks with five disks in each Pak for \$15 per set.

Online Bible

The Online Bible is a full featured program designed for Bible study and reference. You can display Bible passages and notes in any number of windows, limited only by available memory. Most operations can be performed using either the mouse or keyboard commands. The program is both powerful and easy to use.

The basic text for the Online Bible is the 1769 Authorized Version, commonly known as the King James Version, indexed to about 350,000 Greek and Hebrew words using Strong's numbers. In addition to all the Strong's numbers, over 100,000 verb parsings have been added. Footnotes from the original translators along with alternate readings from the 1833 Webster Bible are also included.

Complete search facilities include, word, phrase, multiple words, wild cards, and much more. Searches can use AND, OR, NOT, and proximity operators to select verses. The range for searches can be restricted. All verses are displayed in context rather than asking you to choose a verse from a list to display. Searches are very fast, taking only a second or two even on a Mac Classic.

The Online Bible is segmented into four multi-disk sets as described below. Each set includes from five to seven disks; all are in self-extracting compressed format. The price for all four sets is \$50. Sets may be purchased individually for \$15 per set.

Apple System Software

Three of Apple's recent System Software update disks remain popular. These are System Updater for System 7.1, LaserWriter 8 Install and Software Utility Update.

System Updater 2.0.1 is the equivalent of the System Tune-up for 7.0/7.01 and replaces the Hardware System Updater previously issued. System Updater 2.0.1 is a must-have disk for anybody running System 7.1. It updates System 7.1 to correct programming errors and adds additional functional capabilities including a new Sound Manager.

LaserWriter 8 Install allows you to install the LaserWriter 8.1.1 driver and associated files. This driver offers improved PostScript printing, advanced paper-handling capabilities, customizable printer resources that support your printer's specific features and options, full support of PostScript Level 1 and Level 2 and enhanced Printing and Page Setup options. It is a 'musthave' disk for PostScript Level 2 printers and should give enhanced performance when printing to older PostScript Level 1 printers.

Software Utility Update includes the latest MacCheck, Apple HD SC Setup and Disk First Aid. These are invaluable utilities for the technical support and troubleshooting of Macintosh hard disks and other Mac components.

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 #00.01 -- C 1 MAC DISKETERIA CATALOG

•• Extract Me First.sea ••: When this file is copied over to a hard disk and double clicked, it will automatically extract the following two folders:

Washington Apple Pif: By Dave Weikert. Just double click the • • Double Click Me•• file to read our Program Notes and information about Washington Apple Pi, Ltd. and our Mac Disketeria. This opens the Easy View viewer. You may have to select Word Wrap under the Style menu to facilitate viewing. You may also open the Mac Disketeria text file with your favorite word processor.

Easy View 2.32 f: By M. Akif Eyler. An application for intelligent browsing of collections of structured text files, large or small. It allows very fast access by recognizing the internal structure. Easy View Introduction and Easy View Notes are in text format. Easy View -Read Me is in Easy View format.

Files.txt, By Dave Weikert. A delimited text file of all of the files included in our Mac Disketeria. It includes File Name, File Size, File Type, File Creator, Creation Date, Revision Date, and Folder and Disk Names. You should be able to import this list into your favorite database for sorting and selection and printing. You could also import the list into any word processor that accepts large text files.

DISK #1.02K - AV 2 ANTI-VIRUS UTILITIES

This disk is self starting and includes the System Folder files. Its is designed for users who want a "canned solution" for their Anti-Virus start-up disk. It should be locked when you receive it; keep it locked to prevent the spread of a virus



to this disk. Use Disinfectant as the primary means of detection and removal.

Disinfectant 3.3: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT 17, INIT 29, INIT 1984, ANTI (A & B). WDEF(A&B), CDEF, ZUC(A, B&C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace). MBDF, CODE 252, CODE 1, T4, T4-C and Frankie. Like Virus Detective. it operates under your control and can scan a succession of floppy disks and create a log file of the results. Check out the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE

system 6.0.5 f: Includes Apple System Software version 6.0.5 with System and Finder with Control Panel and SCSIProbe to provide a self starting disk. The System file has been stripped of all possible fonts and DAs to permit using this as your primary virus detection, eradication and prevention disk. We could not install System Software 6.0.7 because there was not enough disk space to install Disinfectant even after 6.0.7 was stripped of all possible fonts and DAs.

Disk #1.03K — AV 3 Anti-Virus Utilities

This disk contains the most popular and effective Anti-Virus applications but does not include a System Folder. Its is designed for users who want to "roll their own" Anti-Virus start-up disks. Two files on this disk are Compactor Pro self extracting archives to save space (the file name suffix is .sea). Place each file on a separate disk and double click to expand them.

Disinfectant 3.3.sea: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT 17, INIT 29, INIT 1984, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace), MBDF, CODE 252, CODE 1, T4, T4-C and Frankie. Like Virus Detective, it operates under your control and can

scan a succession of floppy disks and create a log file of the results. 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.

Eradicat'Em 1,2 f: By Dave Platt. The sole purpose of this INIT program is to monitor and remove the WDEF virus; it does this quite effectively. It scans all inserted disks for WDEF in the invisible Desktop file after it is installed in the System folder and your Mac is rebooted. Eradicat'Em 1.2 release notes are in TeachText format. Requires Mac 512KE or later.

GateKeeper 1.3 Dist f.sea: By Chris Johnson. These INITs and associated Control Panel Device (cdev) are placed in your system folder (Systems earlier than 7.0) and are then accessible via the Control Panel after booting. For System 7.0 and later installation, see the documentation. GateKeeper monitors the types of action that viruses take and limits the system response to prevent infection. GateKeeper creates a log file for later analysis and diagnosis of virus attacks. GateKeeper Aid looks for certain viruses and their variants and eradicates them. GateKeeper Introduction and GateKeeper Aid Introduction, in MacWrite format, describe the use of the programs. For Mac 512KE and System 4.1 or later. Send a postcard.

HyperVirus 1.3 f.sea: By Joe and Hubert Savelberg. Searches HyperTalk scripts for the HyperVirus (Musidenn) virus. Also includes the ability to enter any search string to find any future HyperTalk script virus.

PostScript Vaccine 1.0.3: By Jon D. Clauson. Modifies the Apple Laser Prep file to install a vaccine against PostScript Trojan horses that modify the printer's server password. For Systems 6.0 and later and Laser Writer drivers 5.2, 6.0 and 6.0.1. Shareware – donation to American Cancer Society.

VirusDetective 5.0.6.sea: By Jeffrey S. Shulman. This Desk Accessory scans a disk, folder or file to detect a virus. Viruses detected include Scores, nVIR (A & B), INIT 29, INIT 1984, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B

(Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace), MBDF, CODE 252, T4 and Frankie. Virus Detective can search for operator entered strings and can write a log file to disk. This version has extended capabilities and permits you to easily check out an entire floppy disk library. The DA is installed in the System file and is available under the menu; a copy is not included in this folder due to lack of space on the disk. JSS Virus Article. Bkmn/Helv is the MacWrite II format documentation on the theory and use of Virus Detective. Search String Sets contains text files with search strings. Shareware-\$35 for license, \$40 for license and disk with other demo programs.

DISK #16.01D — SU 1 SYSTEM UTILITIES

UnStuffIt™.sea, ADB Reset f.sit, Alias Finder 1.0 f.sit, AliasThis! 2.0 b2 f.sit, Anonymity 1.2.sit, AppDisk 1.6.1 f.sit, Application Killer 1.1 f.sit, Attributes 1.1 f.sit, Auto Shutdown 1.1 f.sit, AutoLock 1.3 f.sit, Backdrop 1.1 f.sit, Balloon Font Utilities 7.0...sit, BeforeDark 1.1 f.sit, BitFont 1.0.1 f.sit, BNDL Banger v.1.2 f.sit, BootMan 1.1.sit, ClipSave 1.0 f.sit, Compact Pro 1.34 f.sit, Control Key f.sit, CursorAnimator 2.0.1 f.sit, DarkShutdown 1.1 f.sit and DD Expand™ 3.8.sit.

DISK #16.02D — SU 2 SYSTEM UTILITIES

UnStuffIt™.sea, Data Fork Opener 1.0 f.sit, DeBNDLer 1.1 f.sit, Defaultem! 1.0.sit, DFerase 1.0 f.sit, Disk Bug Checker 1.1 f.sit, DiskDup+2.21 f.sit, DiskStatus 1.2 f.sit, EasyLaunch 7.0.sit, EasyPlay 1.0 f.sit, Enabler Patch f.sit, EnMass 1.1 f.sit, Extractor 1.20.sit, FastFix f.sit, File Kit 1.1 f.sit, FileEdit 3.0 f.sit, FileMover 1.0 f.sit and Find Stuff 1.0.2 f.sit.

DISK #16.03D — SU 3 SYSTEM UTILITIES

UnStuffIt™.sea, FileList 1.4 f.sit, Finder 7 Menus! 1.2 f.sit, Finder Info 1.0.1 f.sit, FinderEdit 1.0 f.sit, FinderToFront 1.0 f.sit, FixFileDates.sit, Folder Icon Maker 1.1 f.sit, FONT Lister v.1.1 f.sit, FontLister 1.2 f.sit, iContraption 1.0.2 f.sit, Index Maker 3.0 f.sit, Insomniac 1.0.2 f.sit, Kapu! 1.1 f.sit, Launch 3.0



f.sit, ListApps 1.0 f.sit, MacCompress 3.2 f.sit, MacinTalk 1.5.1 f.sit, MacIntalk for 6.0.7 f.sit, MacProfiler 1.1 f.sit, Mini Grinders 1.0 f.sit and MyAliAsMaker 1.0.1 f.sit.

DISK #16.04D — SU 4 System Utilities

UnStuffIt™.sea, NetClip 1.0.sit, Nom de Plume 1.2.2 f.sit, Out to Launch! 1.1.0a f.sit, PB Numeric Keypad 1.0 f.sit, PopOver 7.0 f.sit, PowerAlias 1.0 f.sit, PowerStrip 2.0 f.sit, PRAM-5.0.sit, QCat 2.0b6 f.sit, QuickFormat! 7.1.sit, Sad Mac Error Codes 1.1.sit, SCSI Evaluator 1.07.sit, SCSI Spy 1.9b3.sit, Set Clock 3.3.sit, ShowSizes 2.2.1 f.sit, Simsonite 1.0 f.sit, SitToCpt 1.10 f.sit, Spam 1.0.1 f.sit and StripFonts 1.2b0 f.sit.

DISK #16.05D — SU 5 SYSTEM UTILITIES

UnStuffIt™.sea, Snap 1.1.1 f.sit, Styler 2.00 f.sit, SuperTools 1.0d f.sit, Swatch 1.2 f.sit, SystemSwitcher 1.1.sit, Talker 2.0.1 f.sit, TattleTale 1.7.1 f.sit, Test Pattern Gen 1.06 f.sit, The Namer 7.0.sit, ToMultiFinder 4.0 f.sit, Trash Chute 2.0.sit, TypeChanger 1.2 f.sit, TypeSpec 1.2 f.sit, UnZip 1.10 f.sit, uu decode 1.0 f.sit, Version 2.2 f.sit and XferIt 1.4b1 f.sit.

DISK #16.06D — SU 6 SYSTEM UTILITIES

UnStuffIt™.sea, Alias Assassin 1.1 f.sit, Alias Maker 7.0.sit, Alias Stylist 1.3.1 f.sit, AliasBOSS 2.03 f.sit, Announce 1.0 f.sit, Anti-Finder 1.0.1 f.sit, AppleEase 1.0 f.sit, AppleMenuAdd 1.0 f.sit, ArcMac1.3e.sit, Blind Monitors 1.0.2 f.sit, BundAid 1.2 f.sit, Bundles 1.1 f.sit, Catalog 1.11.sit, ChatMan f.sit, ClipClop 1.0.1 f.sit, Clöck 1.0 f.sit, ColorAlias 1.0 f.sit, CptExpand 1.0 f.sit, CTC 1.2.sit, DA Piggyback 1.4 f.sit and DART 1.5.2 f.sit.

Disk #16.07D — SU 7 System Utilities

UnStuffIt™.sea, DeSEA 1.4 f.sit, Desktop Checker 1.0ß1 f.sit, Disk Copy 4.2 f.sit, DiskBench 1.1.sit, DisKeeper v1.9.sit, DownLine 1.1.1 f.sit, dTimer 2.0 f.sit, DTPrinter 1.1 f.sit, Dvorak f.sit, Easy Alias f.sit, Easy Errors 1.0 f.sit, Fast Formatter 3.0 f.sit, File Commander 1.0 f.sit, File Fanatic 1.1 f.sit, FileBackup 1.0.sit, FileList+

1.0b21 f.sit and FileSorter 1.0.2 f.sit.

DISK #16.08D — SU 8 SYSTEM UTILITIES

UnStuffIt™.sea, FinderPalette 1.0 f.sit, Font Changer 1.01 f.sit, Formatter 1.1 f.sit, GetFolder1.1 f.sit, GigaCat 4.7 f.sit, HellFolderFix f.sit, HideFiles 1.1 f.sit, IBM.sit, ICON Warehouse 1.0.sit, Iconder f.sit, JiffySwitch.sit, KeyHolder 7.0.sit, Kill~Desktop 1.0.0 f.sit, LanTest 1.0.3 f.sit, LHarc 0.41 f.sit, Lullaby f.sit, MacLoad 1.4 f.sit, MacUpdate 3.1.5 f.sit, Minor•Repairs 1.01.sit, Mug Shot Lite 1.30.sit, MultiXfer 0.4a1 f.sit, MyBattery 1.21 f.sit, myPageSetup 1.2.sit and New Creator f.sit.

DISK #16.09D — SU 9 SYSTEM UTILITIES

UnStuffIt™.sea, No Cache 1.0 f.sit, OneClick! v1.1 f.sit, Popcorn™ 1.0.1 f.sit, PrefsCleaner 1.1 f.sit, Ram Preserves 1.0 f.sit, RenameDelay 7.1 f.sit, ResBulker 1.0.1 f.sit, Reset ADB.sit, Sad Mac Error Codes 3.82.sit, Save a BNDL 1.3 f.sit, SaveATree 1.52 f.sit, Saver! 1.9.5 f.sit, Secure Your Mac f.sit, Shutdown Items 2.1 f.sit, ShutDownLater.sit, Signature Sucker 1.0.sit, SitExpand 1.01 f.sit, sndConverter 1.2.1 f.sit, SoftLock 1.4 f.sit, Sound Extractor 1.21 f.sit, Sound Mover Pkg 1.75 f.sit, suntar 1.2.1 f.sit and System Errors 7.0.1.sit.

DISK #16.10D — SU 10 SYSTEM UTILITIES

UnStuffIt™.sea, Suitcase Maker f.sit, sys7snd2 f.sit, System Picker 1.0b11 f.sit, tar 3.0 f.sit, The Complete Delete.sit, theFONDler 2.1 f.sit, Tiny Saver 1.4 f.sit, Tonto f.sit, TrashMan 3.1.1 f.sit, UnlockFolder 1.0 f.sit, uu**code f.sit, Varityper ToolKit 1.0.sit, Version Sleuth 2.0 f.sit, Viewer Classic 2.02.sit, VM-Eject 2.0.sit, VMTuner f.sit, Watch 1.5.1 f.sit, zapToFront 1.0 f.sit, Zoom Lens 2.0 f.sit, ZoomSwitch 1.1 f.sit and Zorba 1.0.1 f.sit.

DISK #16.11D — SU 11 System Utilities

UnStuffit.sea: By Raymond Lau and Aladdin Systems, Inc. Decompress (unstuff) archive files created with Stuffit Classic and Stuffit Deluxe programs including those on this disk. Easy to install, just double click and follow the directions.

About This Macintosh 1.4 f.sit: By-Bloom!-Software. Tells you everything, or at least almost everything, you would ever want to know about your Mac.*Distribution Policy* and ATM READ ME are in text format.

Alias Director 3.5.2 f.sit: By Laurence Harris. Use its drag and drop and keyboard shortcut capabilities to make creating and deleting aliases as easy as using them. With the proper selection, you can send an alias directly to the Apple Menu folder. Alias Director Read Me is in TeachText format. For System 7.0 and later. Shareware - \$10.

AliasZoo 2.0 f.sit: By Cliff McCollum.

Manage aliases across multiple hard
drives. Locate and delete or repair
aliases that no longer "point" to
anything. • ReadMe - AliasZoo 2.0 •
is in TeachText format. Shareware \$15.

Apple File Exchange f.sit: Place these converters in your Apple File Exchange folder to convert between different file formats as indicated.

BMP<=>PICT f: By R. Mark Fleming. Converts B&W, 16 and 256 Color bitmaps, OS/2 (.BMP), Windows V3.0 & V3.1 (.BMP) formatted files to Macintosh PICT formatted files. XTND & AFE - BMP to PICT.Word is in Word format. Shareware - \$10.

dBase<=>CSV f: By R. Mark Fleming.
Convert between dBase II or III and
Comma Separated Variable (CSV)
formats. dBase to CSV.rtf is in
Microsoft RTF format; it may be opened
with Word or other WP applications
that support the RTF format.
Shareware - \$10.

Mac<=>MacBinaryAFE f:ByRichard
L. Trethewey, PEEK[65]. Translates
files from the original Macintosh
formatinto the MacBinary format and
vise versa. Useful for those who
normally use MS-DOS or Apple II
systems to send and receive Macintosh
software using the commercial services
and local bulletin boards. Mac to
MacBinary Documentation is in
text format.

TIFF PC<=>Mac f: By R. Mark Fleming. Converts IBM PC Tagged Image Format Files (TIFF) formatted files to Macintosh TIFF formatted files. TIFF (IBMpc to Mac).MSWord is in



Word format. Shareware - \$10.

Wordstar<=>RTF f: By R. Mark Fleming. Converts WordStar file to Microsoft Revisable Text Format (RTF). Microsoft Word V3.0, Microsoft Word V4.0 & Microsoft Works, MacWrite II, and WriteNow, Claris Works can read the RTF format. Shareware - \$10.

WP5<=>WORD f: By Microsoft. Converts word processing files in WordPerfect for the IBM XT. AT. and compatibles Versions 4.1, 4.2, and 5.0 format to Microsoft Word for the Macintosh format and vice versa.

Applicon 2.3 f.sit: By Rick Holzgrafe. Creates a tile for each active application; click on the tile to bring the application to the front. Applicon - READ ME is in double clicakable PocketDoc application format. Requires System 7.0 or later.

Attributes 1.1. f.sit: By John A. SchlackAlter file information using a drag-and-drop interface. Information that can be modified includes date and time of file creation / last modification. creator, file type, invisibility, and lock / unlock attributes. Attributes Manual is in Word format; Read Me is in text format. Shareware - \$10.

AutoClock 1.4 f.sit: By Jean-Pierre Gachen. An application and a system extension that keeps your Macintosh's clock correct by calling a time server in Washington DC. For System 6.0.5 or later, including system 7.0. Changes 1.4. Documentation 1.4 and Read Me 1.4 are in TeachText format.

Backup Reminder 1.0.2 f.sit: By Karl Bunker, Displays a dialog box when you start up your Mac when it's time for a backup. It also lets you select when the next reminder will be displayed, and gives you the option of launching your backup application immediately. Backup Reminder docs is in text format.

CatFinder 1.22 f.sit: By Keith Turner. A utility to catalog the contents of all kinds of disks including floppies, hard drives and removables including CDs. You can easily browse the catalog, search for specific files by name and/or creator and create informative catalog reports. CatFinder Shareware Doc v1.22 is in double clickable DOCMaker format. Uses Apple Events under System 7 and later to select and launch files. Requires System 6.0.4 and later. Shareware - \$25.

Changeling 2.0 f.sit: By Michael Covle and Neal Tibrewala. Another of those ubiquitous applications to change creator and file types and finder flags. Changeling 2.0 ReadMe is in TeachText format. Shareware - \$5.

ClockTools 2.2 f.sit: By -Bloom!-Software. Test the operation of the clock chip on any Mac.*Distribution Policy* and ClockTools READ ME are in text format.

Desktop Valet v3.0 f.sit: By Michael Love. Move, delete, shred or alias files that are dropped on it. Make aliases of it on your desktop and rename them according to the desired option. Desktop Valet docisin text format. For System 7.0 and later. Shareware - \$10.

DISK #16.12D - SU 12 System Utilities

UnStuffit.sea: By Raymond Lau and Aladdin Systems, Inc. Decompress (unstuff) archive files on this disk.

CPT2SIT™ 3.0.6 f.sit: By Leonard Rosenthol. Converts Compact Pro archives into StuffIt 3.0 archives which are smaller thereby giving you faster modem or network transfers and additional free disk space. CPT2SIT **Docs** is in text format. Requires System 6.0.4 or later.

Dark Side of the Mac 4.0 f.sit: By Tom Dowdy. An application type screen saver that does not 'patch' the operating system. Runs in the background and has an expandable set of 'blackouts' or 'Faders' to select from. DarkSide Doc is in MacWrite Proformat.: Darkside ReadMe is in text format. For System 7.0 and later.

Detective 1.4 f.sit: By Craig Dunham. Tracks what programs and DAs have been run on your Mac. Read Me is in text format. Shareware - \$10 for additional features.

Disk Charmer 2.0.7 f.sit: 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. Disk Charmer docs is in TeachText format. Shareware - \$10.

Enigma 2.1a f.sit: By Mike Watson. Implements a limited version of the NSA developed Data Encryption Standard (DES) which is the standard for commercial, unclassified, data protection. enigma 2.1 doc.txt and READ Me are in text format; enigma 2.1 doc.wrd is in Word format. Requires System 7.0 and later. Shareware - \$15 for full DES capability.

FileSharingToggle 1.0.4 f.sit: By Steve Forgacs. An easy way to switch file sharing on and off. FileSharingToggle Read Me is in TeachText format. For System 7 and

FinderFont 2.1.1 f.sit: By Raymond DiBugnara. Install a font about 10 to 20 percent narrower than the standard Geneva font to make Finder file labels narrower. Read Me is in text format. For System 7 and later.

FlameFile 1.38 f.sit: By Josh Goldfoot. Completely erases a file, folder or disk so it may not be read by anybody. Discourse on FlameFile 1.38 is in TeachText format. For System 7.0 and later.

DISK #16.13D - SU 13 System Utilities

UnStuffit.sea: By Raymond Lau and Aladdin Systems, Inc. Decompress (unstuff) archive files on this disk.

File Buddy 1.8 f.sit: 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. File Buddy 1.8 Read Me is in TeachText format. For System 7.0 and later. Shareware - \$15.

FileTyper 4.1 f.sit: By Daniel Azuma. Performs a multitude of functions. Changes document creator and file type and changes finder flags (invisible, locked, etc.). MakeAutoTyper 4.1 f includes a utility to create Auto Typers which change file types to those you specify. FileTyper Documentation includes word and text formats. Read Me First! and Typer 4.1 Installation Info are in TeachText format. System 6 and 7 versions. Shareware - \$10.

Font Clerk 5.0 f.sit: By Robert Chancellor. Analyze and report on the type of fonts (PostScript Type 1, TrueType, screen font) installed in your



system. Reports include printed font lists, font information and character sheets. Convert TrueType fonts from Macintosh to Windows format. FC5.0 Read Me is in double clickable DOCMaker application format. Shareware - \$20.

FontPrinter 3.0 f.sit: By Mark J. Anderson. Prints single line samples of all selected fonts installed in your system either directly or via Suitcase or Master Juggler. FontPrinter 3.0 Docs is in Word format. Shareware -\$7.50.

FreeSpace! 2.1.2 f.sit: By Hugo Diaz. Displays a bar along the bottom of your screen with the amount of free space of all mounted volumes. FreeSpace!-ReadMe is in TeachText format. For System 7.0 and later. Shareware - \$5.

Icon Family Maker 2.3 f.sit: By Scott E. Lasley. Create an entire icon family from a cicn, icl8 or PICT resource. Icon Family Maker Doc is in text format.

LaunchPad 2.0.2 f.sit: By J. S. Greenfield. Creates a drag and drop dock for any application without cluttering the desktop. LaunchPad™ 2.0 Docs is in double clickable Postcard application format. For System 7.0 and later. Shareware - \$10.

MacLibrarian 1.6.3 f.sit: By Epsilon Systems. A demo version of a fullfeatured disk cataloging and disk label printing program. MacLib Doc 1.6.1 Addendum is in Word format; the other documents are in text format. Shareware - \$30.

DISK #16.14D - SU 14 System Utilities

UnStuffit.sea: By Raymond Lau and Aladdin Systems, Inc. Decompress (unstuff) archive files on this disk.

Memory Mapper 1.1.1 f.sit: By R. Fronabarger. Draws a map of Macintosh memory usage which graphically shows the location of various system structures in RAM and where they are in relation to each other. Read Me is in Word format.

Moniker 2.0 f.sit: By Michael J. Simms. Allows you to create and place aliases via a drag and drop interface. Moniker 2.0 Read Me! is in TeachText format. For System 7.0 and later.

Monitor 1.5 f.sit: By Mark Alldritt. Presents information about your Macintosh including CPU utilization, memory usage and disk space availability. Read Me is in text format.

Monitor Switch 1.1 f.sit: By David Suggs. Allows you to switch resolutions on your multisync monitor without the hassle of changing the cable that is connected to the built-in video. Read Me and other documents are in text format. Shareware - \$20.

MyBattery 2.1.1 f.sit: By Jeremy Kezer. Provides Mac Portable, PowerBook and Duo users with battery voltage, current and estimated useful time and battery charger status. MyBattery Manual (Word 4) is as indicated; MyBattery registration form and ReadMe -MyBattery 2.1.1! are in text format. For System 6.0.8 and later. Shareware - \$10.

PowerLaunch II 1.0.1a f.sit: By Roby Sherman. An applications and document launcher that uses a palette to select and launch files. Information Files f includes text and Word format files. Demos f includes another of the author's works. Shareware - \$20.

Quick Initialization 4.1.2 f.sit: By -Bloom!- Software. A quick formatter with three options, providing varying degrees of confidence in proper initialization. Distribution Policy* and Q1 READ ME are in text format. Shareware - \$5.

QuickBack 1.8.5 f.sit: By Güenter Blaschek. A simple backup utility that creates Finder readable backup files. QuickBack.doc is in TeachText format.

Random StartUp 2.0 f.sit: By Jochen Pier. Randomly selects Startup Screens and Startup Sounds from the contents of folders placed in your System folder. Readme Random Startup2.0 is in text format.

Reset DTDBs 2.0 f.sit: By Brian Gaeke. Resets the Desktop Databases on each mounted volume. Eject all floppy disks and read-only disks and quit all running applications prior to use. Don't Read Me is in TeachText format.

ShowPages 1.4.1 f.sit: By Takahiro Sumiya. A small utility for downloading PostScript code and printing ASCII text file to your PS printer. Read me is in text format.

ShowShare 1.2.0 f.sit: By Robert Hess. Places an icon in the Menu Bar to indicate the status of File Sharing and Serving. ShowShare File **Documentation** is in double clickable DOCMaker application format.

SmartLaunch 3.0.7 f.sit: By Lohn L. Hayes. Quickly select and launch an application from a scrollable dialog window with the names of the first 400 applications on the boot volume. SmartLaunch Read Me is in TeachText format.

DISK #16.15D - SU 15 System Utilities

UnStuffit.sea: By Raymond Lau and Aladdin Systems, Inc. Decompress (unstuff) archive files on this disk.

Speedometer 3.21 f.sit: By Scott Berfield. A system information and performance testing program for the Macintosh family of computers. Various tests are available; the central one is designed to give a performance rating for the system as a whole. Intended to help you understand and tune the performance of your computer and to give you some basis for comparing different systems. Version History is in text format. Shareware **- \$30**.

Stuffit Expander™ 3.0.7 f.sit: By Leonard Rosenthol. Decompress any non-encrypted Macintosh archives compressed with Stuffit, Compact Pro or AppleLink packages. Also decodes files which have been encoded by BinHex 4.0 (or a compatible product). Stuffit Expander 3.0.7 Docs is in text format. Requires System 6.0.4 or later.

SwitchBack 2.0 f.sit: By Glendower Software. This utility synchronizes two folders, so that both folders have a copy of the most recent version of their files. SwitchBack User Guide is in ClarisWorks format; other documents are in text format. **Shareware – \$25**.

System 7 Pack 3.5 f.sit: By Adam Stein. Allows you to change, add, and delete Finder menu command key combinations. Permits you to change the rename delay built into System 7. Allows you to set the default Application used to open text and PICT documents when the creator applications are not available. You can



create new links between documents and applications; for example, MacWrite documents can be linked to open under MS-Word. System 7 Pack! 3.5 Order Form and System 7 Pack! Quick Start are in text format; System 7 Pack! Documentation is in double clickable DOCMaker format. For System 7.0 and later. Shareware - \$29.95.

TechTool™ 1.0.3.sit: By Robert Sanders and Jeff Baudin. Rebuild the Desktop or zap the PRAM (Parameter RAM) the easy way with this simple utility. Read the included Help dialog to see why you may want to do this.

TheBar 2.1 f.sit: By George Thomas Talbot. Displays the icons of all of the currently running programs in a small window. Double-clicking on an icon will switch you to that program's layer. TheBar 2.1 Docs is in text format. Shareware - \$10.

Tiny Saver 3.1 f.sit: By Chris Owen. A very tiny screen saver; it takes less than 13K of disk space and less than 18K of RAM when running. Includes 'sleep' and 'wake' corners. About Tiny Saver and other documentation are in text format. Shareware -\$2 to \$5.

Town Meeting 2.0 f.sit: By Adam Stein.
An application and server that permits
Mac users on a network to hold an
electronic town meeting. Town
Meeting Read Me is in MacWrite
format; other documents are in text
format. Shareware -\$49.95 per user.

TTConverter 1.3 f.sit: By Chris Reed. Convert TrueType fonts between Windows 3.1 and Macintosh formats. Works with either font suitcases or System 7 font files. For System 6 and later. TTConverter Docs and Registration Formare in text format. Shareware - \$10.

Type Resolve 2.0.1 f.sit: By James Thomson. Change the type and creator of documents using this drag and drop application. Type Resolve - Read Me! is in TeachText format. For System 7.0 and later.

On Line Bible

Online Bible requires a Macintosh with the capabilities of a Mac Plus or later, System software version 6.0 or higher and a hard disk with at least 4 megabytes free for the basic application. The actual amount of free hard disk space required depends on the number of versions and other addon modules installed. Although this program and all of the included modules are free, you must register some of the modules as specified in the program notes.

On Line Bible - Set 1

This six disk set includes the Online Bible application version 2.0.4 and the King James Version and Revised Standard Version text. The OLB application arechive requires 4,000K offree space. The KJV and RSV archive is split into 5 segments. In order to install it on your hard disk, you need at least 5,250K of free space.

On Line Bible - Set 2

This seven disk set adds the Greek and Hebrew Lexicons, Greek New Testament and Hebrew Old Testament. The Greek New Testament archive is split into 3 segments. In order to install it on your hard disk, you need at least 3,458K of free space. The Hebrew Old Testament archive is split into three segments. In order to install it on your hard disk, you need at least 2,948K of free space.

On Line Bible - Set 3

This six disk set adds the Cross References and Treasury of Scripture Knowledge Verse Notes. The Cross References archive requires at least 875K of free space on your hard disk. The Treasury of Scripture Knowledge archive is split into 5 segments. In order to install it on your hard disk, you need at least 6,037K of free space.

On Line Bible - Set 4

This five disk set adds Thompsons Chain References and Peoples New Testament Verse Notes. The Peoples New Testament Verse Notes archive is split into 2 segments. In order to install it on your hard disk, you need at least 2,425K of free space. The Thompsons Chain References archive is split into 3 segments and you need at least 4,465K of free space on your hard disk.

Mac Care & Feeding © 1993 Tom Witte

Tip 5

Question: What can I do about the problems my Syquest Removable HD keeps having?

Answer: Keep the platters in the box when not in the drive. Since they are exposed to the air and the head flies about 1 micron over the platter avoid 1 micron size dust (e.g. cigarette smoke is 1 micron).

If you have an older Syquest drive that is causing problems you can replace the internal mechanism for about \$200 directly from Syquest. Call Syquest tech support: 415-226-4000.

Tip 6

Question: When should I turn off my computer?

Answer: Computers, modems and hard drives wear little in use but suffer from thermal shock on power cycling. So once you turn it on, leave it on if you will use it again within the next dozen or so hours.

Monitors and laser printers use lots of electricity and wear in use. So turn off if not going to be used in a couple of hours.

* Shut down and unplug power and phone connections during lightening storms.

Macintosh Library Order Form

Pi Library	6.14B - PS 14	Miscellaneous	16.13D - SU 13	6.0.5 - 4 disks;
0.01 - C 01	6.15B - PS 15	10.01A - M 1	16.14D - SU 14	\$12
Files	6.16B - PS 16	10.02A - M 2	16.15D - SU 15	6.0.7 - 4 disks;
0.02 - C 02	6.17B - PS 17	10.0211 1112	16.16D - SU 16	\$12
	6.18B - PS 18	Paintings (MacPnt)	— 16.17D - SU 17	6.0.8 - 4 disks;
Sampler	- 6.19B - PS 19	5 disk set; \$15	16.18D - SU 18	\$12
0.03 - C 03	6.19B - PS 19	11.01 - P 1	16.19D - SU 19	7.0 - 8 disks; \$20
MemDir	Two Tyme Fonts	11.02 - P 2		
0.04 - C 04	TrueType Fonts	- 11.02 - F 2 11.03 - P 3	16.20D - SU 20	7.0.1 - 6 disks;
Catalog	7.01A -TT 1	- 11.03 - F 3 11.04 - P 4	16.21D - SU 21	\$20 (‡)
0.05 - C 05	7.02A -TT 2		16.22D - SU 22	Sys 7/7.0.1 Tune-
PS.Catalog	7.03A -TT 3	11.05 - P 5	16.23D - SU 23	Up \$3
	7.04A -TT 4	District 1 Co do	16.24D - SU 24	Sys 7.1 Sys
Anti-Virus Utilities	7.05A -TT 5	Digitized Sounds	16.25D - SU 25	Update 2.0.1 \$3
1.01G - AV 1	7.06A -TT 6	9 disk set; \$27	Action and the last of the last	(‡)
1.02J - AV 2	7.07A -TT 7	12.01B - S 1	Word Processing	Sys Utility
1.03J - AV 3	7.08A -TT 8	12.02B - S 2	Utils	Update 1.0.1 \$3
	7.09A -TT 9	12.03B - S 3	5 disk set; \$15	(‡)
Desk Accessories	7.10A -TT 10	12.04B - S 4	17.01B - WP 1	QuickTime 1.0 -
14 disk set; \$42	7.11A -TT 11	12.05B - S 5	17.02B - WP 2	2 disks; \$6
2.01D - DAs 1	7.12A -TT 12	12.06B - S 6	17.03B - WP 3	QuickTime 1.6 -
2.02D - DAs 2	7.13A -TT 13	12.07B - S 7	17.04B - WP 4	1 disk; \$3
2.03D - DAs 3	The state of the s	12.08B - S 8	17.05B - WP 5	Laser Wrtr 8.1.1
2.04D - DAs 4	Graphics	12.09B - S 9		- \$3 (‡)
2.05D - DAs 5	6 disk set; \$18		Adobe Screen Fonts	
2.06D - DAs 6	8.01 - G 1	Telecommunications	18.01A - AF 1	Laser Wrtr 8.0 -
2.07D - DAs 7	8.02 - G 2	13.01B - T 1	18.02A - AF 2	2 disks; \$6
2.08D - DAs 8	8.03 - G 3	13.02B - T 2	10.0211 - 111 2	Sys Network
2.09D - DAs 9	8.04 - G 4	13.03B - T 3	Fun & Games Series	Installer \$3
2.10D - DAs 10	8.05 - G 5	10.005 10	22.01 - F/G 1	TrueType - 2
2.11D - DAs 10		Programmer/Hacker	22.02 - F/G 2	disks; \$6
2.11D - DAS 11	8.06 - G 6	14.01A - PH 1	22.03 - F/G 3	Basic Con Set
	INITs & cdevs	14.02A - PH 2	22.04 - F/G 4	1.1.1 - 1 disk; \$3
2.13D - DAs 13	27 disk set; \$81		22.05 - F/G 5	Express Modem -
2.14D - DAs 14	9.01B - I/C 1	Miscellaneous Utils	22.06 - F/G 6	1 disk; \$3 (‡)
F Keys (Function		9 disk set; \$27		CD ROM Setup -
	9.02B - I/C 2	15.01B - MU 1	22.07 - F/G 7	1 disk; \$3
Keys)	9.03B - I/C 3	15.02B - MU 2	22.08 - F/G 8	Comm 1 (CTB) -
4.01A - FKs 1	9.04B - I/C 4	15.03B - MU 3	22.09 - F/G 9	1 disk; \$3
4.02A - FKs 2	9.05B - I/C 5	15.04B - MU 4	22.10 - F/G 10	LW PPDs - 3
ImagaWaitan Fanta	9.06B - I/C 6	15.05B - MU 5	Dishetania ValuDalas	disks; \$9
ImageWriter Fonts	9.07B - I/C 7	15.06B - MU 6	Disketeria ValuPaks	
5.01A - IW 1	9.08B - I/C 8	15.00B - MU 0	(†)	
5.02A - IW 2	9.09B - I/C 9		Best of Pi, 15	HyperCard Update
5.03A - IW 3	9.10B - I/C 10	15.08B - MU 8	disks; \$30	1.2.5 - 3 disk set;
5.04A - IW 4	9.11B - I/C 11	15.09B - MU 9	PS Fonts 1, 14	\$9
D (C D .	9.12B - I/C 12	Contam IIIIII	disks; \$30	2.0 - 5 disk set;
PostScript Fonts	9.13B - I/C 13	System Utilities	PS Fonts 2, 5	\$15
6.01B - PS 1	9.14B - I/C 14	25 disk set; \$75	disks; \$10	φιο
6.02B - PS 2	9.15B - I/C 15	16.01D - SU 1	TT Fonts 1, 9	(†) all files com-
6.03B - PS 3	9.16B - I/C 16	16.02D - SU 2	disks; \$20	
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6.05B - PS 5	9.18B - I/C 18	16.04D - SU 4	disks; \$10	LW 8.1.1 &
6.06B - PS 6	9.19B - I/C 19	16.05D - SU 5	Fun/Games 1, 10	PPDs)
6.07B - PS 7	9.20B - I/C 20	16.06D - SU 6	disks; \$25	(‡) on 1.44 Meg
6.08B - PS 8	9.22B - I/C 22	16.07D - SU 7	LW 8.1.1 & PPDs	diskette
6.09B - PS 9		16.08D - SU 8	- 4 disks; \$10	
6.10B - PS 10	9.23B - I/C 23	16.09D - SU 9	τ uions, ψιυ	
6.11B - PS 11	9.24B - I/C 24	16.10D - SU 10	System Software	
6.12B - PS 12	9.25B - I/C 25	16.11D - SU 11	6.0.3 - 4 disks;	
6.13B - PS 13	9.26B - I/C 26	16.12D - SU 12	\$12	
0.1010 - 1 10 10	9.27B - I/C 27		ΨΙΔ	

HyperCard Upgrade requires HyperCard proof of purchase; any of original disk, first page of manual, receipt or previous HyperCard Upgrade disk.

Mail this form with Disk Library Washington Apple F 7910 Woodmont Ave Bethesda, Maryland			Are you a member of Washington Apple Pi, All payments must be in U.S. funds drawn a Non-members add \$3.00 per disk to listed p	gainst U.S. banking i	
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+ postage \$1.00/disk, maximum \$5.00. Disk Catalogs		10	City	State	Zip Code
+ \$1.50 postage TOTAL AMOUNT DUE	\$4.50	\$	- Day Telephone	Evening Tele	phone



Apple Disk Library

by John B. Ruffatto

elcome to the Apple Disk Library section of the Journal, as you can see there is always room for improvement. In this issue there are now Disk Order Forms for the Apple II, Apple IIGS, and the Apple III. The librarians would like to receive comments pro and con to the new set-up versus the old listing format. Direct your comments to me via the Washington Apple Pi office and I will try to respond them.

I would also desire your comments in regard to Public Domain software you would like to see included in our Disk Libraries. Since we no longer publish the titles of the disks in the library, it is advisable to order the Disk Library Catalog Disks for the machine you are using.

Each month we will endeavor to provide information on new additions to the libraries or feature disks currently in the libraries. Some of the disks in the Apple Disk libraries contain SHAREWARE. If you use any Shareware program, please send the shareware fee to the author. By submitting the fee we encourage the author(s) to develop more software.

Special Note: All Apple II, Apple III, and Apple IIgs Catalog Disks may be exchanged for most current edition of the Disk Catalog series— free of charge - if exchanged at the office. For exchanges by mail, please be certain to include your old disks and \$1.00 per disk to cover shipping and handling. Thank you.

Best of Games-Disk 2

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The application GSHK can be found on the "Best of Telecommunications" Disk.

In the /Games.02/Games/ folder: BounceIt1.2.SHK:

Version 1.2 of this popular "pong" type game. Bounce It is based on a game that was included on the old DOS 3.3 system disk called Little Brick Out. The object is to score points by hitting the color boxes at the top of the screen with a ball. The mouse controls a paddle at the bottom of the screen which is used to bounce the ball towards the bricks.

There are nine different levels to complete. The top eight high scores are saved in the Hall of Fame. Supports stereo sound. This version fixes a bug found in the previous version which caused the computer to hang once in a while. By John R. Tierney. This game is Shareware, \$10 fee.

Cosmocade.SHK:

Welcome to the long awaited shareware game called Cosmocade. Cosmocade is the latest shareware game from Pangea Software, the makers of Xenocide, Senseless Violence, Orbizone, etc. Possibly the best work to come from Brian Greenstone and Dave Triplett.

Cosmocade v1.0 is 2 games in one (the 3rd game wasn't completed, so it wasnt released). The two games are Naxos v1.1, and Journey to Calibus v1.1. Naxos uses the mouse, and Calibus uses either the keyboard or the joystick. \$10 Shareware, and well worth it. Send it in. Calibus is a great game/similar to arcade Xevious. Great music, fast action and also comes with 2 editors which will allow you to create your own worlds (similar to Orbizone, but much, much better). If you would like a copy of the 7 page instruction manual, you must send a self addressed, stamped envelope to the above Pangea Software address.

FourInA.Row.SHK:

Four In A Row is a strategy game played on a vertical rack of eight columns. Each column can hold eight playing pieces. To play you drop one of your pieces in the column of your choice. The piece slides down to the lowest position in the column (the bottom, or to the top of other pieces in that column). If a column is full it cannot be used for new moves. The object of the game is to have get four of your pieces in a row before the computer does. There is an optional game called GiveAway. In GiveAway you try to force the computer to get four in a row BEFORE you do. This program is in the public domain. By Bill Fortenberry.

LunarLander.SHK:

Lunar Lander Game. Land a lunar module on the moon! You must use your booster rocket to fine tune the landingso as not to go hurtling into the craters. Great SHR graphics and a fantastic song accompanying the fast paced action. Very addicting! Press "q" to quit.

MageMaze.SHK:

MageMaze by David Hallwas. You desire to become the apprentice of Xevad (Zay-Vodd), the most powerful mage in all the land. But, as a test, you must first find your way out of the MageMaze. You will be magically transported to the very depths of a tremendous labyrinth with naught but a compass, a magic timepiece, and thy wits as thy aid.

The journey will not be easy for numerous magical devices have been conjured to hinder your progress: mysterious



beams of light, moving floors, mystical energy fields which send a compass into a mad frenzy, and illusions which make open paths appear as walls and walls appear as open paths.

Includes a Maze editing application which gives you the chance to change the Mage by designing and editing your own mazes. Each maze can exist of up to 10 levels, and each level is 15 by 15 squares in dimension. This game is Shareware, \$5 fee.

Othello.SHK:

Othello is played on an eight by eight board. The players pieces are disks that are black on one side and white on the other side. The object of the game is to have a majority of the disks on the board showing your color. Players move by placing a disk on the board on an empty square with their color facing up. The only requirement for a legal move is that it must outflank one or move of the other players disks. Outflanking means that a row of your opponents disks has a disk of your color on each end. The outflanked disks are flipped over so that your color shows. In this program the computer handles all the flipping

To make your move, point at the square you want with the mouse then press the mouse button. The computer will place your disk and flip any other disks that should be. The game is over when both players have run out of moves. This usually occurs when the board is full, but not always. Whoever has the most disks at this point wins. By Bill Fortenberry.

Quadronome.SHK:

Quadronome is a 3-D pseudo raquetball game which has three play modes: One player, Two player, and Two player practice. Player One controls his paddle with the mouse and player Two controls his paddle with the joystick. This is an exelent and chalenging tow player game. If you wish to quit Quadronome, press "q" from the selection screen. Written and Designed by Brian Greenstone. Artwork by Dave Triplett. Freeware.

ShufleMouse.SHK:

Shuffle Mouse version 1.0 by Mike Gooding is an Apple IIgs implementation of a two player shuffleboard game. It features a colorful, interactive, super-hires graphics game display, and digitized sound. Each player (green or red) is given 4 mousepucks per game. Players alternate launching each mousepuck so they slide into the scoring region of the game table. There are 3 games to a match. Scores are displayed automatically. ShareWare, \$10.

Best of Games—Disk 3

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The application GSHK can be found on the "Best of Telecommunications" Disk.

In the /Games.03/Games/ folder: **Elavators.SHK:**

Elavators version 1.0 is a simple IIgs game in which you try to evade nastys and get to the top of the screen. Good for youngsters. Use the right and the left arrow keys to move your man back and forth on the screen while avoiding the elavators that move up and down. Move your man to the ladder and climb up to the next level. There are 8 levels, each one having faster elavators! \$10 shareware. By Paul Wasson.

MahJongg.GS.SHK:

Mah Jongg by Chris Heckman and Scott Mathews. This is a shareware game for the GS, by Wedge Software. Its VERY addicting. This game is a clone of the game "Shanghai". The object of the game is to clear all the tiles from the screen. To clear the tiles, you must first find a pair of tiles that match identically. Only matched pairs can be removed from the playing field. Also, a tile must be considered as 'free' in order to be removed. Mah Jongg is shareware, \$5.00 fee.

Puzzle.GS.SHK:

Puz16 version 1.0 by R. M. Yost and Walter Torres-Hurt is a simulation of a 4 X 4 sliding tile puzzle. Although such simulations are common for the GS, this is the first one we've seen that supports competitive play. The object of the game is to solve the puzzle in the fewest possible moves. The game supports 4 variations (starting positions for the tiles). The tile's image are contained in an SHR picture which can be changed with any paint program. This game is FreeWare from MaBug.

Sensi.SHK:

Sensei is an addictive action game from Second Sight and Miami Software, along the lines of the long-since flooded market of martial arts games on Nintendo and in arcades.

start the game, it is highly recommended to insert the diskette in the drive and then to switch the computer off and back on after a short while. Once the diskette is booted, you will see in that order, and without additional entry, the "Toolbox" logo, the "Miami Software" logo and the introduction page just following the introduction music.

One or two player options. Use the games "Help" option to learn the different attack and defend positions that the karatekas can use during the game and how to get them with the joystick or the keyboard. Sensei features eight different backgrounds for fights in "Dojo", outside fights and in between scenes in which you will have to break bricks with the "Shuto". You can progress through the belts (white yellow - orange - green - blue - brown black) by scoring points during the "Kumite". High scores are saved on the diskette.

SpyHunterV2.SHK:

SpyHunter GS version 2 by Shane Richards is a IIgs version of Spy Hunter. The game is fairly straigh forward. There are 15 types of enemy car attempting to harm you, few will leave vou alone! Each level has a different set of baddies out to get you. Version 2 includes the song "Peter Gunn" as background music. This game is FreeWare.

Best of Games—Disk 4

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The application GSHK can be found on the "Best of Telecommunications" Disk.

In the /Games.04/Games/ folder:



Ant.Wars.SHK:

Instructions to Ant Wars v1.0 by Karl Bunker are available under its Apple menu. Your task in Ant Wars is to kill the enemy black ants while keeping your own red ants alive. Ther are four levels. When you kill all of the black ants in one level, you will progress to the next level. Shareware, \$10 fee.

BncnFernoII.SHK:

Bouncin' Ferno II by Dustin Mitchell is the winner in a contest held by the Shareware Solutions column of inCider/A+. The rules for the programming contest were simple: use the IIGS assembly language source code supplied by the FTA to complete their Bouncin' Ferno game. The criteria for the contests were direct: "Let the FTA guide you in spirit, and make our eyes bug out and make our toes tap". The guidelines suggested that all entries would be judged for artistry, creativity, playability, fun, music, sound and animation.

The original FTA version of Bouncin' Ferno is a Marble Madness type of game, with stunning animations, incredible graphics, sound effects and music. 3 levels, each containing 25 different rooms, were defined by the FTA. The goals of Bouncin' Ferno are twofold: try to roll over small objects the more objects rolled over, the higher the score - and try to advance to the next level. Some scoring objects are suspended high above the ground, while others are hidden under 3 dimensional ramps. As originally released, Bouncin' Ferno was a lot of fun, but it wasn't quite complete; it is now!

The game is now completely GS/OS compatible; it's even hard drive installable and if launched from The Finder it returns the player to the Finder upon quitting the game. True to the spirit of the FTA, it does not use the IIGS Toolbox.

As Bouncin' Ferno II begins, a stunning scanned NASA photograph of the earth is displayed, a wonderful sounding song is played, and a multi-colored animated credit screen is shown. Once the game starts, the player has the option to play the FTA's original levels, a new level supplied by Dustin, or any other level located in the Level folder found on disk.

In Bouncin' Ferno II, game play is essentially the same as in the FTA's

original version. Enhancements include a superimposed playing field on top of a dazzling fractal graphic, and a musical soundtrack that plays continuous NoiseTracker music in the background. For late night sessions, that music can be turned off. The player's score is displayed on screen at all times, and as energy is gained or lost, the IIGS border changes colors. Each level is now also linked to it's own High Score module.

Hearts.v1.0.SHK:

Hearts v1.0 by Bill Hamshire. You must try and get the least amount of points. The player with the least amount, when another player or players have reached the final score, wins the game. You get one point for every heart you take in. The Queen of Spades is the equivalent of 13 hearts. The author has tried to make the players intelligent and has implemented the many variations that he encountered over the years. Shareware, \$10 fee.

Solarian101.SHK:

Solarian GS v1.0.1 arcade shoot-em-up. Solarian is a fast-action arcade game not unlike Galaxian but with a number of tricks and traps that give it a unique and interesting character of its own. It started life as the first commercial-quality color Mac arcade shoot-em-up, written by Jonah Stich and controversially released as ShareWare. See the read.me file for details.

WiscRummy11.SHK:

Wisconsin Rummy v1.1 by Bill Hamshire. This game is a cross between Rummy Royale and Michigan Pool. The objective is to continue to collect chips and have the most accumulated when one player runs out or one player gets more than 250 chips. The player with the most at the end will receive all of the chips left on the board. A running total is kept for all games in the stats window. Shareware, \$10 fee.

Best of Games—Disk 5

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The

application GSHK can be found on the "Best of Telecommunications" Disk.

In the /Games.05/Games/ folder: DbSolitaire.SHK:

Solitaire v1.0 by Bill Hamshire. This is the classic version of Solitaire called Klondike. Includes Vegas Style Play/ Scoring and Double Solitaire options. Shareware, \$10 fee.

DuelTris.SHK:

DuelTris v1.0s by DreamWorld is a two player head-to-head tetris-like game, which features incredible graphics and sound. It is not DuoTris, which was part of the GS<>IRC demo. DuelTris features 2 player simultaneous play, the DuelLINK (tm), and six different special pieces. When DuelLINK is turned on, whenever one player makes 2-4 lines, they are automatically passed to the other player, and vice versa. The six special pieces have a variety of functions, gun, fill gun, bomb, anvil, inverse other person's controls, etc.

DuelTris has some of the best 16 and 256 color art I've seen, drawn by David Seah and has great music composed by James Brookes. DuelTris is shareware, \$15/\$20 fee. This version of DuelTris is fully functional, except you cannot save preferences or high scores. The registered version will allow you to save both. DuelTris requires an Apple IIGS w/ 1 meg of ram, System 5.04 or above, and 1 3.5" disk drive. Speakers and a stereo card are optional, but a nice addition.

All of Best of Games— Disk 5 will be listed in the February issue.

(See Disketeria form on base of page 78.)

Apple II Disk Library Order Form



	EAMN-18 #5	MISC-04	Graphics	4.0.2 - \$1.50
5-1/4" DISKS:	EAMN-19 #5	MISC-05	NWPS-22	(#2)DOS 3.3 System
	EAMN-20 #5	MISC-06	Graphics	Master - \$1.50
System Software			Graphics	
APSD-01 #1	EAMN-21 #5	MISC-07	NWPS-23	(#3) Apple Disk
APSD-02 #2	EAMN-22 #5	MISC-08	Graphics	Catalog (A) (DOS
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1 D: 1 C + 1 -	EAMN-24 #5	MISC-10	Graphics	\$3.00
Apple Disk Catalog	8345	MISC-11	NWPS-25	(#4)Apple Disk
(DOS 3.3)	Education	MISC-12	Graphics	Catalog (A) (ProDos)
3 disk set #3	20 disk set =\$30.00	MISC-13	NWPS-26	- 4 disk set - \$4.00
Apple Disk Catalog	EDUC-01	MISC-14	Graphics	(#5)Requires
(PRODOS)	EDUC-02	MISC-15	NWPS-27	EAMN-03
4 disk set #4	EDUC-03	MISC-16	Graphics	
4 disk set #4	EDUC-04	MISC-17	NWPS-28	
	EDUC-05	MISC-18	Graphics	3-1/2" DISKS:
Appleworks	EDUC-06	MISC-19	NWPS-29	
APWK-01	EDUC-07	MISC-20	Borders	System Disk
APWK-02	EDUC-08	MISC-21		
			NWPS-30	2APS-01 #6
Communications	EDUC-09	MISC-22	Borders	
10 disk set =\$15.00	EDUC-10	MISC-23	NWPS-31	Apple Disk
	EDUC-11	MISC-24	Fonts	Catalog
COMM-01	EDUC-12	MISC-25		2ADC-01A #7
COMM-02	EDUC-13		Pascal	2ADC-02A #7
COMM-03	EDUC-14	New Print Shop	8 disk set \$12.00	21100-0211 #1
COMM-04				
COMM-05	EDUC-15	31 disk set =\$46.50	PASC-01	Appleworks
COMM-06	EDUC-16	NWPS-01	PASC-02	2AWK-01
COMM-07	EDUC-17	Graphics	PASC-03	
	EDUC-18	NWPS-02	PASC-04	Communications
COMM-08	EDUC-19	Graphics	PASC-05	2COM-01
COMM-09	EDUC-20	NWPS-03	PASC-06	2COM-02
COMM-10A	EBCC-20	Graphics		2COM-02 2COM-03
	Daniel	NWPS-04	PASC-07	2COM-03
CP/M	Forth		PASC-08	
	FRTH-01	(Franhice		Education
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CP/M-01		NWPS-05		
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CP/M-01 CP/M-02 CP/M-03	FRTH-02 FRTH-03	NWPS-05 Graphics NWPS-06	PILT-01	2EDU-01 Membership
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	FRTH-02 FRTH-03 Games	NWPS-05 GraphicsNWPS-06 GraphicsNWPS-07 GraphicsNWPS-08 GraphicsNWPS-09 GraphicsNWPS-10 GraphicsNWPS-11 GraphicsNWPS-12 GraphicsNWPS-12 GraphicsNWPS-13	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-10	2EDU-01 Membership Directory 2MRD-01 Utilities 2UTL-01 2UTL-02A (#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00
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	FRTH-02 FRTH-03 Games	NWPS-05 GraphicsNWPS-06 GraphicsNWPS-07 GraphicsNWPS-08 GraphicsNWPS-09 GraphicsNWPS-10 GraphicsNWPS-11 GraphicsNWPS-12 GraphicsNWPS-12 GraphicsNWPS-14 GraphicsNWPS-14 GraphicsNWPS-15	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	2EDU-01 Membership Directory 2MRD-01 Utilities 2UTL-01 2UTL-02A (#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Share- ware. Please send a remittance to the
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Apple IIGS Disk Library Order Form

	GSDM-26	GSFT-13	GSGM-15	GSGX-14
3-1/2 DISKS:	GSDM-27	GSFT-14	GSGM-16	GSGX-15
	GSDM-28	GSFT-15	GSGM-17A	— GSGX-16
System Software		GSFT-16		2 10 7 9 7 9 7 9 7 9 7 9 1 8 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1
GSAS-01 (*1)	GSDM-29		GSGM-18A	GSGX-17
GSAS-02 (*2)	GSDM-30	GSFT-17	GSGM-19A	GSGX-18
GSAS-03 (*3)	GSDM-31	GSFT-18	GSGM-20	GSGX-19
GSAS-04 (*4)	GSDM-32	GSFT-19	GSGM-21	GSGX-20
GDAD-04 (4)	GSDM-33	GSFT-20	GSGM-22	GSGX-21B
C	GSDM-34	GSFT-21	GSGM-23A	GSGX-22A
Communications		GSFT-22	GSGM-24B	GSGX-23
6 disk set = \$18	Developer	GSFT-23	GSGM-25B	GSGX-24
GSCM-01D	18 disk set = \$54	GSFT-24	GSGM-26A	GSGX-25
GSCM-02C	GSDV-01	GSFT-25	GSGM-27	— GSGX-26
GSCM-03B	GSDV-02	GSFT-26	GSGM-28	GSGX-27
GSCM-04B	GSDV-03	GSFT-27	GSGM-29	GSGX-28
GSCM-05A		GBF 1-21	— GSGM-29 GSGM-30	
GSCM-06	GSDV-04	Florida Directoria		GSGX-29
The Control of the Co	GSDV-05	Fonts - TrueType	GSGM-31	GSGX-30
DAs, CDevs, FExts,	GSDV-06	30 disk set = \$90	GSGM-32	GSGX-31A
Dyrs, and Inits	GSDV-07	GSTT-01	GSGM-33	GSGX-32A
16 disk set = \$48	GSDV-08	GSTT-02	GSGM-34	GSGX-33
	GSDV-09	GSTT-03	GSGM-35A	GSGX-34
GSDA-01B	GSDV-10	GSTT-04	GSGM-36	GSGX-35
GSDA-02C	GSDV-11	GSTT-05	GSGM-37A	GSGX-36
GSDA-03D	GSDV-12	GSTT-06	GSGM-38	GSGX-37
GSDA-04C	GSDV-13	GSTT-07	GSGM-39	GSGX-38
GSDA-05B	GSDV-14	GSTT-08	GSGM-40	GSGX-39
GSDA-06B	GSDV-14 GSDV-15	GSTT-09	GSGM-41	GSGX-40
GSDA-07B	— GSDV-16	GSTT-10	GSGM-42A	GSGX-41
GSDA-08B		GSTT-11	GSGM-42A GSGM-43	GSGX-41
GSDA-09A	GSDV-17	GST1-11		
GSDA-10A	GSDV-18	GSTT-12	GSGM-44	GSGX-43
GSDA-11A		GSTT-13	GSGM-45	GSGX-44
GSDA-12A	Disk Catalog	GSTT-14	GSGM-46	GSGX-45
	3 disk set = \$6	GSTT-15	GSGM-47	GSGX-46
GSDA-13A	GSDC-01I	GSTT-16	GSGM-48	GSGX-47
GSDA-14A		GSTT-16 GSTT-17	GSGM-48 GSGM-49	GSGX-47 GSGX-48
GSDA-14A GSDA-15B	GSDC-01I	GSTT-16 GSTT-17 GSTT-18	GSGM-48	GSGX-47
GSDA-14A	GSDC-01I GSDC-02I	GSTT-16 GSTT-17	GSGM-48 GSGM-49	GSGX-47 GSGX-48
GSDA-14A GSDA-15B	GSDC-01I GSDC-02I GSDC-03I	GSTT-16 GSTT-17 GSTT-18 GSTT-19	GSGM-48 GSGM-49 GSGM-50 GSGM-51	GSGX-47 GSGX-48 GSGX-49 GSGX-50
GSDA-14A GSDA-15B GSDA-16A	GSDC-01I GSDC-02I GSDC-03I Education	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51
GSDA-14A GSDA-15B GSDA-16A	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52 GSGM-53	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52
GSDA-14A GSDA-15B GSDA-16A 34 disk set = \$34	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52 GSGM-53 GSGM-54	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52 GSGM-53 GSGM-54 GSGM-55	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54
GSDA-14A GSDA-15B GSDA-16A 34 disk set = \$34	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5)	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-55	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-54
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5)	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-55	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5)	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-55 GSGM-56 GSGM-57 GSGM-58	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-55
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5)	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-55 GSGX-56 GSGX-57
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5)	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-26	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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-04 GSDM-05	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5)	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-26 GSTT-27	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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-55 GSGX-56 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-03 GSDM-04 GSDM-05 GSDM-06	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5)	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-26	GSGM-48 GSGM-49 GSGM-50 GSGM-51 GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-04 GSDM-05 GSDM-06 GSDM-07	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-26 GSTT-27 GSTT-27 GSTT-28 GSTT-29 GSTT-30	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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-29	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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-29 GSTT-30 Games 63 disk set =	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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-09 GSDM-10	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-29	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 Graphics 64 disk set =	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-10	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-09 GSED-10	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-29 GSTT-30 Games 63 disk set =	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 Graphics 64 disk set =	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-10 GSDM-11 GSDM-12	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-29 GSTT-30 Games 63 disk set =	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-63 GSGM-63 GSGM-63 GSGM-63	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-10 GSDM-11 GSDM-12 GSDM-13A	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-27 GSTT-28 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B	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-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 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-12 GSDM-13A GSDM-14	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-27 GSTT-28 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03	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	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 HyperCard GSGX-64 GSHC-01
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 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-11 GSDM-12 GSDM-12 GSDM-13A GSDM-14 GSDM-15	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-27 GSTT-28 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04	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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-52 GSGX-53 GSGX-53 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-01
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 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-12 GSDM-13A GSDM-14	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-27 GSTT-28 GSTT-30 Games GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05	GSGM-48 GSGM-49 GSGM-50 GSGM-51 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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-02 GSHC-03
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 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-11 GSDM-12 GSDM-12 GSDM-13A GSDM-14 GSDM-15	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-27 GSTT-28 GSTT-30 Games GSTT-30 Games GSGM-01B GSGM-02B GSGM-03 GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-06A	GSGM-48 GSGM-49 GSGM-50 GSGM-51 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 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard GSGX-64 HyperCard GSGX-64 GSHC-01 GSHC-02 GSHC-03 GSHC-04
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-11 GSDM-11 GSDM-12 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-16	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-22 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-27 GSTT-28 GSTT-30 Games63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05	GSGM-48 GSGM-49 GSGM-50 GSGM-51 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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard GSGX-64 HyperCard GSGX-64 GSGX-64
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 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-10 GSDM-10 GSDM-10 GSDM-11 GSDM-12 GSDM-12 GSDM-14 GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-17A GSDM-18	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games63 disk set = \$189 GSGM-01B GSGM-02B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08	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-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-64 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard GSGX-64 HyperCard GSGX-64 GSHC-01 GSHC-02 GSHC-03 GSHC-04
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 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-12 GSDM-14 GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-16 GSDM-17A GSDM-18 GSDM-19	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-06	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08 GSGM-08	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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05 GSHC-06
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 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-10 GSDM-10 GSDM-11 GSDM-12 GSDM-14 GSDM-15 GSDM-15 GSDM-15 GSDM-16 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-19 GSDM-20A	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-07 GSFT-07	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08 GSGM-09A GSGM-09A GSGM-10	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-63	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05 GSHC-06 HyperStudio
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-09 GSDM-09 GSDM-10 GSDM-10 GSDM-11 GSDM-12 GSDM-12 GSDM-14 GSDM-14 GSDM-15 GSDM-15 GSDM-15 GSDM-16 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-20A GSDM-21	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-07A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-05 GSFT-06 GSFT-07 GSFT-08 GSFT-08	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-07A GSGM-08 GSGM-09A GSGM-10 GSGM-11	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	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10)
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-10 GSDM-11 GSDM-12 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-19 GSDM-20A GSDM-21 GSDM-21 GSDM-22	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-07A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-04 GSFT-05 GSFT-06 GSFT-07 GSFT-08 GSFT-09 GSFT-09	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-07A GSGM-08 GSGM-09A GSGM-09A GSGM-10 GSGM-11 GSGM-12A	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 GRAPHICS 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-06 GSGX-07A GSGX-08A GSGX-09B GSGX-10A GSGX-11	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10) = \$10
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-10 GSDM-11 GSDM-12 GSDM-12 GSDM-14 GSDM-15 GSDM-15 GSDM-14 GSDM-15 GSDM-16 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-19 GSDM-20A GSDM-21 GSDM-22 GSDM-23	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-05 GSFT-06 GSFT-07 GSFT-08 GSFT-09 GSFT-10 GSFT-10	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08 GSGM-09A GSGM-10 GSGM-10 GSGM-10 GSGM-11 GSGM-12A GSGM-13	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-63 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-04 GSGX-05 GSGX-05 GSGX-07 GSGX-07 GSGX-08 GSGX-09B GSGX-10A GSGX-11 GSGX-12	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-04 GSHC-06 HyperStudio Demo Ver. (1-10) = \$10 GSHS-01
GSDA-14A GSDA-15B GSDA-16A Demos 34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-10 GSDM-11 GSDM-12 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-19 GSDM-20A GSDM-21 GSDM-21 GSDM-22	GSDC-01I GSDC-02I GSDC-03I Education 10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-05A (*5) GSED-07A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-04 GSFT-05 GSFT-06 GSFT-07 GSFT-08 GSFT-09 GSFT-09	GSTT-16 GSTT-17 GSTT-18 GSTT-19 GSTT-20 GSTT-21 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-07A GSGM-08 GSGM-09A GSGM-09A GSGM-10 GSGM-11 GSGM-12A	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 GRAPHICS 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-06 GSGX-07A GSGX-08A GSGX-09B GSGX-10A GSGX-11	GSGX-47 GSGX-48 GSGX-49 GSGX-50 GSGX-51 GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10) = \$10

Apple IIGS Disk Library Order Form



GSHS-03	GSHS-66	GSMU-30A	GSSN-37	Best of Games
GSHS-04	GSHS-67	GSMU-31A	GSSN-38	5 disk set =
GSHS-05	GSHS-68	GSMU-32A	GSSN-39	\$12.50
GSHS-06	GSHS-69	GSMU-33A	_	
GSHS-07	GSHS-70	GSMU-34A	SOUNDS - CDEV	Best of Graphics
GSHS-08	GSHS-71	GSMU-35A	rSOUNDS	2 disk set = \$5.00
GSHS-09	GSHS-72	GSMU-36A	20 Disk Set = \$60	
GSHS-10	GSHS-73	GSMU-37A	GSSN-17A	Best of Icons
	GSHS-74	GSMU-38A	GSSN-18	(Finder)
66 disk set	GSHS-75	GSMU-39A	GSSN-19	1 disk set = 2.50
$\overline{(11-76)} = 198	GSHS-76	GSMU-40A	GSSN-20	
GSHS-11		GSMU-41A	GSSN-21	Best of Music
GSHS-12	Icons	GSMU-42	GSSN-22	4 disk set =
GSHS-13	12 disk set = \$36	GSMU-43A	GSSN-23	\$10.00
GSHS-14	GSIC-01B	GSMU-44A	GSSN-24	
GSHS-15	GSIC-02B	GSMU-45	GSSN-25	Best of Sounds
GSHS-16	GSIC-03B	GSMU-46	GSSN-26	2 disk set = \$5.00
GSHS-17	GSIC-04B	GSMU-47	GSSN-27	
GSHS-18	GSIC-05B	GSMU-48	GSSN-28	Best of True Type
GSHS-19	GSIC-06B	GSMU-49	GSSN-29	Fonts
GSHS-20	GSIC-07B	GSMU-50	GSSN-30	5 disk set =
GSHS-21A	GSIC-08A	GSMU-51	GSSN-31	\$12.50
GSHS-22	GSIC-09A	GSMU-52A	GSSN-32	
GSHS-23	GSIC-10A	GSMU-53A	GSSN-33	Best of Utilities
GSHS-24	GSIC-11A	GSMU-54A	GSSN-34	$_{}$ 2 disk set = \$5.00
GSHS-25	GSIC-12A	GSMU-55A	GSSN-35	m - D - 1 (1) - 1 - 1
GSHS-26		GSMU-56A	GSSN-40	The Best of the Apple
GSHS-27	Membership	GSMU-57A	*******	IIGs may be purchased
GSHS-28	Directory	GSMU-58A	Utilities	as a 25 disk set or as
GSHS-29	GSMD-01	GSMU-59	15 disk set = \$45	individual sets as listed
GSHS-30	100	GSMU-60	GSUT-01C	above.
GSHS-31	Miscellaneous	GSMU-61	GSUT-02	(*1) G
GSHS-32	GSMS-01A	GSMU-62	GSUT-03B	(*1) System 5.0.4 - 2
GSHS-33	44.00	GSMU-63A	GSUT-04A	Disk Set = \$6.00
— GSHS-34	Music	GSMU-64	GSUT-05C	(*2) Hyper Mover v1.1
GSHS-35	${600}$ 75 disk set =	GSMU-65	GSUT-06A	- 2 Disk Set = \$6.00
GSHS-36	\$225	GSMU-66	GSUT-07B GSUT-08D	(*3) GS Bug & Debug Tools $v1.6 = 3.00
GSHS-37	— GSMU-01B	GSMU-67	GSUT-09A	(*4) System $6.0.1 - 6$
GSHS-38	GSMU-02	GSMU-68 GSMU-69	GSUT-10A	Disk Set = $$18.00$
GSHS-39 GSHS-40	GSMU-03 GSMU-04	GSMU-70	GSUT-11B	(*5) Astronomer - 7
GSHS-40 GSHS-41	GSMU-04 GSMU-05	GSMU-71	GSUT-11B	disk set (GSED-01 to
GSHS-42	GSMU-06	GSMU-72	GSUT-13A	GSED-07) \$21.00
GSHS-42 GSHS-43	GSMU-07	GSMU-73	GSUT-14	GSED-01) \$21.00
GSHS-44	GSMU-08	GSMU-74	GSUT-15B	Note: Some disks
GSHS-45	GSMU-09	GSMU-75	GDC1-10B	may contain Share-
GSHS-46	GSMU-10	GDMC-10	Best of The Apple	ware. Please send the
GSHS-47	GSMU-11	Sounds	IIGS	requested remittance
GSHS-48	GSMU-12	20 disk set = \$60	25 disk set =	to the author if you use
GSHS-49	GSMU-13B	GSSN-01A	\$56.25	the program. Most of
GSHS-50	GSMU-14	GSSN-02A	(save \$6.25 - normally	the programs on these
GSHS-51	GSMU-15	GSSN-03	\$62.50)	library disks may
GSHS-52	GSMU-16A	GSSN-04		require a IIGS with a
GSHS-53	GSMU-17	GSSN-05	Best of	minimum of 1.25 megs
GSHS-54	GSMU-18A	GSSN-06	Communications	of memory.
GSHS-55	GSMU-19A	GSSN-07	1 disk set = \$2.50	
GSHS-56	GSMU-20A	GSSN-08	A Treatment of Course	
GSHS-57	GSMU-21A	GSSN-09	Best of DA's, Cdevs,	
GSHS-58	GSMU-22	GSSN-10	FExts,	
GSHS-59	GSMU-23A	GSSN-11	Dvrs, & Inits	
GSHS-60	GSMU-24A	GSSN-12	1 disk set = \$2.50	
GSHS-61	GSMU-25A	GSSN-13		
GSHS-62	GSMU-26A	GSSN-14	Best of Bit-Mapped	1. 10 M. R. 12 P. 13
GSHS-63	GSMU-27A	GSSN-15	Fonts	
GSHS-64	GSMU-28A	GSSN-16	2 disk set = \$5.00	
GSHS-65	GSMU-29A	GSSN-36		



Apple III Disk Library Order Form

5-1/4 DISKS:	Combin	word taller a	2-	31NF-12	3PCL-05	3UTL-12
Accounting	Graphic	disk set = \$64.50	_	3INF-13 3INF-14	3PCL-06 3PCL-07	3UTL-13 3UTL-14
3 disk set =\$4.50		RX-01	_	3INF-15	= 3PCL-08	
3ACT-01A		RX-02	-	3INF-16	3PCL-09	
3ACT-02		RX-03		3INF-17	ODOL 10	
3ACT-03		RX-04	_	3INF-18		3UTL-18
Control of the State of State		RX-05	_	3INF-19	3PCL-12	
3 Easy Pieces Templates		RX-06	_	3INF-20	3PCL-13	3UTL-20
15 disk set = \$22.50		RX-07		3INF-21	3PCL-14	3UTL-21
3AWZ-01		RX-08		3INF-22	3PCL-15	3UTL-22
3AWZ-02		RX-09	-	3INF-24	ODOL 10	3UTL-23
3AWZ-03		RX-10		3INF-25		
3AWZ-04		RX-11		3INF-26	3PCL-18	3UTL-25A
3AWZ-05		RX-12		3INF-27	3PCL-19	3UTL-26
3AWZ-06		RX-13		3INF-28	3PCL-20	3UTL-27
3AWZ-07		RX-14		3INF-29		3UTL-28
3AWZ-08	30	RX-15		3INF-30	Repairs	3UTL-29
3AWZ-09		RX-16		3INF-31	11 disk set = \$16.50	3UTL-30
3AWZ-10		RX-17		3INF-32	3REP-01	3UTL-31
3AWZ-11	30	RX-18		3INF-33	3REP-02	3UTL-32
3AWZ-12	30	RX-19		3INF-34	3REP-03	3UTL-33
3AWZ-13	30	RX-20		3INF-35	3REP-04	3UTL-34
3AWZ-14	30	RX-21	<u> </u>	3INF-36	3REP-05	3UTL-35
3AWZ-15	30	RX-22		3INF-37	3REP-06	3UTL-36
	30	RX-23		3INF-38	3REP-07	3UTL-37
Business Basic	30	RX-24	Men	bership Directory	3REP-08	3UTL-38
9 disk set = \$13.50		RX-25	_	3MRD-01	3REP-09	3UTL-39
3BSB-01	30	RX-26	_	3MRD-02	3REP-10	3UTL-40
3BSB-02	30	RX-27			3REP-11	3UTL-41
3BSB-03	30	RX-28	Misc	ellaneous		3UTL-42
3BSB-04		RX-29A		20 disk set = \$30	TeleCommunications	3UTL-43
3BSB-05	30	RX-30	_	3MSC-01	12 disk set = \$18.00	3UTL-44
3BSB-06	30	RX-31		3MSC-02	3TEL-01	3UTL-45
3BSB-07		RX-32		3MSC-03	3TEL-02	3UTL-46
3BSB-08	30	RX-33		3MSC-04	3TEL-03	3UTL-47
3BSB-09A		RX-34	_	3MSC-05	3TEL-04	3UTL-48
		RX-35		3MSC-06	3TEL-05	3UTL-49
Disk Catalog (ASCII		RX-36		3MSC-07	3TEL-06	3UTL-50
TEXT)		RX-37		3MSC-08	3TEL-07	3UTL-51
3 disk set = \$3 or \$1		RX-38	_	3MSC-09	3TEL-08	3UTL-52
per disk		RX-39	_	3MSC-10	3TEL-09	Anna Santa San
3CAT-01A - Disk 1		RX-40	_	3MSC-11	3TEL-10	Word Processing
3CAT-02A - Disk 2		RX-41	_	3MSC-12	3TEL-11	7 disk set = \$10.50
3CAT-03A - Disk 3		RX-42		3MSC-13	3TEL-12	3WDP-01B
	30	RX-43	_	3MSC-14		3WDP-02
Disk Catalog (3 EZPC's)		74		3MSC-15	Utilities	3WDP-03
2 disk set = \$2 or \$1	Informa		_	3MSC-16	52 disk set = \$78	3WDP-04
per disk		disk set = \$54	_	3MSC-17	3UTL-01	3WDP-05
3CAT-04A - Disk 1		NF-02D	_	3MSC-18	3UTL-02	3WDP-06
3CAT-05A - Disk 2		NF-03	_	3MSC-19A	3UTL-03	3WDP-07
C		NF-04	_	3MSC-20	3UTL-04	N-4 C Ji-l
Games		NF-05	Dane	.1	3UTL-05	Note: Some disks may
5 disk set = \$7.50		NF-06	Pasc		3UTL-06 3UTL-07	contain Shareware.
3GAM-01 3GAM-02		NF-07 NF-08		20 disk set = \$30 3PCL-01		Please remit to the author of the program the
3GAM-03		NF-09	_	3PCL-01		requested amount if you
3GAM-04		NF-10	_	3PCL-03	3UTL-10	use that program.
3GAM-05		NF-11	_	3PCL-04	3UTL-11	use that program.
3GAM-03	51	NF-11	-	31 CL-04	50115-11	
			-			
Mail this form with yo	ur check t	0.	1/21/2019	THE RESERVE OF THE RE		
Disketeria	ar criccii c	•	Are you	a member of Washington	Apple Pi, Ltd? Y/N If Yes	. Member Number
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Disks	Price	@ Extended	Name		400000000000000000000000000000000000000	in Philippine
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5 or more @	\$3.50	S	DUA HUI	, rapar tinent, butte	, and	The second secon
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5.25" Singles	\$(abov	e) \$	Street A	ddress		
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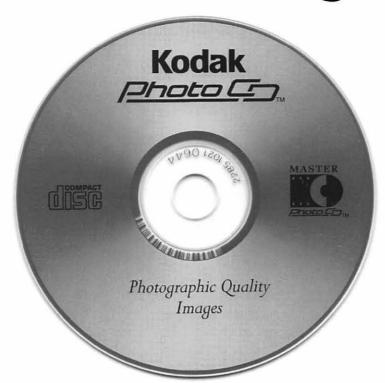
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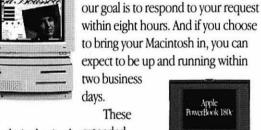
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