August 1993

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The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI

Volume 15, Number 8

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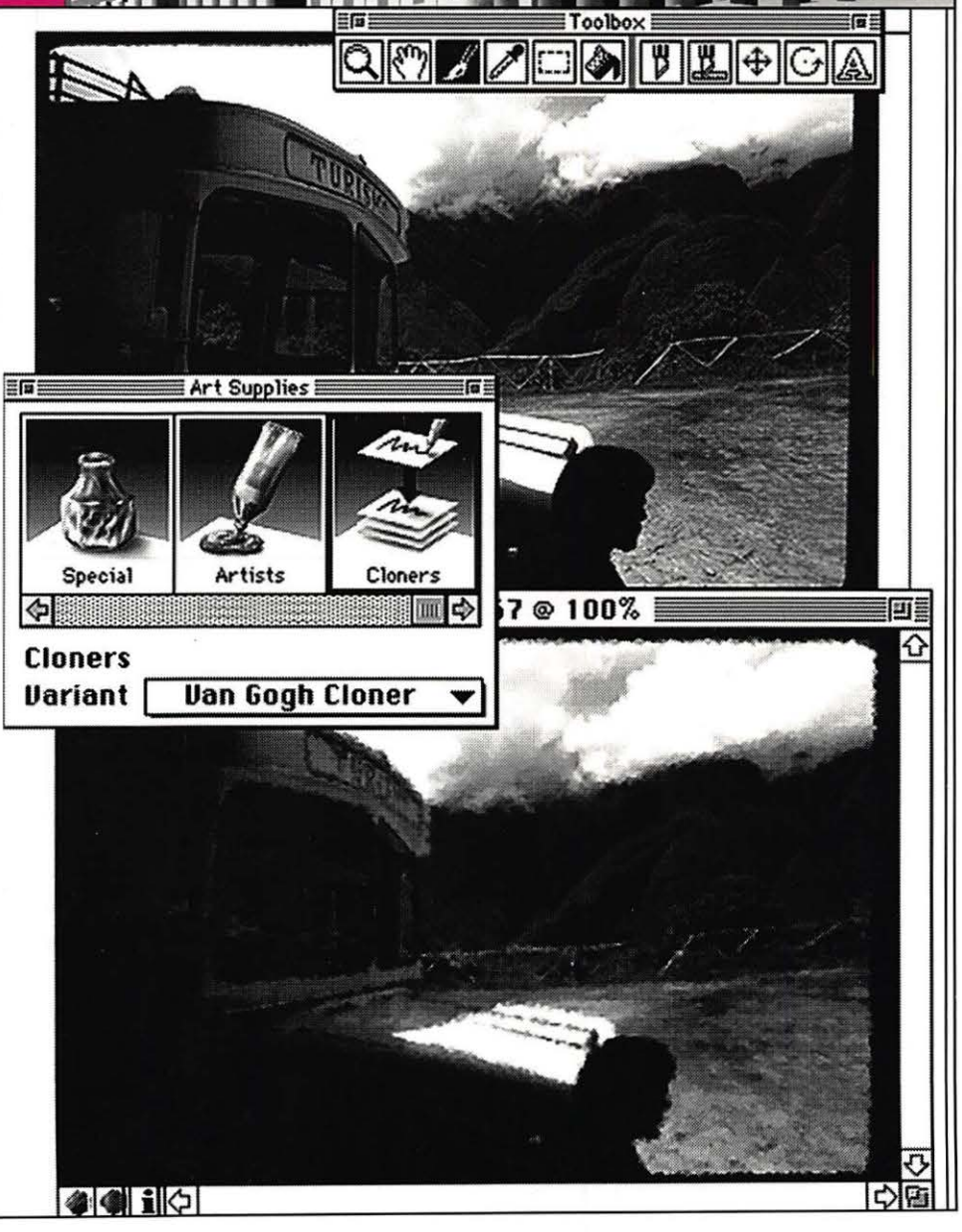
A Photographic Renaissance 27

Using ShrinkIt 59



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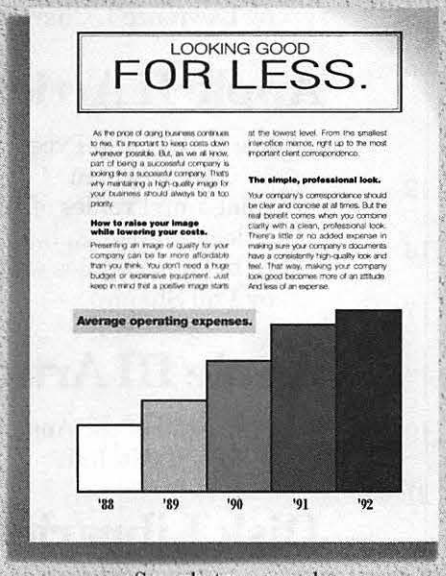

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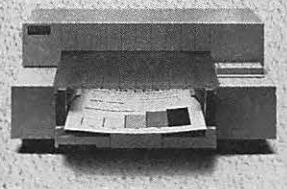

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Table of Contents

Volume 15 ..... August 1993 ..... Number 8

Club News

WAP Hotline 39, 32
WAP Calendar 40, 41
Index to Advertisers 66
Classified Advertisements 79
WAP Membership Form 80

SIG's and Slices

Stock SIG 8
by Morris Pelham
EdSIG 8
by Phil Shapiro
Women's SIG 14
by Nancy Seferian

General Interest

In the Pi Pan 5
by Debbie Hoyt
Toe Magic 10
by Scott Barber
"Sponsored" Communication 12
by Phil Shapiro
Random Observations on Software 13
by Joseph A. Hasson
Less Time On-Line 17
by Paul Campbell
BoD Summary 18
by Dana J. Schwartz
Beginning HyperSpeak: The C's, Part 2 19
from the Jargon File
Thanks to All 21
by Tom Witte
Looking out from the Inside–A Poem 66
by Paul Campbell

Macintosh Articles

August Macintosh Tutorials 22
Tutorial Registration Form 23
Graphic Tips 24
by Carol O'Connor/ Transparent Objects
Voyage to the Electronic Darkroom 27
by Dennis Dimick
Audioshop/Software Review 35
by Susan Kayser
Yearn2Learn/Software Review 43
by Ray Settle
Quicken 3.0 and System 7.0 44
by Ralph Begleiter
The Banker's Secret/Software Review 45
by David Oliver
Building Your Wealth/ Software Review 47
by Chris Kagy
New Files on the TCS 51
by Lawrence I. Charters

Apple II Articles

Apple II Byts and Pyces 54
by Gary Hayman
GEnieLamp Profiles of Warren Williams and Cathleen Merritt 57
How to Unpack Files with ShrinkIt 3.4 59
by Phil Shapiro

Apple III Articles

On the Trail of the Apple III 63
by David Ottalini

Disk Libraries

Macintosh Disk Library 67
by Dave Weikert
Macintosh Disk Order Form 71
Apple Disk Library 72
by John Ruffatto
Apple Disk Order Forms 75-78

Advertising in the Journal

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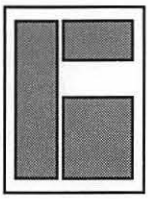

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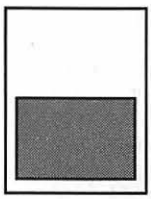

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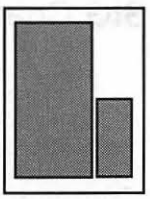

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The Washington Apple Pi Journal is published monthly. The ad copy deadlines and ad space reservations are listed below for your convenience.

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

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This issue of the Washington Apple Pi Journal was created on a Mac IIci, proofed on a newgen TurboPS/880p printer, and produced by electronic typesetting at The Publishers Service Bureau.

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

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

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Apple II, IIe, & IIGS

Apple Disk Libraries

Apple III (SARA)

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October .....August 16
Editors' submissions
September .....July 23
October .....August 24
Ad space reservations
September .....July 19
October .....August 18
Camera-ready ad copy
September .....July 27
October .....August 26

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In the Pi Pan...

by Debbie Hoyt

We're back on schedule again. Fortunately there was no General Meeting in June due to the Garage Sale, so the delay in receiving your Journals should not have caused too much difficulty–I hope.

For those of you who got the July Journal and saw the ad for the NOVA Educators' Mac and Apple II User Group ClarisWorks demonstration and who have been cursing my family to the twelth generation for getting the Journal to you so late that you found out about it only after it was over, I can only say that I genuinely am sorry. The delay was unexpected and unavoidable. I would, however, like to extend my apologies to Pat Fauquet, chair of the NOVA Educators' SIG, because she worked very hard to plan and arrange that demonstration for you.

Another bit of sad news to pass along: The Washington Apple Pi lost another fine member last week, Martin Milrod. Marty may be known to many of you through his work on the Macintosh Hotline, through his efforts in connection with the Macintosh Disketeria, or because of his assistance in arranging for WAP to go to MacExpo in Boston over the years. The Pi and many of its members benefitted from Marty's knowledge and volunteer efforts. Those of us who work on the Journal would like to take this opportunity to extend our sympathy to his friends and family.

On to happier topics. During the weekend of June 26, 27, the Washington Apple Pi Journal was honored at a computer users group conference (IG6) sponsored by InfoWorld and Lotus, Inc., held in New York. The conference awarded honors to user group publications in varying categories determined by the publication length. Our Journal won an award in the over 32 page category. This isn't too shabby when you consider that the competition was national and multi-platform (i.e., Macintosh, Apple II and PCs).

Goodies to look for in this month's Journal include Dennis Dimick's "Voyage to the Electronic Darkroom: PhotoCD and a Photographic Renaissance," Carol O'Connor's Graphic Tips, and Phil Shapiro's guide to using ShrinkIt for the Apple IIe. Enjoy.

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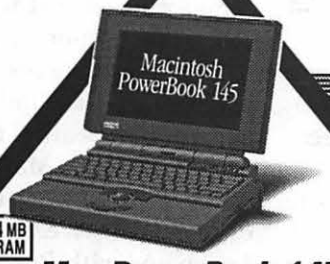

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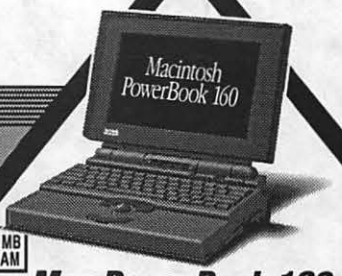

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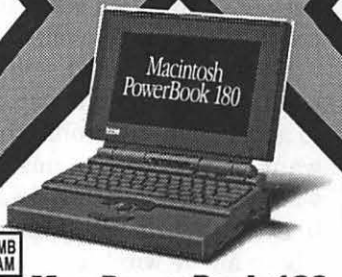

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StockSIG

by Morris Pelham

In the year or so that I have been running StockSIG, the most frequently asked question has been, "What do you do here?"

I have struggled some with the answer to that. We want to make a profit. We want to avoid losses. We want to buy low and sell high. We want to do the smart things. We want to avoid doing the dumb things. We want to survive our mistakes. We want to minimize our risks. We want to exercise financial common sense. Above all we want to make our own informed decisions, not give our assets over to someone else and hope.

Business Week, in the May 31, 1993 issue titled their cover story "You Can Do It! How Individual Investors Beat Stock Market Pros At Their Own Game." Their article says "By and large, professional investors do a mediocre job of stockpicking. That, along with their expenses and fees, causes them to lag well behind the market ... A $10,000 investment ten years ago in the average equity mutual fund would have grown at an annual rate of 11.9% while the Standard & Poor's 500-stock index grew 15.6%." I brought my copy to our June meeting and passed it around. Then I suggested that what *BW* describes is what we are trying to do here and others generally agreed. So, now you know. You can read all about us if you subscribe or at your library if you don't.

Just in case you don't see the article, here is my short summary: First, it takes time to succeed. Most successful people have been doing this for a few years. Second, most people who succeed begin by making a mistake or two. This is called experience. Third, most people who succeed do their own research, make their own decisions, and don't hand their money over to someone else to manage. Fourth, most people who succeed find some forum where they can talk with others who are pursuing similar goals.

Speaking of success, Mark Pankin again passed around the latest results of our Beating the Dow strategy. At the end of May the portfolio is up 18.1%, after being up 16.4% at the end of April. We agree with Peter Lynch and with *Business Week* that we can do it. The DJIA (Dow Jones Industrial Average) is up from 3301 to 3527 during the same time period, or 6.9%.

The Dow did hit another new high after our May meeting. On May 20 it hit a new all time record high close of 3,554.83. At our June meeting I asked the usual question, "Will the Dow hit a new higher high in 1993?" and got the usual answer, some said yes and some said no. But none of us has sold our Beating the Dow stocks yet.

StockSIG continues to look for experts, particularly for those experienced with Managing your Money, Quicken, and Wealthbuilder. All you have to do is show up and speak up. As always, we welcome both novices and experts at our meetings. We meet in the WAP office on the second Thursday of each month at 7:30.

EdSIG

by Phil Shapiro

A lively, effervescent group of parents and teachers showed up for the June education special interest group (EdSIG) meeting. We huddled around the club's Apple IIGS to examine and discuss the best educational software for elementary and middle school students.

We spent the first part of the meeting looking at how you can de-

sign puzzles with the editor of the FreeWare "Shove It GS" game. Peter Brinkley, the creator of Shove It GS (a derivative of the "Sokoban" series of games), created a very easy to use graphical-user-interface editor. You can actually create your own puzzles with just a few well-placed mouse-clicks. Modifying existing puzzles is even easier.

Naturally, you do have to be careful that the puzzles you design are solvable. But with that caveat in mind, you can let your imagination run wild in designing your own Shove It puzzles.

Shove It can be downloaded from many information services (such as GEnie or America Online), and can be found on many local bulletin boards, too. A copy may be available also in WAP's Disketeria library. The puzzle fits neatly on a 3.5 inch floppy disk, with lots of room left over for saving your own puzzle creations.

Following our look at Shove It, we booted up one of Scholastic's Microzine disks. The particular disk we were looking at had a very nicely done reading adventure titled: "Quest for the Pole." This reading adventure gets students to travel on a trip from northern Canada to the North Pole. Along the way students learn about Artic geography and biology.

It takes students about an hour to an hour and a half to complete the entire reading adventure. This software would be suitable for eager readers in grades three and up. Some advanced first and second graders might enjoy it, too.

Back issues of Scholastic's Microzine subscription disks can be ordered from Scholastic Software, at 1-800-541-5513. ("Quest for the Pole" is included on Microzine number 28.) Each Microzine disk costs about $30, plus postage. The "Quest for the Pole" disk runs on any 64K Apple II, including the older Apple II+ computers. The more recent Microzines run on any 128K Apple II, including the 128K Apple IIe, IIc, IIGS, and IIc+.

Another Microzine reading adventure that I found to be top notch is "Towards the North Star," where students take on the role of being a "conductor" on the Underground Railroad. Scholastic has some outstanding writers creating these "Twistaplot" adventures.

Following that, middle-school teachers Jennie Huffman and Jan Mosso shared with us their experiences using Apple IIe's with their special-needs students. Jennie explained how she has derived great use from an Apple II simulation program titled: "Zoyon Patrol." (Published by MECC, I believe.) This simulation is sufficiently complex as to get students involved for lengthy periods of time. But the program also gives the type of feedback that helps engage students with shorter attention spans.

After the discussion on Zoyon Patrol, EdSIG stalwart Bill Wydro told us of his plans to attend the prestigious Governor's Academy for Math and Science Teachers, at Towson State University. Bill was chosen as one of 120 select science teachers in the state of Maryland. These teachers will receive a stipend to attend a month long summer training session to expose them to the newest ideas in teaching science.

Our discussion turned away from computers, then, when EdSIG loyalist Howard Heydt told us about the field trip to an electric generator plant he recently organized for his middle school students. Howard told us that the trip itself worked out fairly well, although the slide-show presentation at the electric plant itself was too complex for the knowledge level of middle school students. The electric company, PEPCO, might have done better to cater to the interests and knowledge-level of these younger science students.

The actual tour of the plant was as impressive as it was intimaditing. Ear-protectors needed to be worn in the turbine rooms, as the tour guide tried to explain the basics of thermodynamics above the din of mega-sized steam turbines.

We ended up the meeting with Bill Wydro telling us about the Renewable Energy Resource Center being planned for downtown District of Columbia. Co-sponsored by the US Dept. of Energy, and the University of the District of Columbia, this "resource center" will be part museum, part library, part learning center. Bill explained that this center may well be ready to open in early 1994. The center will be located in the building formerly occupied by the Carnegie Library.

An interesting facet of this learning center is that local science teachers were invited to take part in the planning stages of the center. It will be interesting to see if the center makes use of computers to engage students' interest in this subject.

Finally, as I mentioned in last month's EdSIG minutes, this will sadly be the last EdSIG meeting that I'll be leading. The time demands of the new national publication I'll be starting, Helium Balloons, have forced me to cut back on some of my volunteer activities.

I do hope that the current EdSIG members will continue on with the momentum they've built up in the past few years. While I'll no longer be able to lead the meetings, I do very much look forward to dropping in on future EdSIG meetings when time permits.

As usual, I'm happy to discuss educational software concerns with other members of the Pi. I can usually be reached evenings at my home/office: (202) 686-5465.

Toe Magic

by Scott Barber

On the first Friday of December, Margaret Comer called and asked if I'd like to go with her to see a special student at a local high school. When I asked why, she explained that the student was disabled and was working with a computer interface that allowed her to type and draw pictures with her IIGS. Her teacher recently joined Apple Squires with the idea in mind to expand the software, on a limited school budget, available to the student.

Two key words in that statement convinced me to go: "interface" and "IIGS." Even though I had made my decision, I probed on.

I asked her what made this situation special because I've seen instructional interfaces before. That's when she told me what her interface was: her right foot. Gears began turning.

That night, I sat down trying to contemplate what kind of interface could access all the keys on a keyboard with only an on/off switch. To be honest, what I envisioned was exactly what I got; even though neither I, nor Margaret, nor even the student knew it when we arrived the next day.

Margaret met me at my house, and on the way to the school she briefed me on what details she did know. The girl has cerebral palsy. She is unable to speak verbally, is confined to a wheelchair, and communicates with a switch under her right foot. The switch operates her wheelchair and her built-in communicator. The school had recently purchased an interface compatible with her foot switch, and she had been hooked up for about two weeks.

When we arrived, the student was drawing a picture using Platinum Paint. Her foot switch has a long cord with a 1/4" miniature phone jack on the end. This then plugs into a device called an AFC (Adaptive Firmware Card) which translates her switching into characters and commands for the IIGS.

The AFC is actually two different cards. Evidently, the makers of the AFC couldn't access everything they needed from just one card. Internally, the AFC takes up slot 6 and 7. The two cards are interconnected using several wires and three sets of ribbon cable. A fourth ribbon cable is run out the back of the machine to a 'remote interface.' This interface has only a connective box that has an on/off switch and two phone jacks for the student's interface. The reason the box is remote is to prevent plugging and unplugging the interface directly into the card, where damage could be done. The remote box is glued firmly to the right side of the IIGS case using foam tape.

The AFC cards allow the user extreme control over the computer. The run both internally AND externally to the computer if necessary, and then allow the user to turn power on with another click of the switch.

The AFC menu is a simple interface. Various letters of the alphabet are highlighted in groups of five for one second, then the next group, then the next until the highlight "moves" off the screen. If the switch is again pressed while the highlight is on a group, that group's characters are then highlighted one by one. When the switch is again hit, the highlighted character has been chosen, or a reserved menu will pop up in the main menu's place.

The menu can also access "joystick/mouse" mode. This menu flashes the following characters on the screen in a repeating cycle: ^ (up), > (right), V (down), < (left), C (click mouse), B (click mouse and hold), X (exit from mouse menu). With these commands, the arrow can be moved anywhere on the screen, applications can be

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double-clicked, access to NDA's can be made, and files, believe it or not, can be copied from icon to icon. Everything that can be done with a mouse is available to the user.

Because of the nature of this interaction, one article cannot adequately describe what has transpired with the student. In the next article, I'll go into the special software features of the AFC card and begin describing how the student first interacted with the AFC.

P.S.–Because of the student's special handicap, word processing is still a time consuming task. Knowing other User Groups read this newsletter, and knowing companies like Quality Computers and Apple read it too, I'm asking for help.

If someone knows of a 'word bank,' a program that allows a user to use macros to type words and phrases quickly using few keystrokes, that works with AppleWorks 3.0, AppleWorks GS, Teach, or any other commonly used word processor, I'm very interested. The student can now type seven words a minute with her interface, and hopes to type around 10 wpm as she gets used to the more streamlined configuration constructed for her. I've done some work with HyperStudio, but my success has been limited.

One of the best guidebooks on special needs computing for Apple II and Macintosh computers is Apple Computer Resources in Special Education and Rehabilitation. This book was developed by Apple's Office of Special Education Programs, in association with the Trace Research and Development Center, University of Wisconsin-Madison. The book is edited and published by DLM Teaching Resources. Allen, Tex.: DLM Teaching Resources, 1989.

Title: Apple Computer Resources in Special Education and Rehabilitation.

Availability:
Montgomery County Special Needs Library (SNL)
Davis Public Library
6400 Democracy Blvd.
Bethesda, MD 20817
Phone: (301) 530-4411
(301) 530-5719 (TDD)
Call No.: 371.39445 A648 1989

More Information: Other information resources for special needs computer users is the noted publication "Closing the Gap," P.O. Box 68, Henderson, MN 56044. Phone: (612) 248-3810 (voice), (612) 248-3810 (fax). Subscriptions to this bi-monthly cost $26 in the United States, $41 in Canada and Mexico. The magazine's annual "Resource Directory" issue sells for $14.95.

Locally, in the Washington Apple Pi user group, the resource person for special needs computing is Jay Thal. Jay can be reached at his home: (202) 244-3649. Jay has had extensive first hand experience in this field, and is generously willing to point others in the direction of further information resources in special needs computing.

See sidebar for further information.

[Scott Barber, the author of this article, can be reached in care of the Apple Squires of the Ozarks, P.O. Box 3986, Ozark, MO, 65808-3986. User group contact: Doug Kahler, (417) 833-4362.]

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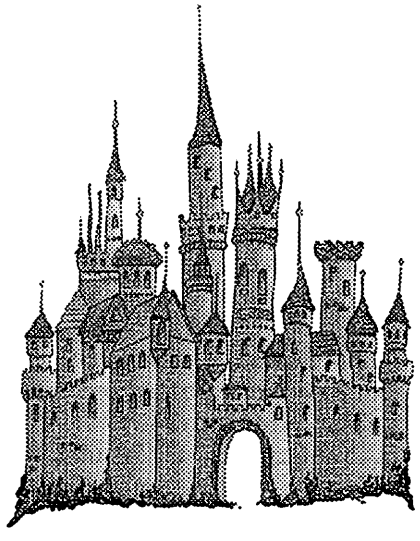

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Thinking About Online Communications

A New Concept: "Sponsored" Communication

by Phil Shapiro

Suppose you wanted to set up your own local or national information service. One of your first tasks would be to find ways of attracting and nurturing participation in the service. To attract and encourage a central core of subscribers to your service, there is an incentive you can offer that is almost as potent as cash: Online time.

For example, you could "sponsor" a core group of individuals who'd volunteer to contribute and participate on the service at a level that is above and beyond the average level of participation on the service. People would hear that a "community" had formed on the service. And your prospects of attracting new subscribers would rise sharply.

It's interesting to note the "social dynamics" angle of online communities. Not long ago I had a chance to make an online visit to a statewide education network whose access is toll-free from any part of the state. At first glance you'd think that a statewide toll-free information service for educators would act like honey to bees.

But few educators have the time or temperament to spend a lot of effort with online communications. Teacher compensation levels are such that it just does not make a lot of sense to invest much extra-curricular time in exploring professional growth opportunities on a state-sponsored information network.

It especially does not pay to invest time learning and using an information network with just a few dozen regular callers. To make any information service attractive to new callers, you need to have an existing base of several hundred active and enthusiastic callers. And about the only way of building such a "social base" is to offer online perks to the most active contributors to the community.

The exact nature of these perks can take on many different forms. The most common perk that's offered is extended online time and/or free downloading privileges. A perk that is not that frequently offered or considered, but can sometimes be a powerful motivator, is giving active contributors greater creative freedom in molding the information service to their own particular vision.

Human beings are creative animals by nature. By giving people a measure of creative control over the way in which an information service is built, you can reward those persons by recognizing and celebrating their creative talents. The granting of that creative freedom, itself, can amount to a significant form of "sponsored communication."

The most interesting dynamic that occurs in such situations is that an information service can create value to new subscribers by giving perks to older subscribers. A conglomerate of older subscribers can offer technical support for the service that could never possibly be financially feasible otherwise. And in some instances, existing subscribers can help evangelize the information service in a fashion far beyond the dreams of the service's own marketing department.

To understand how sponsored communication can be most effective, you need look no farther than the existing body of psychological knowledge regarding effective incentive schemes. The way to create the greatest possible incentive for sponsored communication is to create a "ladder" of perks, where contributors can be offered incremental perks for each incremental new level of contribution they make.

Just as an army officer can take pride in progressing through the incremental levels of the army hierarchy, so too can a sponsored contributor take pride in his or her progress up the "active contributors" ladder of an information service. The psychology of human motivation that applies in both situations is closely analogous.

Incremental incentive schemes have been proven to work in school settings, in business settings, and in military setting. By specifying attainable goals for each step up an "incentive ladder," you can create an environment where people just naturally think about how they can move up to the next rung of the ladder. And in the case of an information service, by organizing and publicizing such a sponsorship scheme, you can dangle an inviting carrot to those most inclined to create knowledge-value on the service.

Sponsored communication, where perks and incentives are offered to the most active members of an online community, costs an information service very little. Yet the beneficial effects of such incentive schemes extends out in many directions.

So it seems likely that in the months ahead you'll be seeing

greater and greater instances of "sponsored" or "subsidized" communication on local and national information services. Once the concept itself gains strong root, the information services will start attracting some of the brightest minds in the nation. And the benefits that accrue will extend out in many directions: To the information services, to the sponsored contributors, and to the "third party beneficiaries" in the picture.

[The author takes a keen interest in the social dynamics of online communications. He can be reached on GEnie at: p.shapiro1; on America Online at: pshapiro]

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Random Observations on Computer Software

by Joseph A. Hasson

The world is in a convulsion over computers which have made inroads into almost all aspects of our lives. The medical profession has been experiencing radical changes, based on new technologies, many made possible by the semiconductor chip and the computers into which they are embedded. Libraries have abolished old fashioned card catalogues and one can in an instant accrue a lengthy bibliography on almost any subject. For instance, Montgomery County libraries employ a computerized system that is similar to that installed in the Library at the University of Maryland. The Library of Congress is computerized and has installed its Scorpio, Mums and other systems. It would require a separate article to describe fully the Library of Congress systems. Schools are being saturated with computers, relied on to teach reading, arithmetic, science, etc. Our financial markets–domestic and international–have become sensitized by the computer which transmits information with nanosecond speed and in massive volumes among far-flung markets, more closely integrated than ever before. This rapid flow of information and decisions based on it can lead to great gains and losses that transcend those based on the real flows of goods and services internationally. The temptation to abuse the technology can be considerable in anticipation of great gains.

Computers have played a role on the battle field. Certainly during the Desert Storm conflict with "smart" guided missiles, the operation of tanks and the firing of their guns as well as in artillery barrages where rapid calculations are required to adjust for over- or under-firing.

The Chairman of the Federal Reserve Board, in numerous appearances before Congressional Committees where he has discussed the State of the Economy, has intimated that the path of this recovery from the recent recession has been affected by technological changes in American industry. Those changes, he has stated, have affected the rate at which displaced workers have been reemployed as the recovery has occurred. Not only has there been substitution of capital for labor. Many workers, unemployed, lack the new technological skills that new processes of produc-

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tion require. Some portion of their obsolescence can be attributed to the computer. The consequences have been that reemployment levels during this recovery have been much lower than in earlier recoveries. In many instances, there has been computerization of operations earlier performed by hired hands using older equipment. For instance, in a May 6, 1993 speech before a Conference at the Federal Reserve Bank of Chicago, Board Chairman Allan Greenspan stated the following: "Modern dynamic, competitive economies are characterized by rapid obsolescence of products and services displaced by ever more innovative ways of doing things." In other testimony, he has made specific references to the economic impact of the computer.

In a recent newletter, a researcher at the Federal Reserve Bank of San Francisco concludes as follows: "Our current statistics are undermeasuring the output effects from the application of computing power in many industries. Productivity growth tied to computers may be significantly understated. Productivity gains in growing service industries (may be) much higher than current measures suggest."

The wide-ranging implications of the Computer Revolution may be difficult to comprehend at this time. It is not incorrect, one feels, to draw parallels with previous technological changes that have occurred. One thinks, for instance, of the impact of the railroads as they spanned the continent, or of the telephone and telegraph, the electric light, the automobile, etc. These, too, were revolutionary changes that had ramifications that impacted on the economy, our politics and society, in general. There were shifts not only in income distributions but also on the distribution of power and position as new social groups rose while others declined. But a full assessment along these lines of the impact of the Computer Revolution is far beyond the narrow scope of this essay. Still, there is merit as we meet, talk and exchange information about technical specifics of computers to have an awareness of the significant changes we are participating in. In a relatively short period of time, we have witnessed how the ways of functioning in our society have been altered. One intuitively feels that we are still in the lower ranges of the changes the future holds for us. It may sound a bit corny but is it not relevant to ask whether we shall control the technology or whether it shall control us? Shall it contribute to creating new, unpalatable divisions in a fissured society or will it be extended to all–even those currently disadvantaged? These are broad but wholly significant issues to posit.

Computers per se are hardware, inanimate and harmless. Software "breathes life" into them and provides them with "a soul." Only 15 years ago, mainframes dominated the demand for and supply of computers. One wrote programs which were transferred onto punch cards, turned in to central places. At those stations, one waited a time until the fruits of one's labors were returned to the customer. Seldom did a program sail through smoothly without a hitch the first time. The development of software actually started according to some accounts, in the 1950's but most was customized to meet particular user's needs. "Off the shelf" software was not available, The independent software industry, however, began on a small scale in the 1960's. Its growth has been remarkable so that by 1990, there were thousands of independent software developers and a $35 billion industry had evolved. Economically, barriers to entry were low. Capital requirements small. Overhead costs were minimal and could be satisfied in one's basement. A machine or two could be easily combined with the requisite human capital–programming skills. It became "a cottage industry."

The full-dimensions of the software industry are difficult to define since it is characterized by many facets. Most people who study the industry are agreed that minimally its components are comprised of the following: (1) software and services which includes processing and professional services; (2) application and systems software, packaged or customized; (3) packaged software for the personal computer and (6) software from "independent" developers. These categories may not be mutually exclusive and data for each "sector" is difficult to come by. Official government statistics do not adequately reflect the scope of the industry. Most data seem to originate from private sources in the industry itself. In 1989, estimated revenues from the sale of software in North America were in excess of $14.2 billion among the top ten firms. In 1990, their revenues were under $17.0 billion–an increase of slightly less than 17 percent in one year. In the United States, close to 80 percent of software that entered into the North American market was produced by IBM (59 percent), Microsoft (6 percent) Computer Associates (9 percent) and Digital Computers (6 percent). Included in these totals of the top ten firms, were sales of personal computer software of $2.8 billion in 1990.. The largest companies in this market were Microsoft, Lotus, Word Perfect and Ashton Tate. They controlled 75 percent of the market.

By any measurement, the U.S. is the world's largest producer and consumer of computer software. The figures will vary from year to year In 1989 the computer programming and software industry of the United States comprised 1.2 percent of the Nation's GNP and generated about $62 billion

in total revenues, over $12 billion of which was from foreign sales. Worldwide sales of packaged software in 1990 by US firms was close to $25 billion. These figures vary up or down slightly, depending on their source. It is clear that the US has been dominant in world markets for software, with close to 60 percent of total sales. The next largest share of sales has gone to Japan with about 14 percent of the market, followed by France, Germany, and Britain which, combined, had slightly more than 20 percent of the world market. However, its predominant position is being challenged. Its rate of growth has fallen from about 50 percent per annum to close to 15 percent in 1989. Many American companies still derive up to 50 percent of their revenues from foreign markets. Along with the motion picture industry, the computer industry is a major earner of foreign exchange and helps buoy the U.S. balance of payments. The preeminence of American companies is not unrelated to a huge domestic market. This has several important consequences. First, there are important economies of scale associated with a large market. Second, that domestic market makes it possible to support a wide variety of software which meets a broad spectrum of needs. Third, there is a continuous flow of new products, many of which tap new sources of demand. It is not incorrect to posit that new products create new demand where it did not exist. Brand recognition when combined with a large loyal following leads to what is known technically as "monopolistic competition."

The term implies the coexistence of monopolistic and competitive elements side by side in a market. A producer is mindful of the presence of substitutes for his product but seeks to develop a distinctiveness through advertising and other brand recognition techniques. He seeks to "corner" a segment of the market. There are some, for instance, who will not wear anything but Arrow shirts, or London Fog overcoats. Women have their favorite designer clothes, or fashion-breaking accessory producers; etc. This segmenting of markets by brand is a common practice that cuts across product lines. Similarly, Americans have become attached to products with foreign labels which may be higher priced than domestic goods. There may be a status factor involved. Changes in consumer preferences may be a slow process as American auto producers are discovering. It occurs in the computer area as well. IBM has its recognizable logo. Apple and Macintosh have theirs. These trademarks help create "niche" markets which are based in varying degrees on price and non-price considerations.

Because of these conditions, computer product producers, including software, are very sensitive in protecting their intellectual property rights. The degree to which this protection occurs can affect profitability. It provides a strong incentive to seek strong intellectual property right protection, both domestically and internationally. The illegal copying of software results in great losses to rights' owners and can impede their willingness to invest and create new products or to enter into new markets. This is one reason the United States Government has been urging the adoption of increased intellectual property right protection under the Uruguay Round and why it has entered into extensive bilateral negotiations with individual countries. It has sought to induce foreign countries to strengthen their laws and to develop proper enforcement mechanisms once those laws are established.

Estimates of piracy of computer software are tenuous and highly variable. There are numerous specific instances where piracy has occurred but the true magnitude of losses sustained are conjectural. For instance, it has been estimated that one of every two copies of computer software used by corporations in the United States is illegal and in violation of copyright laws. In dollar terms this implies losses of $1.5 to more than $2.2 billion per annum. In 1988, it was estimated that the United States software industry lost close to $600 million in 12 problem countries. By 1990, the number of problem countries had increased to 22 and dollar losses had increased to $2.7 billion. Other estimates placed losses to U.S. firms in excess of $10 billion Microsoft, the software firm, has collected information that indicated counterfeiting of MS/Dos programs had displaced more than $1.5 billion in legitimate sales. In January 1990, a Federal grand jury awarded Microsoft and Everex $1.4 million in damages in a suit against eight defendants, accused of counterfeiting Microsoft software.

Full restitution of losses because of piracy is difficult or impossible to obtain. Most highly industrialized countries have both an interest in strong intellectual property rights and the means of enforcing laws. They have the police powers required to track down infractors and the courts in which violators can be prosecuted. Less developed countries lack incentives either to strengthen their laws or to enforce them once adopted. The self-interests of these two groups of countries collide. The developed countries want strengthened laws and free trade for their products. LDC's want easy access to technologies required to modernize their business-economic activities. Industrialized countries want self-enforcing international agreements with high minimum standards and long periods of protection: 20 years for patents; 50 years for copyrights; and 10 years for semi-conductor chips. They

maintain that strong intellectual protection laws will facilitate technology transfers to the less developed countries.

In the United States, software industry groups have come together to deal with piracy and counterfeiting. Piracy occurs at two levels: "retail piracy" which implies that software is copied for purposes of resale; "end-user piracy" which implies the output is for end-use but not for resale. Domestic organizations, set up by the software industry, include the Business Software Alliance (BSA), ADAPSO (Computer Software and Services Industry Assn.), SPA (Software Publishing Association). BSA brings litigation on behalf of its members against infringers of software copyrights and works at developing a higher level of public awareness on questions of intellectual property rights. BSA hs become an international policing arm for the software industry.

SPA deals with domestic piracy. It files lawsuits on behalf of its members. It has filed as many as two suits per week. It estimates that for every legal software package sold in the United States, there is one unauthorized copy in use. It estimates that the overall piracy rate is high enough to inflict such heavy damage on the industry that it would dampen expenditures for research and development. SPA has succeeded in getting highly favorable out-of-court settlements for its clients. In one instance, in November, 1990, SPA conducted a raid with a U.S. Marshall and found 80 unauthorized copies of Word Perfect and Lotus 1-2-3. In February, 1991, it reached a $200,000 settlement out of court with a construction engineering firm. This firm agreed to destroy unauthorized copies of Lotus and Word Perfect. These are but a few instances of its successes in dealing with piracy.

B.S.A. has developed a formula for estimating the level of unauthorized copying of PC software in foreign countries. The formula is based on ratios of legitimate application software packages and hardware units shipped to foreign countries compared with U.S. ratios. In the U.S., it is estimated that 1.66 software packages were shipped for every hardware unit shipped in 1989. The ratio is estimated at 1.3 for shipments to Italy and Spain It is less than one for France. Each country's ratio is compared with that for the United States. An "average unit value" is established for software. Based on such considerations, BSA has estimated 1989 economic losses from PC software piracy of $528 in France and $439 million in the United Kingdom. Losses in Italy and Spain are estimated at $768 million and $792 million, respectively. In West Germany, estimates were $1.44 billion.

In December, 1990, Microsoft, Ashton-Tate and Lotus Development filed law suits through BSA against a film producer in France and an electrical instrument company in the United Kingdom in order to make legally authorized searches for illicit software. In addition, out-of-court settlements were reached with three French companies charged with copyright violations. Earlier, a law suit against an Italian firm had been motivated by the fact that it ran 40 PCs with one purchased copy of Lotus 1-2-3 and 20 PCs with one purchased copy of the dBase program.

Country	Sales (S)	Piracy (P)	Ratio P:S
France	805	628	.781
Italy	190	768	4.042
Sweden	188	151	.803
U.K.	795	439	552
W.Germany	581	1440	2.478
Total	**2359**	**3426**	**1.452**

***Table 1**–Comparison of Sales and Piracy of Software by Selected European Countries, 1989 (millions of dollars)*

The same approach based on a ratio of two application programs per personal computer has been applied to Asian countries. BSA, then, estimated that 75 percent of software used in South Korea in 1990 was pirated. More specifically, an estimated 90 percent of Lotus 1-2-3 software, 85 percent of dBase and 65 percent of MS/DOS in South Korea is acquired illicitly.

The unauthorized use of software has been rampant in the Soviet Union. It is estimated that by 1990, US software producers had lost revenues of close to $1 billion because of illegal copying in the former Soviet Union. In June, 1990 the US and the then USSR signed an agreement that reaffirmed the two countries' commitments to the Berne Convention which provides for protection of copyrighted software and of trade secrets. There was not total satisfaction among all American interests, particularly in matters dealing with piracy and enforcement. There has been widespread dissatisfaction with the protection accorded videocassettes of motion pictures in the former Soviet Union. Major US film companies have ceased licensing their films for showing there.

The issue of improved protection of intellectual property rights, in general, and as it affects computer software is an ongoing one. The list of countries that have been charged with violations is extensive. While the US has pursued the matter vigorously on a bilateral basis, the multilateral treatment of the issue depends heavily on the successful completion of the Uruguay Round under the GATT.

[Joseph Hasson, a frequent contributor to the WAP Journal, has been a computer enthusiast since before the age of the microcomputer. His professional background is in economics.]

Less Time On-line

by Paul Campbell

One of the great pleasures I have at the end of the day is sitting down at the computer and spending some time going through my mail on the various networks that I access from home. Most of you may be familiar with the basics of tele-computing, but for those of us who are not, tele-computing is when your computer is used as a communications device to connect with another computer or computer system through a modem and your telephone lines.

A prime example of a computer system used specifically for telecommunications is the Washington Apple Pi's TCS. The TCS (for Tele-Communications System) consists of twelve computers linked together through which you can access thousands of programs, messages, and other files. These other computers or systems are commonly referred to as Bulletin Board Services (BBS's)

"Spending some time" becomes a literal statement when the computer connection is long distance, and a great pleasure leads to the displeasure of paying a huge phone bill! This article will offer some tips on reducing the amount of your connect time (the time you are connected to another computer) and maybe even make your tele-computing a little less stressful.

The first thing to determine is where you are spending the most amount of time on your long distance connections. Most of my time used to be spent responding to messages, with reading the messages running a close second. Third place went to browsing for files.

There are two common methods of posting messages on another computer (also called Electronic Mail or E-Mail for short). You can enter a message directly to the BBS and type while attached. This form of leaving messages is easy enough, but some BBS software leaves much to be desired in terms of editing. I usually stay away from typing a message while online (connected to the other computer) unless it is a short message.

The other common method is called "offline" and has many advantages which include phone bill and typing error reduction, especially if you type like me!

The Setup

You can create an offline message in just about any word processor that will let you export or save the file as an ASCII file. ASCII is an abbreviation used for standard text files that comply with the American Standard Code for Information Interchange.

For AppleWorks or Three Easy Pieces, you print the word processor document to disk as an ASCII file. AppleWriter uses the ASCII format for normal storage so that all you have to do is save the file with the correct filename.

My favorite method is to use The DeskTop Manager's Notepad. This Notepad is like a mini word processor and allows search functions, cut and paste, and printing to disk in ASCII format. I have a macro set up that creates an ASCII file from the Notepad and gives me a choice of file names.

To get really fancy with multiple messages, create several notepads for all your intended messages, then create a macro which transfers the notepad to ASCII format and then transmits the file. Just think about the convenience... select the message you want and press one key. The entire process is all done and the transmission begins automatically in about 2.48 seconds.

The only major difference between creating an offline message and creating a standard word processing document is the handling of blank lines between paragraphs. A lot of BBS's do not accept blank lines in a message, you must leave out the blank lines or put *something* on the lines between paragraphs.

Sometimes you can just put in a few spaces in a blank line by holding down the spacebar briefly on the lines between paragraphs. Other times the BBS may insist that you put a visible character on the line, for this I use the circumflex character (~) because at least it gives the appearance of a blank line.

You must also be aware of the maximum message size allowed by the BBS for which you are writing the message. Most allow at least 4K, others allow only 2K or less. BBS's that allow less than 2K do not seem to stay popular very long, as users get tired of splitting long messages so that they will fit this limitation.

A local victim to this problem was a BBS run on a Macintosh FX which only allowed one screen for each message. Not only was it an irritation for long winded (long keyboarded?) people like me, I was also forced to slow down the transmission speed of my Apple III to painfully slow speeds so that the Mac would not choke.

Poor software makes a poor BBS no matter what kind of computer is used.

Once you create an ASCII file using the above considerations (you can also run it through your spell checker), the only thing left for you to do is connect to your favorite network or BBS and press your transmit key, then sit back and watch your computer work for you.

That is, after all, what they were made for, right? Of course, MS-DOS users may think that *they* were made to work for the computer! (grin)

Reading Messages

There is only one way (outside of speed reading courses) to speed up online message reading: do it offline. All communications programs offer a capture buffer or recording mode to grab the text that flies past your screen. This is the most efficient method of getting your files and reading them on your own time, not the phone company's time.

These capture buffers take text that is transmitted to your computer, and save it to the computer's memory or write the information to disk. Access III and the Communications Manager both use the latter method, so they are limited to 16 megabytes which should be enough unless you plan on grabbing the entire message base off of every BBS in your state.

You have a variety of methods for reading back these messages after disconnecting from the other computer system. My standard method is pressing Solid Apple-Q which activates a macro that leaves me using the arrow keys to scroll around the messages in AppleWriter III.

I prefer using AppleWriter for this task because it allows me to split the screen and view different messages at the same time. AppleWriter also has a wider display width than AppleWorks or Three Easy Pieces, so things appear exactly the way they did when you were online.

If you have The Desktop Manager, you can view the messages without even leaving your communications program with the View File module or the File Scroll module. File View lets you move forward and backward in a file and also provides for screen prints. File Scroll does just that, the file will scroll automatically until you pause it, this is great for skipping over a file and stopping for items that catch your interest. This module allows you to advance through a file by one character at a time, you can also toggle the printer on or off and perform screen prints.

These modules also come in handy for verifying your transmit file before you send it. In order to standardize your procedures, you should be consistent with the filenames of your transmit and recording files. I always keep the same file names; /pro3/data/tr1 for the recording file, and /pro3/data/tf for my transmit file.

This allows me to setup the communication program's prefixes and leave them alone. It also protects me from filling my sub directory with garbage. If I want to keep something then I'll save it in the correct area. If I don't save it, then it will be gone the next time I use the communications program.

The last subject is the shortest, creating an list of BBS files for later use. This is as easy as turning the recording mode on and calling for a file index from the BBS. After you are done and dis-connected from the other computer, you can edit the capture file and save it as a master index which you can browse through at your own leisure.

Following these simple guidelines has caused a drop in our family phone charges, and I no longer sweat when the bill arrives in the mail–at least not as much!

Summary of Activities
Washington Apple Pi, Ltd. Board of Directors Meeting
April 14, 1993

Directors Present: Lorin Evans, Bob Shaffer, Charlie Froehlich, Dana Schwartz, Jon Hardis, Lawrence Charters, Tom Witte, Dave Weikert, Ken DeVito.

Directors Absent: Lee Raesly, Tom Vier, Bernie Urban, Bill Wydro, Bill Campbell, Guy Durant.

Report from NAUGSAW: The President reported to the Board on his recent trip to the National Apple User Group Symposium and Workshop in Detroit, and announced that WAP will distribute an Apple II "Beginners Disk" and a User Group support disk.

MacWorld Exposition Boston: The President expressed WAP's need for a leader/booth coordinator for the MacWorld show in August, and asked the Board to assist in finding a volunteer.

BMUG: The President asked the Board to consider whether they wished to proceed with negotiations with the Berkeley, California Macintosh Users Group (BMUG) on cross projects and dual membership possibilities for members of both our organizations. The Board provided him guidance, and he will proceed with talks with the BMUG leadership.

Election Instructions: The Board approved wording for an announcement concerning Election procedures for publication in the June Journal.

Financial Report: The President presented the current financial report to the Board.

Dana J. Schwartz, Secretary

Beginning HackerSpeak: The C's, Part 2

The following are selected excerpts from the on-line Jargon File, version 2.9.9, a comprehensive compendium of hacker slang illuminating many aspects of hackish tradition, folklore, and humor.

As usual with slang, the special vocabulary of hackers helps hold their culture together–it helps hackers recognize each other's places in the community and expresses shared values and experiences. Also as usual, *not* knowing the slang (or using it inappropriately) defines one as an outsider, a mundane, or (worst of all in hackish vocabulary) possibly even a {suit}.

Hackers love word play and are very conscious and inventive in their use of language. Their inventions thus display an almost unique combination of the neotenous enjoyment of language play with the discrimination of educated and powerful intelligence. Further, the electronic media which knit them together are fluid, 'hot' connections, well adapted to both the dissemination of new slang and the ruthless culling of weak and superannuated specimens. The results of this process give us perhaps a uniquely intense and accelerated view of linguistic evolution in action.

coefficient of X: n. Hackish speech makes rather heavy use of pseudo-mathematical metaphors. Four particularly important ones involve the terms 'coefficient,' 'factor,' 'index,' and 'quotient.' They are often loosely applied to things you cannot really be quantitative about, but there are subtle distinctions among them that convey information about the way the speaker mentally models whatever he or she is describing.

'Foo factor' and 'foo quotient' tend to describe something for which the issue is one of presence or absence. The canonical example is {fudge factor}. It's not important how much you're fudging; the term simply acknowledges that some fudging is needed. Quotient tends to imply that the property is a ratio of two opposing factors: "I would have won except for my luck quotient."

'Foo index' and 'coefficient of foo' both tend to imply that foo is, if not strictly measurable, at least something that can be larger or smaller. Thus, you might refer to a paper or person as having a 'high bogosity index,' whereas you would be less likely to speak of a 'high bogosity factor.' 'Foo index' suggests that foo is a condensation of many quantities, as in the mundane cost-of-living index; 'coefficient of foo' suggests that foo is a fundamental quantity, as in a coefficient of friction. The choice between these terms is often one of personal preference.

condom: n. 1. The protective plastic bag that accompanies 3.5-inch microfloppy diskettes. Rarely, also used of (paper) disk envelopes. Unlike the write protect tab, the condom (when left on) not only impedes the practice of {SEX} but has also been shown to have a high failure rate as drive mechanisms attempt to access the disk — and can even fatally frustrate insertion. 2. The protective cladding on a {light pipe}.

Control-C: vi. 1. "Stop whatever you are doing." From the interrupt character used on many operating systems to abort a running program. Considered silly. 2. interj. Among BSD UNIX hackers, the canonical humorous response to "Give me a break!"

Conway's Law: prov. The rule that the organization of the software and the organization of the software team will be congruent; originally stated as "If you have four groups working on a compiler, you'll get a 4-pass compiler."

cookie: n. A handle, transaction ID, or other token of agreement between cooperating programs. "I give him a packet, he gives me back a cookie." The claim check you get from a dry-cleaning shop is a perfect mundane example of a cookie; the only thing it's useful for is to relate a later transaction to this one (so you get the same clothes back).

core dump: n. [common {Iron Age} jargon, preserved by UNIX] 1. [techspeak] A copy of the contents of {core}, produced when a process is aborted by certain kinds of internal error. 2. By extension, used for humans passing out, vomiting, or registering extreme shock. "He dumped core. All over the floor. What a mess." "He heard about X and dumped core." 3. Occasionally used for a human rambling on pointlessly at great length; esp. in apology: "Sorry, I dumped core on you." 4. A recapitulation of knowledge (compare {bits}, sense 1). Hence, spewing all one knows about a

topic, esp. in a lecture or answer to an exam question. "Short, concise answers are better than core dumps" (from the instructions to an exam at Columbia; syn. {brain dump}).

cosmic rays: n. Notionally, the cause of {bit rot}. However, this is a semi-independent usage that may be invoked as a humorous way to {handwave} away any minor {randomness} that doesn't seem worth the bother of investigating. "Hey, Eric –I just got a burst of garbage on my {tube}, where did that come from?" "Cosmic rays, I guess." Compare {sunspots}, {phase of the moon}. The British seem to prefer the usage 'cosmic showers'; 'alpha particles' is also heard, because stray alpha particles passing through a memory chip can cause single-bit errors (this becomes increasingly more likely as memory sizes and densities increase).

cowboy: [Sun, from William Gibson's {cyberpunk} SF] n. Synonym for {hacker}. It is reported that at Sun this word is often said with reverence.

cracker: n. One who breaks security on a system. Coined ca. 1985 by hackers in defense against journalistic misuse of {hacker} (q.v., sense 8). An earlier attempt to establish 'worm' in this sense around 1981—82 on USENET was largely a failure.

crank: [from automotive slang] vt. Verb used to describe the performance of a machine, especially sustained performance. "This box cranks (or, cranks at) about 6 megaflops, with a burst mode of twice that on vectorized operations."

crash and burn: vi.,n. A spectacular crash, in the mode of the conclusion of the car-chase scene in the movie "Bullitt" and many subsequent imitators (compare {die horribly}). Sun-3 monitors losing the flyback transformer and lightning strikes on VAX-11/780 backplanes are notable crash and burn generators. The construction 'crash-and-burn machine' is reported for a computer used exclusively for alpha or {beta} testing, or reproducing bugs (i.e., not for development). The implication is that it wouldn't be such a disaster if that machine crashed, since only the testers would be inconvenienced.

cray: /kray/ n. 1. (properly, capitalized) One of the line of supercomputers designed by Cray Research. 2. Any supercomputer at all. 3. The {canonical} {number-crunching} machine.

crayon: n. 1. Someone who works on Cray supercomputers. More specifically, it implies a programmer, probably of the CDC ilk, probably male, and almost certainly wearing a tie (irrespective of gender). Systems types who have a UNIX background tend not to be described as crayons. 2. A {computron} (sense 2) that participates only in {number-crunching}. 3. A unit of computational power equal to that of a single Cray-1. There is a standard joke about this that derives from an old Crayola crayon promotional gimmick: When you buy 64 crayons you get a free sharpener.

critical mass: n. In physics, the minimum amount of fissionable material required to sustain a chain reaction. Of a software product, describes a condition of the software such that fixing one bug introduces one plus {epsilon} bugs. When software achieves critical mass, it can only be discarded and rewritten.

crudware: /kruhd'weir/ n. Pejorative term for the hundreds of megabytes of low-quality {FreeWare} circulated by user's groups and BBS systems in the micro-hobbyist world. "Yet *another* set of disk catalog utilities for {{MS-DOS}}? What crudware!"

cruft: /kruhft/ [back-formation from {crufty}] 1. n. An unpleasant substance. The dust that gathers under your bed is cruft; the TMRC Dictionary correctly noted that attacking it with a broom only produces more. 2. n. The results of shoddy construction. 3. vt. [from 'hand cruft,' pun on 'hand craft'] To write assembler code for something normally (and better) done by a compiler (see {hand-hacking}). 4. n. Excess; superfluous junk. Esp. used of redundant or superseded code.

This term is one of the oldest in the jargon and no one is sure of its etymology, but it is suggestive that there is a Cruft Hall at Harvard University which is part of the old physics building; it's said to have been the physics department's radar lab during WWII. To this day (early 1992) the windows appear to be full of random techno-junk. MIT or Lincoln Labs people may well have coined the term as a knock on the competition.

cruft together: vt. (also 'cruft up') To throw together something ugly but temporarily workable. Like vt. {kluge up}, but more pejorative. "There isn't any program now to reverse all the lines of a file, but I can probably cruft one together in about 10 minutes."

cruftsmanship: /kruhfts'm*n-ship / n. [from {cruft}] The antithesis of craftsmanship.

crufty: /kruhf'tee/ [origin unknown; poss. from 'crusty' or 'cruddy'] adj. 1. Poorly built, possibly over-complex. The {canonical} example is "This is standard old crufty DEC software." In fact, one fanciful theory of the origin of

'crufty' holds that was originally a mutation of 'crusty' applied to DEC software so old that the 's' characters were tall and skinny, looking more like 'f' characters. 2. Unpleasant, especially to the touch, often with encrusted junk. Like spilled coffee smeared with peanut butter and catsup. 3. Generally unpleasant. 4. (sometimes spelled 'cruftie') n. A small crufty object (see {frob}); often one that doesn't fit well into the scheme of things. "A LISP property list is a good place to store crufties (or, collectively, {random} cruft)."

cryppie: /krip'ee/ n. A cryptographer. One who hacks or implements cryptographic software or hardware.

cuspy: /kuhs'pee/ [WPI: from the DEC abbreviation CUSP, for 'Commonly Used System Program,' i.e., a utility program used by many people] adj. 1. (of a program) Well-written. 2. Functionally excellent. A program that performs well and interfaces well to users is cuspy. See {rude}. 3. [NYU] Said of an attractive woman, especially one regarded as available. Implies a certain curvaceousness.

cut a tape: vi. To write a software or document distribution on magnetic tape for shipment. Has nothing to do with physically cutting the medium! Early versions of this lexicon claimed that one never analogously speaks of 'cutting a disk,' but this has since been reported as live usage. Related slang usages are mainstream business's 'cut a check,' the recording industry's 'cut a record' and the military's 'cut an order.'

cybercrud: /si:'ber-kruhd/ [coined by Ted Nelson] n. Obfuscatory tech-talk. Verbiage with a high {MEGO} factor. The computer equivalent of bureaucratese.

Thanks to All

Another (RAIN FREE) Garage Sale is over. Having just awakened from my long post-event sleep, I don't have all the stats, but it looks like there were over 700 buyers and nearly 100 vendors. For those that missed it or were too busy buying bargains to notice, IT DID NOT RAIN. There was no rain Friday at 4 PM while we were inside setting up tables or at our 5 PM Pizza feast. Saturday was overcast but pleasant and the preparations began before 7 AM with outside table setup and other last minute duties. Sellers entered at 7:30 and buyers at just before 9 AM. There were hourly tours of the Falcon facilities and thanks to Falcon many give-aways, including a color monitor, a dozen copies of GreatWorks and lots of wrist and mouse pads. The unusually slim pickings for the end-of-the-day Distress Auction indicated that sellers were more successful than usual. The event concluded after the 3 PM Cleanup with a Pi hosted lunch for the volunteers.

I wish to thank all those who helped make this event a success. Most important are Dendy Young [CEO and President] and Joe Abram [Used Equipment Sales] of Falcon Microsystems who co-hosted this event. For advanced preparation and advertising: Lorin Evans and the Jernigan sign committee. For Friday setup: Lorin Evans, Bill Wydro, Beth Medlin, Phil Shapiro, Bob Shaffer, Henry Ware, and Joe Abram (with extra credit for buying Pizza). For the main event: Joan Jernigan, David Jernigan, David Weikert, Lawrence Charters, Jon Slobins, Lorin Evans, Bob Shaffer, Frank Potter, Lou Pastura Tim Helsing, Tom Vier, David Wood, Gary Hayman, Seth Meize, Greg Bartolett, Ken DeVito, David Mudd, Jon Hardis and Bill Geiger. Special recognition needs to go to Joan Jernigan who assumed most of the duties of running the event after it began and to new (at least to me) volunteer Greg Bartolett who contributed significantly to the clean up action. My apologies if I missed anyone.

Thanks again,
Tom Witte

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 *HyperCard*. Call me if there is a subject that you are qualified to teach.

We have a great 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 more information call Beth Medlin at the Pi office, 301-654-8060.

Tutorial Fees and Other Information

The rate of all tutorial classes is $25.00 per class for members of the Washington Apple Pi; $35.00 per class for non-members.

All classes are taught in seminar-style and students need not bring their comuters to the classes; however, if a student would like hands-on training while attending the tutorials, he or she will need to bring his or her computer. The WAP office is only able to supply a computer for the instructor.

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 # M80993) 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, startup disk, and an unformatted DSDD 800k disk.

Date: Mon., Aug. 9, 7-10 pm.

Introduction to the Macintosh, Part II (Course # M81693) Part II will continue the exploration of the basic components of your Macintosh system, hardware and software. You'll learn more of the dos and don'ts; the finer points of the Menu Bar, Error Messages, Dialog Boxes, Icons, Folders, Keyboard Shortcuts, Scrapbook, and Clipboard will be discussed. You'll learn the basics of installing software, as well as about the Chooser, peripheral devices, and how they are connected to the Macintosh.

Materials Required: Your Macintosh, hard disk drive, startup disk, and an unformatted DSDD 800k disk.

Date: Mon., Aug. 16, 7-10 pm.

Introduction to the Macintosh, Part III (Course # M82393) 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, startup disk, and an unformatted DSDD 800k disk.

Date: Mon., Aug. 23, 7-10 pm.

Maintaining Your Macintosh (Course # OS82593) 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., Aug. 25, 7-10 pm.

Other Educational Opportunities

I've listed some training resources to supplement our class schedule.

The Pi is not endorsing the listed resources. Call or write me on your training experiences outside the Pi. I am very interested in documenting courses at local schools, colleges, universities, Adult and Continuing Education programs, at the Smithsonian, and any other Macintosh or Apple II training. Any information would be very helpful in this regard.

- Personal Training Systems (828 S. Bascom Avenue, Suite 100, San José, CA 95128): 1-(800)-TEACH-99. Offers a comprehensive set of 90-minute tutorial modules which consist of an audiocassette and computer disk. Most sets have four or more modules ranging from beginning to more advanced topics. At mail order prices of $60 or less per module ($99.95 list), these packages are relatively cheaper than other such training materials. Check them out.
- Northern Virginia Community College, Alexandria Campus (3001 North Beauregarde Street, Alexandria, VA 22311): 703-845-6301. Loudoun Campus (1000 Harry Flood Byrd Highway, Sterling, VA 20164): 703-450-2571. Continuing education classes in Macintosh computing. Associate Degree in Applied Science programs in Communication Design and Computer-aided Graphic Design at the above campuses. The primary Mac classes are Computer Graphics I and II. Advanced projects and seminars are required for degree students.
- AFI-Apple Computer Center for Film and Videomak-ers, Los Angeles, CA: 213-856-7664 or 1-800-999-4AFI. Courses in film, video, and multimedia–most involve Macintosh computing. Courses primarily at the LA campus.
- Avid Education Services: 617-221-6789. The Avid Media Composer is the premiere off-line editing system in video and film (cine as the insiders call it). It is Mac-based. If you're interested in video, film editing, or production, learning the Avid system is a good idea. Courses around the country.
- The Corcoran School of Arts: 202-628-9484. Courses in Mac color computing, design, illustration, art, and electronic pre-press. Location: Georgetown.
- The Eastman Kodak Center for Creative Imaging, Camden, Maine: 1-800-428-7400. State-of-the-art, Mac-based imaging, digital photography, and electronic pre-press. Courses on beautiful Maine campus in the Atelier.
- The Sony Video Institute (The Sony Institute of Applied Video Technology, 2021 North Western Avenue, PO Box 29906, Hollywood, CA 90029): 213-462-1987, then #*. Film, video, and multimedia courses–many involving the Mac. Courses in Hollywood and around the country.
- Dynamic Graphics Educational Foundation: 1-800-255-8800. The "Step-by-Step Graphics" people offer courses on Mac-based graphic design, electronic publishing, color pre-press, etc. at a Peoria campus, at DC area hotels, and other locations around the country. Prices range from approximately $200-800.
- Diversified Technographics (formerly Don Thompson Laser Service) Seminars: 1-800-457-5776. Seminars in laser printer repair that are taught at various locations in the area and around the country. Maximum class size is 12 persons. 23072 Lake Center Drive, Suite 100; Lake Forest, CA 92630. 1-800-457-5776.

Washington Apple Pi Tutorial Registration Form

Washington Apple Pi
7910 Woodmont Ave., Su. 910
Bethesda, Maryland 20814
301-654-8060

Basic Information

Name _____

Address _____

City/Zip/State _____

Phone (day) _____ (evening) _____

Member Number _____ Non-member _____

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

Check/Money Order ____ Credit Card ____ Card Number _____

Card Expiration _____ Signature _____

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

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

Course Numbers

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

Class #1 _____

Class #2 _____

Class #3 _____

Class #4 _____

Class #5 _____

Class #6 _____

Graphic *Tips*

by Carol O'Connor

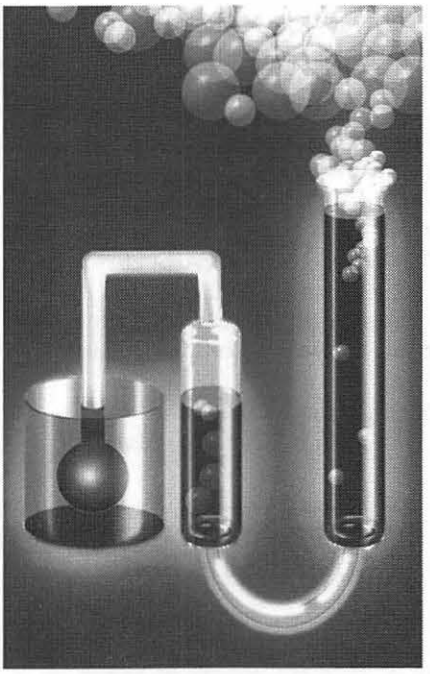
Creating Transparent Objects

One of the pleasures of computer illustration is stumbling upon a technique which has some lofty graphic razzle dazzle. "This is nifty," we say as visions of future successes fill us with heady pleasure.

Doesn't it always happen, though, that when we try to show a buddy our new technique, we can't repeat it with the same flare, or we can't repeat it at all?

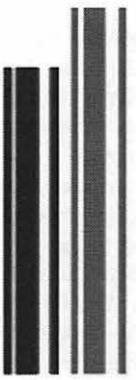
One thing I find gives me some credibility in the "Look at this!" arena, is to perform some useful routine six or eight times with only very slight variations, until I understand everything that contributes to the effect, as well as those things which could mess it up and why.

In the cases which follow, you'll see that there are many ways to use Composite Controls to make transparent objects. If we use a Darken Mode or a Screen Mode or a Normal Mode in the Composite box, we will see very different results each time; one producing a flop and another delivering a ringing success.



The following routine should be tried with different colors, with dark and/or light backgrounds, and with different brushes to make the surfaces very slick or to make mapped surfaces. Make a crystal banana or a transparent curtain flowing in a breeze for a real challenge.

Step One



1. Begin by making a rectangle of a light blue. (Photoshop 2.5, RGB mode) If you are using an earlier version of Photoshop, you will have to use your favorite blend-making routine to simulate the example, instead of using the soft edged brush in numbers 2 and 3 below.

2. Drag vertically at the left edge with a narrow soft brush at 50% opacity. Drag vertically with a wider brush near the right edge at 90% opacity.

3. Drag-Copy a second rectangle and change the color to maroon.

4. Shorten the maroon blend.

Step Two

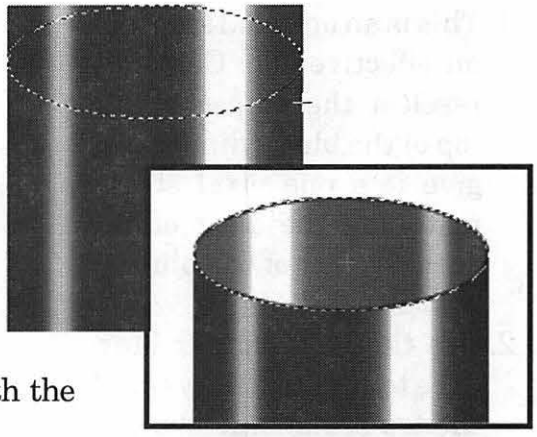
1. Use the Elliptical Marquee to select the red blend, carefully aligning the left and right edges.

2. Float the selection (Command-J) and move the ellipse into place as shown. Flip horizontally.

3. While the ellipse is still selected, Command-B to get the Brightness/Contrast control box and adjust the sliders to your satisfaction. The purpose is to visually separate the surface of the liquid from the column.

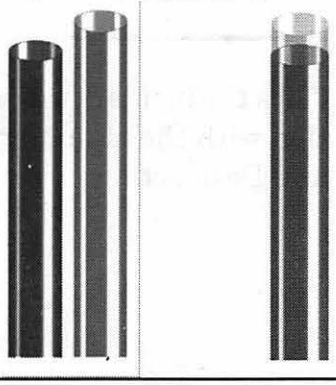
4. Deselect.

5. Repeat these steps with the blue blend.



Top of the test tube.

Step Three



1. Select and copy the blue "tube." Move it directly over the red one. Do not deselect. You will not see the red one at all for the moment.

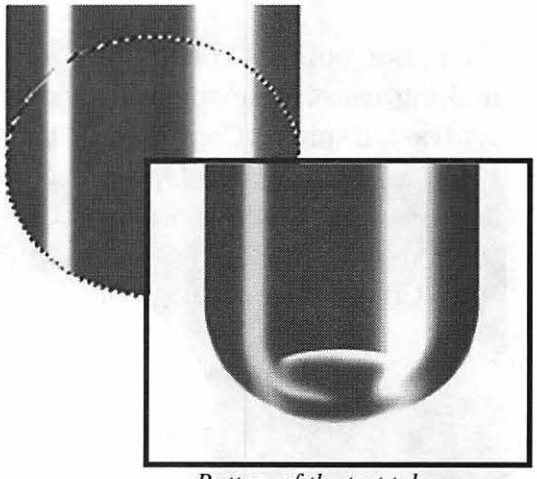
2. Use the Composite Controls (Edit Menu) to make the top layer transparent. Do this by setting the opacity percent low enough to get the result that you want in the Normal Mode. You might want to experiment with the Darken Mode. You will see the blue "tube" become translucent and the red "liquid" show. Deselect.

Step Four

1. Make a deep ellipse over both the liquid and the glass. Float the selection and move it down with the arrow key. Do not deselect.

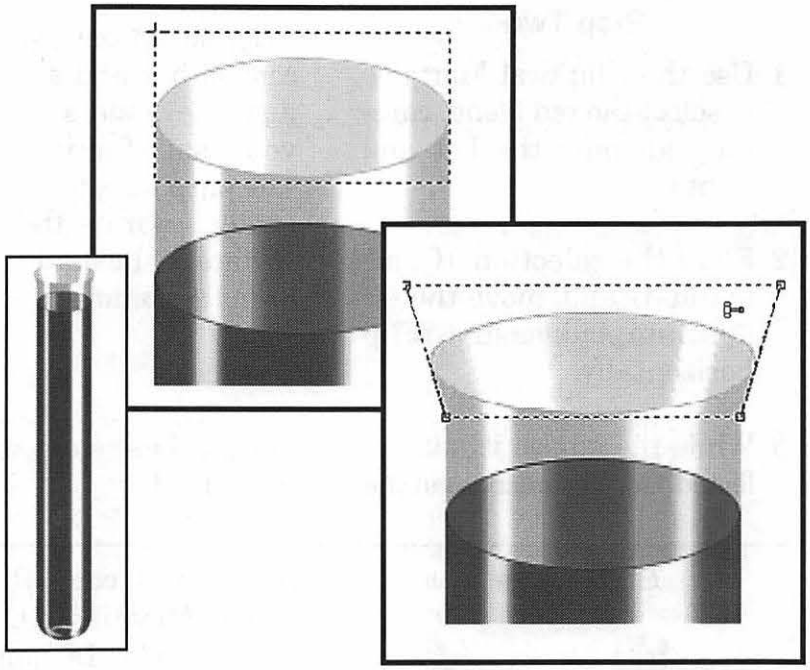
2. With the smudge tool, curl the dark areas of the tube inward slightly.

3. With a low opacity soft brush, touch the back wall of the selection. If you wish, make a smaller ellipse and do the same thing. Our blow up shows only one ellipse. Deselect.



Bottom of the test tube.

Step Five



1. This is an optional step, but an effective one: Carefully reselect the ellipse at the top of the blue cylinder and give it a one pixel stroke matching the color of the deepest part of the blue.

2. Use the Rectangular Marquee to very carefully select the top of the blue glass as indicated in the example. The selection should be parallel to the vertical edges of the tube.

3. Open the Perspective Controls from the Image: Effects group. You will see four accented corners on the selection box. If you drag the upper right corner very slightly to the right, the left corner will mirror the move.

4. Click the inside of the selection with the Hammer tool and Deselect.

BUBBLES

To make bubbles, begin by making a nice, somewhat well-contrasted sphere. Copy it and Paste it, holding the Option key down–the Composite Controls box will appear automatically. Choose the Screen Mode at 100% opacity. Drag-Paste the now transparent bubble all over the page.

Note: you will not get the effect unless you paste over other things, not on a white page.

KAI Power Tools makes a superb sphere automatically. I used KAI, but i have also tested this other method as well. More on KAI next month.

I need feedback *from readers to make these articles useful.*

I invite readers to call 703 430-5881.

Voyage to the Electronic Darkroom:

PhotoCD *and a Photographic Renaissance*

by Dennis R. Dimick ©1993

It's been about eight months since my first pictures from PhotoCD rolled out of a LaserWriter. Creating photos with a Macintosh-based "electronic darkroom" has been as much fun as when my pictures first appeared in trays of a murkily-lit photo darkroom more than two decades ago. However, this conversion from conventional to electronic darkroom has had its price.

Even if you have a IIci or faster Mac, PhotoCD will help you develop empathy for owners of Mac Pluses running System 7. PhotoCD will challenge your system more than you ever thought possible. Everything, including SCSI devices, RAM, video support and the CPU will get pushed to the limit.

The December 1992 Journal contained an article about my early experiences with PhotoCD shortly after its general release. Since then, enhancements in hardware and software have been introduced. My own trials have revealed ways to extract better hardware performance, and new software has helped improve speed and consistency of output. I pass some thoughts along here in hopes your own road to the electronic darkroom has fewer potholes and smoother rides.

Like Starting Again

PhotoCD has created a personal photo Renaissance for me. Now I can use my Macintosh to make pictures easily, at home. Before, making prints from my slides or negatives at home was an arduous task, or I had to take film to a custom photo lab to get prints.

The refrigerator door is now covered with new 8x10 photos, and relatives have been bombarded with stacks of prints. Letters to friends now have gray-scale images in the middle of a page. (New babies at home have a way of inspiring lots of pictures.) But these computer prints have generated as much interest for how they came about as for what's in the pictures.

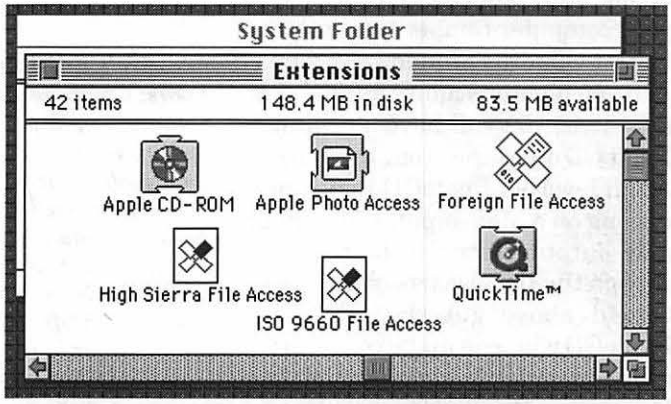
Before PhotoCD, making homemade photos meant setting up a dedicated darkroom space for trays and an enlarger. This was always such an effort (in a small basement with no sink) that I gave up trying. Now, with Photo-CD and a Macintosh at hand, I shoot nearly any conventional color or black-and-white film, take an edited selection of slides or negatives to a Kodalux dealer, and am making prints a few days later.

Granted, gray-scale LaserWriter pages aren't as good as real full-tone prints from a darkroom tray. But, they're pretty good, and the idea gets across. For me, the limiting factor is whether my original photos are any good, with something to communicate. (Quality, of course, is very subjective.) No amount of computer-inspired whiz-bang solutions will save bad photos.

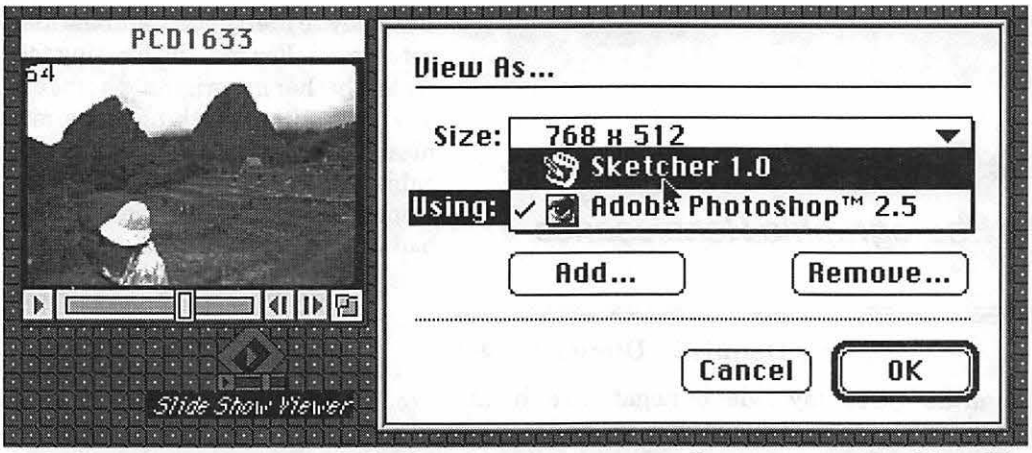
Hardware Rx: Speed and More of It

That said, trying to optimize this process of making pictures from PhotoCD and a Mac could alternately be called a course in "More RAM, Fast Hard Drives, More RAM, PostScript Level 2, *Photoshop*, More RAM and Faster CPUs." If some recommendations here are basic or obvious, I include them for you who are new to discussions of PhotoCD.

Your Mac must support QuickTime (68020 or better CPU) and gray-scale or color monitors. My own experience shows that 8-bit color works, but doesn't do justice to images on a PhotoCD disk. Actually, 16-bit color is pretty good with photos, and is supported by onboard video of several new Mac models. The ideal is 24-bit color if you can afford it, but in nearly all cases except early Quadras, 24-bit color must come from one of many good video cards on the mar-



PhotoCD Extensions: *Your System 7 Extensions folder must contain these extensions for Photo CD to work properly. As of June, 1993 the latest QuickTime version is 1.6. The newest Apple CD-ROM driver set is v. 4.02, which contains all other extensions seen here.*



Slide Show Preference Link: Slide Show Viewer, a program that comes on every PhotoCD, allows you to link Slide Show files to graphics programs supporting QuickTime PICT files. As you progress through the slide show you can view images in one of five sizes by using the "View As" Menu command or double-clicking the Slide Show picture on screen.

ket. If you can afford a card with acceleration, buy it–you'll need it.

CPU Choices: IIci or Better

You're in the basic performance arena if you have or acquire a IIci, IIvx or LCIII. Anything less and you will spend more time being patient than looking at pictures. The LCIII offers native speed comparable to a IIci, but is limited to one expansion slot. The IIvx and IIci have the advantage of a separate PDS (processor direct slot) for accelerator cache cards. You could later add one of the capable accelerators now available and make your computer competitive with the fastest Quadras around.

If you have or acquire a Quadra or a Centris, you will have a desirable PhotoCD machine from the outset. At all levels of PhotoCD image processing on a Mac–input, throughput and output–faster is better, and though the IIci-class machines mentioned above get the job done, PhotoCD will soon make you wish for a Quadra or for fast accelerators like Daystar's or Radius' new 68040 cards.

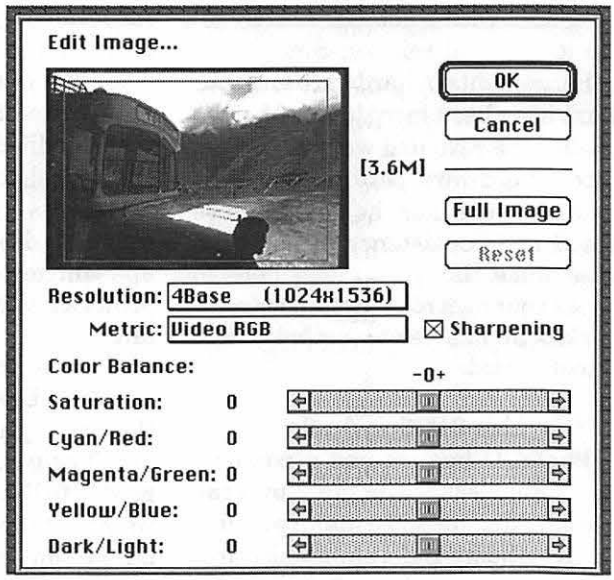
CD-ROM Drives: Fast Changing Field

PhotoCD compatibility for CD-ROM drives may be the biggest issue you face when configuring a system. Only now are multi-session capable CD-ROM drives in the marketplace in quantity. As of this writing (early June) Apple's new CD300 multi-session external drives are still in short supply. –I've seen them in stock for walk-in sales only at ComputerAge here. Briefly, multi-session drives will read PhotoCD images written to a disk in consecutive sessions. Older, single-session drives read only images written during the first disk recording session.

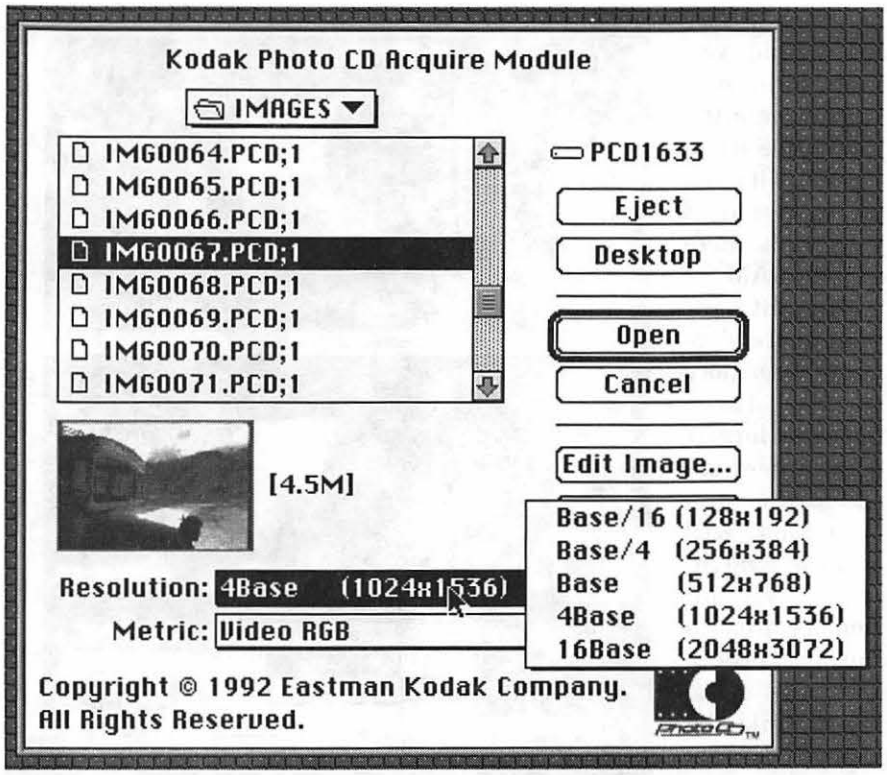
Multi-session is preferable, but a few older drives work well in single-session mode. These include Apple's CDSC+ and CD150. An even older Apple drive, the CDSC, does support PhotoCD, but only with Apple's latest CD-ROM driver mentioned below. Beyond that, Eastman Kodak is constantly updating its list of approved PhotoCD-compatible drives. Call them at 1-800-242-2424, ext. 51 before buying anything. (I've also uploaded a folder of related PhotoCD documents from Eastman Kodak to the Mac Technical Notes Area 17 of the TCS. This package includes lists of single- and multi-session drives compatible with PhotoCD–if you need a password, call the office during office hours.)

System Software: Precision Required

CD-ROM software drivers and extensions, installed correctly, are absolutely necessary for PhotoCD to



Acquire's Editing Tools: *Cropping, color balance, brightness and saturation are some tools offered by Kodak's PhotoCD Acquire Module Plug-In for Photoshop. It's also possible to import images as RGB, YCC, grayscale, or in a variety of color options balanced to the color temperature and size of your monitor.*



Kodak's Acquire Module: *An invaluable addition to Adobe Photoshop for PhotoCD users comes from Eastman Kodak. The Kodak "PhotoCD Acquire Module" for Photoshop offers image import and manipulation tools, and speeds up image import from PhotoCD disks by two-thirds in some cases. Importing PhotoCD's largest files to a IIci dropped from 13 minutes to four when using Acquire.*

work right. You need QuickTime 1.5 or later. You also need the following extensions: Apple Photo Access, a suite of Foreign File Access extensions (including ISO 9660 and High Sierra format) and Apple's CD-ROM driver v.4.02 or later. These drivers all come via Apple on an Installer disk, and are also available in disk image format from some on-line sources. (While you're installing, try to get the newly released QuickTime 1.6. When paired with Apple's CD300 drives and programs like Apple's Movie Player, you can also record the music from any audio compact disk to QuickTime movies.)

Proper driver installation allows you to see and use a PhotoCD application and file on each disk. Entitled Slide Show Viewer and Slide Show, these PhotoCD files allow you to browse all pictures on a disk via a QuickTime-style still movie.

Third-party drives may require other software drivers and extensions from your hardware vendor. Some advice on CD-ROM compatibility with PhotoCD: If you really want PhotoCD to work correctly, out of the box, and aren't interested in hassles, incompatibilities, and other frustrations, get an Apple-brand drive. This is not a promo for Apple, but a plea for your sanity. (Besides, if you get one of Apple's 300 series drives you get a package of nine CD-ROM disks, all the proper software drivers and an owner's manual that addresses PhotoCD compatibility.)

My old CDSC+ (same mechanism as an Apple CD150) has worked without any problems since day one of PhotoCD. A friend, with NEC's CDR-74, has suffered a logic board upgrade and three software driver updates and only now can he access single-session PhotoCD images consistently. All this, despite NEC's claims that his new drive was PhotoCD compatible.

If you buy a third-party drive, you may have to depend upon your vendor for driver upgrades. When Apple releases system software updates, they do it first for their drives. If you want to save some cash buying a third-party drive, that's your choice. But don't blame me if you have compatibility headaches.

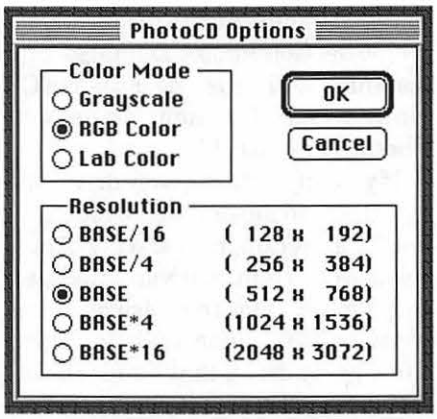
One company, FWB, has just released a package called "CD-ROM Toolkit," a software driver package that promises to make a variety of existing drives compatible with PhotoCD (at least in single-session mode), and also to speed drive performance. This could be an answer if you buy or already have a third-party CD-ROM drive.

Hard Drives and RAM: Never Enough

Kodak says 8MB RAM will work when dealing with PhotoCD images. Well, a Mac LC works too. How much is time worth? How long are you willing to wait? Are you adept at reading novels while the little "clock hands" spin on your screen?

Buy RAM, lots of it. If you can afford 20MB, 32 MB or more, get it. Why? The biggest speed improvement for me has come from adding additional RAM. When the Mac processes these sometimes huge photo files, installed RAM levels dictate how fast an image opens, how fast I can apply filters, how fast mode changes occur, how fast I can save files and how long prints take to produce.

A standard guideline is: Install three times more RAM than the largest image file size you plan to work with consistently. Normally, my largest files are PhotoCD's BASE4 images. Decompressed from disk in



Photoshop's Integral Plug-In: *Photoshop 2.5 comes with its own Plug-In to access native PhotoCD image format files. Accessed via the "File...Open As" menu, this Plug-In offers several file type and size options. It's slower to import images than Kodak's Acquire Module.*

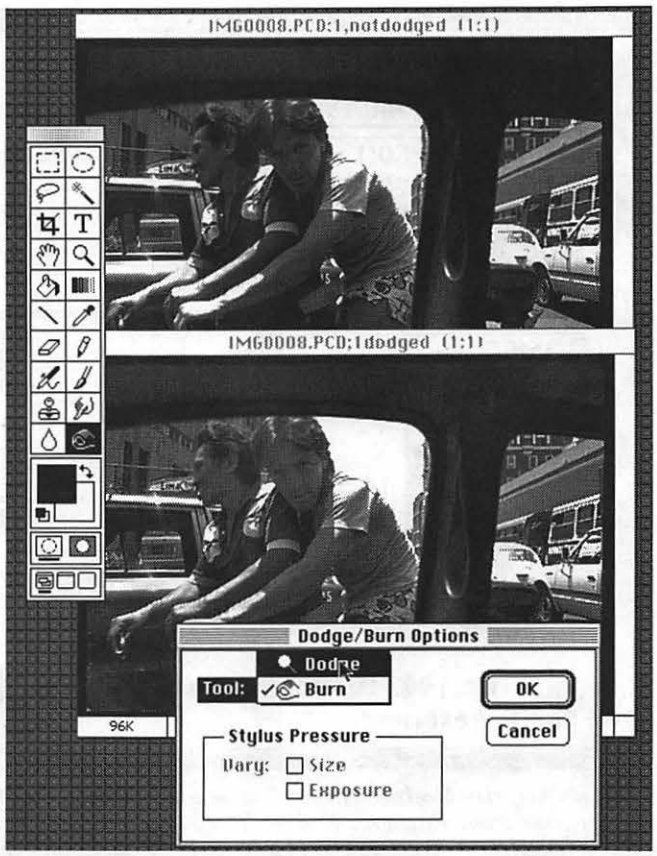
color, these next-to-largest of Photo CD's files will take anywhere from 4.5 to 6MB of RAM. In this case a machine with 20MB RAM will serve, 32MB is better. Remember, you must also allocate RAM for your system and other operations like PrintMonitor and your extensions.

This much RAM is helpful because all image processing functions occur in much faster RAM, and you avoid storing part of an image on the hard drive while the rest of it is being processed. If you don't have enough RAM, or have not increased the "application memory size" to three times the largest file size, most image processing programs will create a "scratch" or virtual memory area on your hard disk to store part of an image while the program does its work.

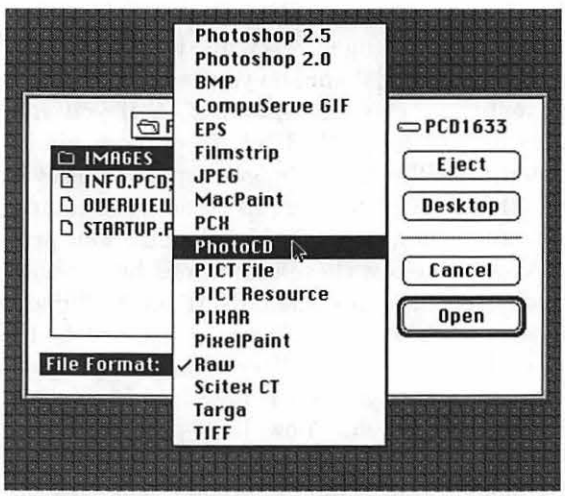
If you've ever used Apple's System 7 Virtual Memory scheme (I did once. It kept crashing.), you will understand the speed hit your system takes. The same thing occurs when image processing programs use their own virtual memory schemes. One estimate is that the fastest hard drive still runs only 10 percent as fast as RAM. As a comparison for working on PhotoCD files, I would rather have a IIci with 32MB of RAM than a Quadra 800 with 8MB.

Beyond RAM, get a fast access hard drive with no less than 200 to 230 MB of space. Don't ask me who decided Apple should install 80MB hard drives (as the only choice) in new IIvx computers with factory CD-ROM option. Whoever decided this doesn't have a clue. You can almost fill one of these 80MB drives with only four of PhotoCD's largest color image files.

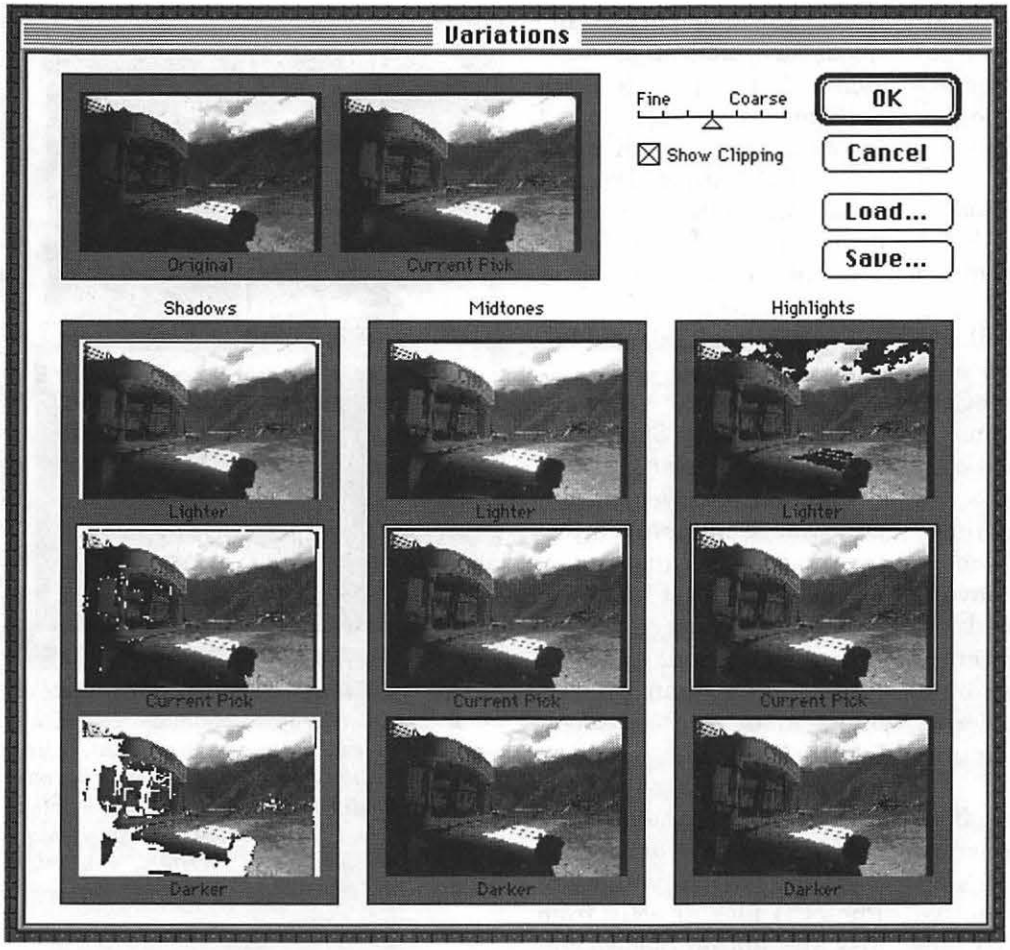
If you don't have enough RAM you need lots of free, unfragmented space on a hard disk so image processing programs can create the "scratch" files mentioned earlier. The choice is yours: if you plan on working with PhotoCD's biggest color files (18MB) either plan on a machine with more than 54MB of RAM installed or a use a system with total combined RAM and unfragmented hard drive free space equaling or exceeding 54MB. No kidding.



Recreating Darkroom Tools: *The "Burn and Dodge" tools in Adobe Photoshop 2.5 are invaluable for localized tonal corrections in PhotoCD images. The "Dodge" tool was used in the lower photo to lighten the faces of these bike-riding Peruvian men and the foreground Volkswagen taxi interior.*



Photoshop Open As Options: *Besides PhotoCD native format, Photoshop's integral Plug-In also supports a variety of file type import options. This Plug-In should not be confused with Kodak's PhotoCD Acquire Module, a high performance import option purchased separately.*



Variations on a Frame: One of Adobe Photoshop 2.5's most worthwhile new features for PhotoCD users is the "Variations" Plug-In. You can modify and preview shadow, midtone, and highlight aspects. Note the "Clipping," or blocking of highlights and shadows at top right and lower left. This feature helps indicate when contrast range of the picture is beyond the capability of your printer or other output device, and is valuable when creating LaserWriter prints from PhotoCD images. Variations also helps with color correction when you work in color.

Software Choices: Basic to Deluxe

Several new programs and revisions on popular existing programs are now available to help process and catalog your images from PhotoCD. Among others, they include Adobe's *Photoshop* 2.5, Fractal Design Sketcher, a series of programs from Kodak, and Fetch, an image cataloging program from Aldus.

Adobe *Photoshop*

The premier option is Adobe's new *Photoshop* 2.5, released earlier this year. Combined with Eastman Kodak's newly released *Photoshop* Plug-In called "Photo CD Acquire Module," you have all you will ever need to import, process and print the complete range of image sizes and types stored in a PhotoCD disk. Of course, if you plan to use images in documents, publications, QuickTime movies or other multimedia presentations, you'll need layout, design or production programs too.

Be sure to get the *Photoshop* 2.5.1 (or later) update if you plan to allocate more than 20MB or so of memory to *Photoshop* for these operations. Apparently the first version of *Photoshop* 2.5 sometimes suffered out-of-memory errors saving files when more than 20MB of RAM was allocated to *Photoshop*.

Photoshop's excellent new "Variations" Plug-In allows you to preview on-screen nine different contrast possibilities, and also indicates when "clipping," or loss of proper halftone dots occurs. Since using this new feature I have been able to improve printed output dramatically, so much so that I can get very good contrast and exposure from the first set of prints.

Before, I would make prints, look at them, guess how much contrast and exposure changes were needed, and try again. "Variations" precludes the need for rigorous screen-output calibration efforts, at least for me, with black-and-white prints. Other than speed, matching screen levels to output levels had been my biggest problem.

Another new feature of *Photoshop*, the "Burn and Dodge" tools, recreate the tools most photographers use when making con-

ventional prints with a photo enlarger. Burn and Dodge let you selectively darken or lighten, respectively, an isolated area of the picture without the need for masking.

Kodak's Photo CD Acquire Plug-In

Kodak's PhotoCD Acquire Plug-In module for *Photoshop* reduces opening times for PhotoCD files by almost two-thirds. On a stock IIci, it would take more than 13 minutes to open an RGB version of PhotoCD's largest (BASE16) files when using the PhotoCD Plug-In supplied with *Photoshop* 2.5. Using Kodak's Acquire Plug-In, these opening times drop by two-thirds, to slightly more than four minutes. If you have a faster CPU your times should improve proportionately. I recently timed this same file opening on a Mac IIfx 32/230 with Thunder/24 video card and it took three minutes to complete.

The Acquire Plug-In also offers color-correction, sharpness, cropping and brightness tools. This allows changes in PhotoCD's native format before being imported into *Photoshop*.

Kodak's PhotoCD Program Suite

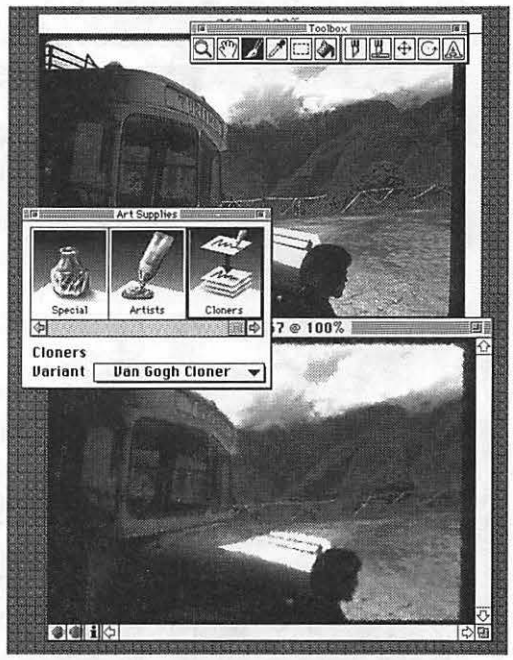
PhotoCD software programs available from Eastman Kodak include *Photo CD Access, PhotoEdge,* and *Renaissance.* All three provide support for PhotoCD image format, with varying levels of capability when you manipulate picture files.

PhotoCD Access will translate files from the PhotoCD format and save as PICT, TIFF or EPS format. *PhotoEdge* also offers image manipulation tools such as sharpen, contrast, and brightness. *Renaissance* is a more specialized page design program with typographic and printing customization tools.

My own experiences with *Access* and *PhotoEdge* are that both work reasonably well, and are appropriate if your image processing needs are modest or occasional. If you plan to work with images regularly, invest in *Photoshop* and get Kodak's "Photo CD Acquire" Plug-In. This combination provides dramatic speedup in image acquisition over any other program now available, and offers very sophisticated image controls.

Fractal Design Sketcher & Painter

I include *Sketcher*, a gray-scale image editor and drawing program, because it may be one of the least heralded, most useful image-editing programs around. At street prices of less than $100, it offers many of *Photoshop's* features, including support for *Photoshop* Plug-Ins. This means Kodak's PhotoCD Acquire Plug-In works with *Sketcher* when you open PhotoCD files directly from disk. In addition, *Sketcher* offers a variety of drawing tools, filters, and special effects. If your output is color, also consider *Sketcher's* bigger sibling, *Fractal Design Painter* 2.0, a highly regarded natural media color drawing program with image-editing capabilities and *Photoshop* Plug-In compatibility.



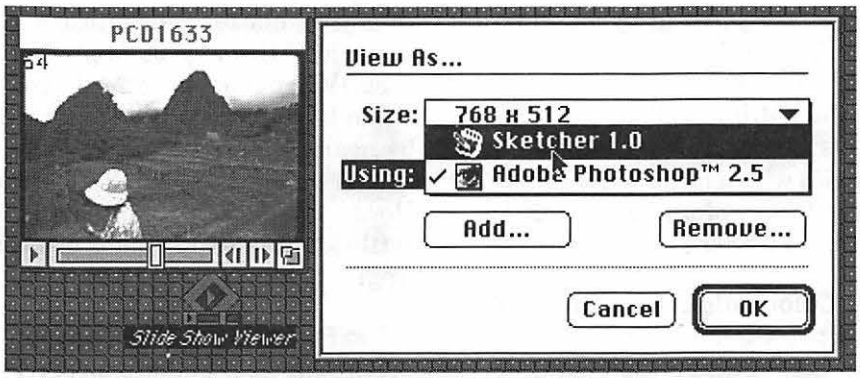
Sketcher's Clones: *Fractal Design Sketcher, an inexpensive gray-scale image editor and natural media drawing program, offers intriguing "Cloning" features. Here, the lower photo was modified using the integral "VanGogh" cloner feature. If your PhotoCD image output is only to gray-scale LaserWriters, you might consider this inexpensive program as a way to process your images.*

Image Catalogers: *Fetch & Shoebox*

Sooner or later, keeping track of your pictures and PhotoCD disks will become a chore. A type of program just on the market is the graphics database. Two entries are *Fetch* from Aldus and *Shoebox* from Kodak. As of this writing Shoebox had just been released at a special price of $99. *Fetch*, at street prices of $200, has been around for some months.

Briefly, Aldus *Fetch* is a superb early entry in an indispensable category of software. For example, if you want to index the contents of a PhotoCD, all you do is drag the PhotoCD disk icon over *Fetch's* program (or alias) icon and *Fetch* catalogs the PhotoCD. It keeps track of image file type data, filenames, dates, file size, and any other information existing on disk, and also produces a high-quality thumbnail view database.

Fetch creates links to the original files from its catalog, and by double-clicking on the thumbnail photo you can open the original file for viewing. If the original PhotoCD no longer is on-line, *Fetch* will prompt you to insert that disk, by name, and will wait until the disk is mounted and then show the image.



Slide Show Preference Link: *Slide Show Viewer, a program that comes on every PhotoCD, allows you to link Slide Show files to graphics programs supporting QuickTime PICT files. As you progress through the slide show you can view images in one of five sizes by using the "View As" Menu command or double-clicking the Slide Show picture on screen.*

If a catalogued image is stored on a remote file server, *Fetch* will log on to the server and show you the image. *Fetch* allows extensive multiple keyword searches. I hope to soon produce a more extensive look at *Fetch*, its competitors, and other methods of managing and editing large collections of PhotoCD images.

LaserWriters: PostScript Level 2

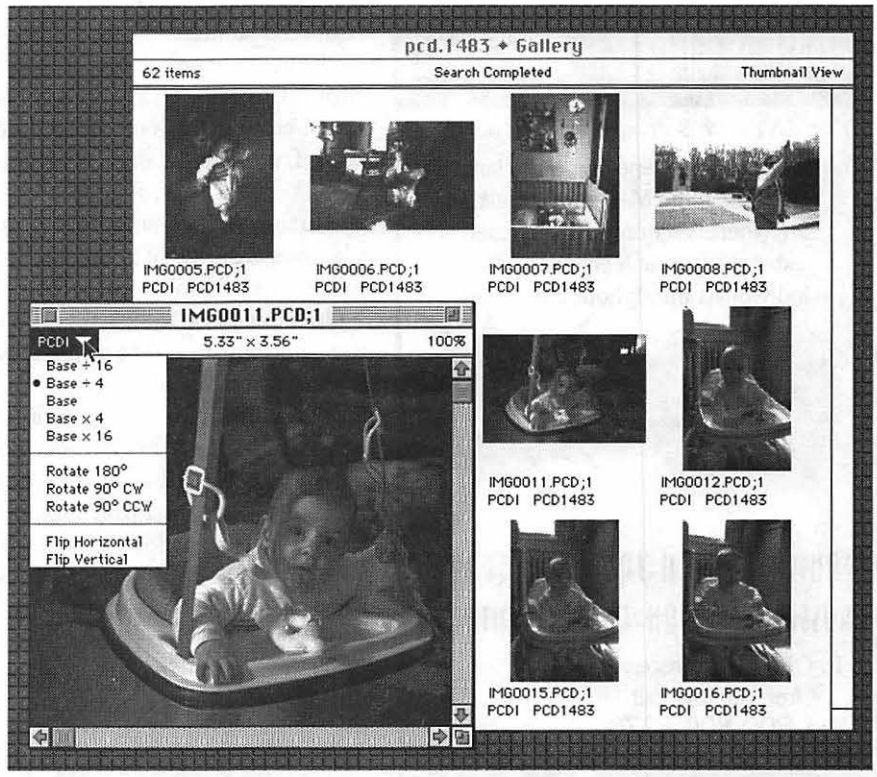
PhotoCD images in 24-bit color look great on screen, but getting color output on film or paper is a complex issue, beyond my current abilities. My experience is with gray-scale prints from PostScript Apple LaserWriters, and the source photos have all been color and black-and-white negatives or color transparencies.

If you don't have a laser printer but plan to buy, get one with support for PostScript Level 2, Adobe's updated page description language. This will make your life easier, as these new printers, combined with Apple's LaserWriter 8.0 printer driver, will improve output times significantly. LaserWriter 8.0 supports PostScript Level 2.

I have been able to reduce output times from more than 6 minutes per page to about 2.5 minutes by doing two things: upgrading a printer logic board and installing the LaserWriter 8.0 printer driver.

The first change alone cut output time by one-third. This was an upgrade of logic board in a Personal LaserWriter NT to the newer RISC-based Personal LaserWriter NTR which supports PostScript Level 2. Updating the printer driver to LaserWriter 8.0 further cut page production times, with letter-size page output from the NTR dropping from 4 minutes to 2.5 minutes. This was with 1.5MB gray-scale *Photoshop* files, image size about 7x10 inches.

If you are only planning on gray-scale LaserWriter output, consider a logic board upgrade, and by all means install the new LaserWriter



Fetch That Image: *This screen shot shows a photo thumbnail index offered by Aldus Fetch, a recently introduced database program designed to keep track of graphic images. The larger image at left indicates that Fetch will display all five different pixel sizes offered on PhotoCD disks. This new category of software offers one solution at helping you keep track of PhotoCD disk contents. Another entry in this emerging software category is Kodak's Shoebox.*

8.0 driver. Apple's LaserWriter IIf and IIg printers support PostScript Level 2, and logic board upgrades are still available from Apple for owners of IINT and IINTX printers. If you have or acquire Apple's new LaserWriter Pro 600 or 630 printers, or Hewlett-Packard's 4M (all 600-dpi printers) you will have output that's about as good and fast as desktop laser printer technology can achieve.

If yours is an older printer that cannot be upgraded, by all means install LaserWriter 8.0 anyway. It has improved memory management schemes, and can speed output considerably. If your printer is a non-Apple brand, you may have to acquire a "PostScript Printer Definition" (PPD) file from your printer vendor to take advantage of features now offered by LaserWriter 8.0. Adobe Systems also is producing for sale a Chooser-level Mac printer driver called "PS Printer." This LaserWriter 8.0 work-alike also comes with a large selection of PPD files for a wide range of non-Apple brand PostScript laser printers.

Color Output from PhotoCD

PhotoCD has limitations if you're publishing (large) high-quality color photographs. Don't toss the drum-scanner yet, or close your account with the service bureau that has one. Kodak plans a new "Pro Photo CD" format that should address some of the quality limitations now found in the consumer version of PhotoCD. This new format will store four times as much image data (about 72MB uncompressed) as is now possible from the consumer PhotoCD disks.

I have seen color output from Photo CD, but have not produced color prints or published color from these digitized images. What I saw, from a high-resolution image-setter, was in a league with very good 16x20-inch prints from 35 mm slides.

On a personal user's level, it's just too expensive to regularly produce high-quality color output. True, you can use a Hewlett-Packard Deskwriter C to get ink-jet color prints, but that's not what I call high-quality output. This field is rapidly changing though. SuperMac now offers desktop dye-sublimation printers for less than $10,000, Canon offers a color printing solution with its new color laser copiers, and prices seem to be dropping with regularity. Remember when LaserWriters cost $6,000?

Maybe one day before the Millennium we'll all be able to afford color dye-sublimation printers for our personal desktops. (For that matter, Macintosh may have gone the way of Apple II by then.) When that happens, the transition to electronic darkrooms will be nearly complete. Until then, or when I win the Publisher's Clearing House Sweepstakes, I'll have to settle for gray-scale photos printed from a LaserWriter.

The Future: Fast and Cheaper

It's come clear that product cycles are getting very short now, and a machine that was new and fast last fall is this spring's last-in-pack. Just look at the Macintosh IIvx. It was on the price list for only four moths before the Centris line came along at similar and lower price levels. (IIvx owners needn't be reminded.) We can be guaranteed that the upcoming Power PC line and the unannounced Cyclone and Tempest Macs will further improve performance levels at competitive prices.

These changes, combined with faster CD-ROM drives, and faster printers with better resolution will provide even more power for producing projects with photographs in them. We really are only seeing the beginning of PhotoCD, and powerful new hardware on the horizon will only make handling and presenting these pictures easier and faster.

Arlington, VA, resident Dennis Dimick brought home his first *PhotoCD* the day before his first child was born. Each event has been a Renaissance. A former newspaper photographer and editor, Dennis tries to keep up on digital technology's effect on photography. He also edits photo essays for *National Geographic* Magazine, raises vegetables in the front yard, listens to shortwave radio, and photographs his daughter (of course for *PhotoCD*). Besides WAP, Dennis also is a member of BMUG, contributes to its Newsletter, and can be reached by Internet e-mail: ddimick@aol.com and ddimick@well.sf.ca.us.

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Audioshop

by Susan Kayser

It may seem unlikely that the happy owner of a Mac IIci would be covetous of a Classic II, but when the Macs with microphones came out, I confess to yearning a little. A loan of a MacRecorder, with an old version of *SoundEdit* (really old; it's v1.0, dated Jan. 1988) helped soothe 'mike envy.' It was fun getting sound bytes and bits of recordings on the Mac and I decided that someday, I'd get an up-to-date sound editor. When the chance came to review *Audioshop*, therefore, I jumped at it.

What does *Audioshop* Do?

Audioshop has a different emphasis than *SoundEdit*. *SoundEdit's* primary function (at least back in v.1) is to edit sounds. *Audioshop* can do some editing, but its strength is as a cataloguer of sounds. You construct "playlists" with it, which are basically aliases to your sound files. Playlists contain lists of selected sound files. You can add files, delete them, reorder them and adjust the playing characteristics of each file, setting the number of repeats, looping, volume, and so on. It's like programming your CD player and saving the program. In fact, the *Audioshop* window looks just like a CD player, and that's what the window is called–the "player."

Audioshop works with more than your system beeps, or sound bytes you've gleaned from the TCS. It prepares playlists of audio CDs too, so you can use your Mac CD drive to play your favorite tracks while you work. This ability is one of *Audioshop's* strongest selling points.

Getting Started

Audioshop takes up a moderate 530K on your hard disk. You install it by dragging the application icon from the floppy to your hard disk, and the *Audioshop* Helper to your System folder. The Helper lets you treat *SoundEdit* files as if they were *Audioshop* files (even changing the icon), and is supposed to let you see audio CD playlists in the Finder like any other playlist, but that hasn't been implemented as of v1.03. In addition, you get two floppies with assorted sounds and their playlists, totaling 1.6 MB altogether.

When you launch *Audioshop*, either by opening a playlist (each playlist is a separate file) or by launching directly from the application, you get a "player"–a window that looks like the front of a CD player (see Fig. 1), and lights flicker across the front emulating a warm-up. It's an elegant window, with all the buttons, dials, and so on, of a real player. It fits neatly across the 13" Apple monitor; a squarer format is provided for smaller screens. If you have opened a playlist, it starts to play through the list by default. Clicking buttons lets you start, stop or pause the play, move between tracks, adjust the volume and switch between playing single tracks or the whole playlist, and between playing once through or continual repeats. When you click the Display button, the display in the central part of the window switches between showing time remaining on the track, time elapsed, and the time you've been in that player. It also shows the name of the current track.

The menus provide little more than duplicates of the button commands, offering key commands as well. Clicking the buttons is by far the easiest way to operate, however, and it's more intuitive. The spacebar is an alternate control for Play/Pause and is very convenient.

Working with Playlists

The real fun begins when you

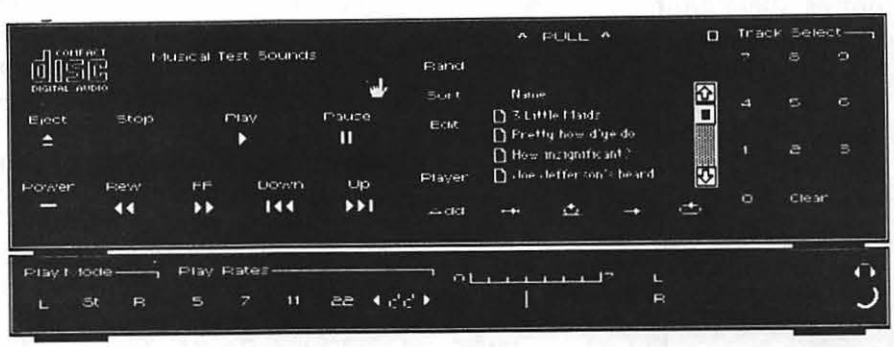

Figure 1

click the Playlist button. The display changes from showing a time to a list of tracks; at the top of the list is a bar labelled "Pull." When you pull the bar, you remove the Playlist window from its player. You can then resize it as you like. The Playlist window lists the tracks by name, number, type of sequencing (you can set the number of repeats and the pause length after each, separately for each track; this requires the Control menu), and characteristics of the track, such as its sampling rate, its length, and the type of sound (of which more later). You can rename track names, cut and paste them, and drag them up and down to reorder them; a cursor shows you exactly where you are, which is a very nice feature. You can sort them by clicking a button on the Playlist, by any of the columns (name, length, etc.). Cut and paste and drag work between playlists as well as within one. However, you must keep in mind that what you are cutting and pasting are references to files, not the sounds themselves, so to copy a sound into another application requires using the Editor. You can set a loopback in a track, by clicking the A and B buttons while it plays, to set the start and stop of a loop. Once a loop is set, the track will play continuously between the loop points. Removing loop points altogether requires the Editor. You can save playlists as real playlists and as text files. The text files can be imported into any word processor or spreadsheet, and provide the record-keeping function for your cataloging.

The Interface

The interface is decidedly non-standard for the Mac. It has been very nicely done, but takes a bit of getting used to. There appears to be no title bar to drag with, or close box. You can move the window, however–the title bar disguises itself as the Playlist name on the left side of the player window. Clicking the zoom box, located near the top center of the window, reduces the window to just the left hand control panel. To close a player, you click the Power button.

The manual is excellent, which is lucky, because you'd never figure out some features without it. It's been written as a User's Guide, explaining how to control each function, rather than as a reference manual, describing each menu item in turn.

Sound Sources

By this point, you may be telling yourself that you don't have enough sounds on your Mac to make this worthwhile. You will find, however, that with the help of *Audioshop* you can get at more sounds than you realized you had. First of all, there are the system beeps that came with your system software. Next, you may have copied sounds from friends or from bulletin boards, such as the TCS. Third, *Audioshop* lets you get at the sounds stored in any file on your Mac. Do you like the bubbling sounds from After Dark? Have you a HyperCard stack or a QuickTime movie that talks to you? Or a voice annotation in a document? All of these sounds are accessible. You can play them, and even paste any of them into other documents, or save them in other formats. You can make some unusual system beeps in this way.

If you have a CD-ROM drive, you may have been using Apple's CD Remote DA to play audio discs. *Audioshop* uses the DA to get at the sounds, but provides a much better interface, more options, and a printable playlist. Sound from an audio disc does not get digitized; you can't edit it, and you listen to it via the output jacks on the CD drive. The Mac merely controls the playlist. The playlist can derive from a variety of CD discs, and *Audioshop* will request the CDs as needed.

Recording Sounds

Those built-in mikes let you record a short stretch of sound whose length depends on the amount of RAM and the rate of sampling you select, which can be 22, 11, 7 or 5 Khz at 8 bits (CD-quality is 44 Khz at 16 bits). You can control this directly in *Audioshop*, from the Editor window, with the ability to save the sound in any of six formats. Be careful! Once a track is recorded, hitting the record button again will flush the sound, rather than letting you add to it.

Saving and Exporting Sounds

Several sound formats exist. The most general is the Audio Interchange File Format (AIFF), which is supported by all major audio applications. Macintosh sound resources, such as system beeps, are 'snd' resources–different between System 6 and 7; HyperCard sounds are 'snd' resources with a different header. *SoundEdit* has its own proprietary format.

Lastly, there's the QuickTime format. You can save a sound as a QuickTime Movie (it won't have a picture, just a playtrack), or *into* a QuickTime Movie, so you can add sound to an animation you've created. You can't delete the sound track after you've added it, but you can replace it by a tiny stretch of silence. (QuickTime 1.6, just released, will let you digitize sound from an audio CD if you have the Apple CD300 drive, at the full 44 Khz sampling rate.)

Audioshop supports all of these, with AIFF the default, and lets you convert between them and save any sound into an application, or as a system beep.

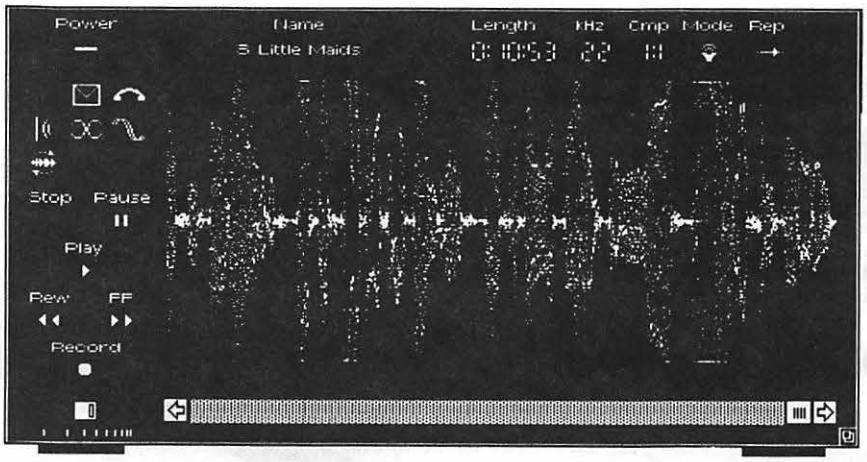

Figure 2–The Editor Window.

Editing Sounds

The Editor window, (Fig. 2) which you can open for a selected track from the Control menu, by command key, or by clicking the Edit button in the Playlist window, is where you can make changes to the sound track. You can cut and paste bits of the sound, across tracks and players as well as within a window.

Adding special effects to the sounds is quick and easy with the buttons in the Editor window, but figuring out what they do is less easy. I had to resort to the manual, in fact. The top row of buttons lets you adjust the amplitude or pitch of the selected portion of the track (for stereo tracks, you can select either channel or both). The middle row adds Echo, Vibrato or Flange effects to the selection; you can set parameters for the effects from the Edit Menu. (Echo repeats part of the track with a delay, Vibrato adjusts the pitch by a varying amount, and Flange adjusts amplitude by a varying amount.) The lower row reverses the selection (plays it backwards), crops the unselected part, and switches channels for stereo sounds.

Comparisons

The major competitor to *Audioshop* is *SoundEdit* Pro. I haven't seen that yet, but even my ancient version can do more editing than *Audioshop*, with more effects, better track labelling, and the ability to mix tracks. (The report is that *SoundEdit* Pro is slow, with a clumsy interface, but with a lot of features. It is also much more expensive.) The ShareWare Sound Mover can do a bit of editing, as well as installing sounds into applications, the system Sound control panel handles recording, and the CD Remote DA can control a CD's playing although not as neatly as *Audioshop*. When it comes to managing sounds, *Audioshop's* playlists are excellent, and none of the others has anything comparable.

Conclusion

Audioshop has its faults. It has a tendency to create unwanted players, it won't show titles until they have been saved and it has only limited effects. For the price, however, you get a lot of maneuverability, good control of your CD player and other sounds and an interaction with QuickTime that no other application offers yet.

Title: *Audioshop* v1.03

Requirements: System 6.0.7 or higher on any Mac; 1MB RAM (2 MB recommended), useful with CD-ROM drive (with external audio output).

Publisher: Opcode Systems

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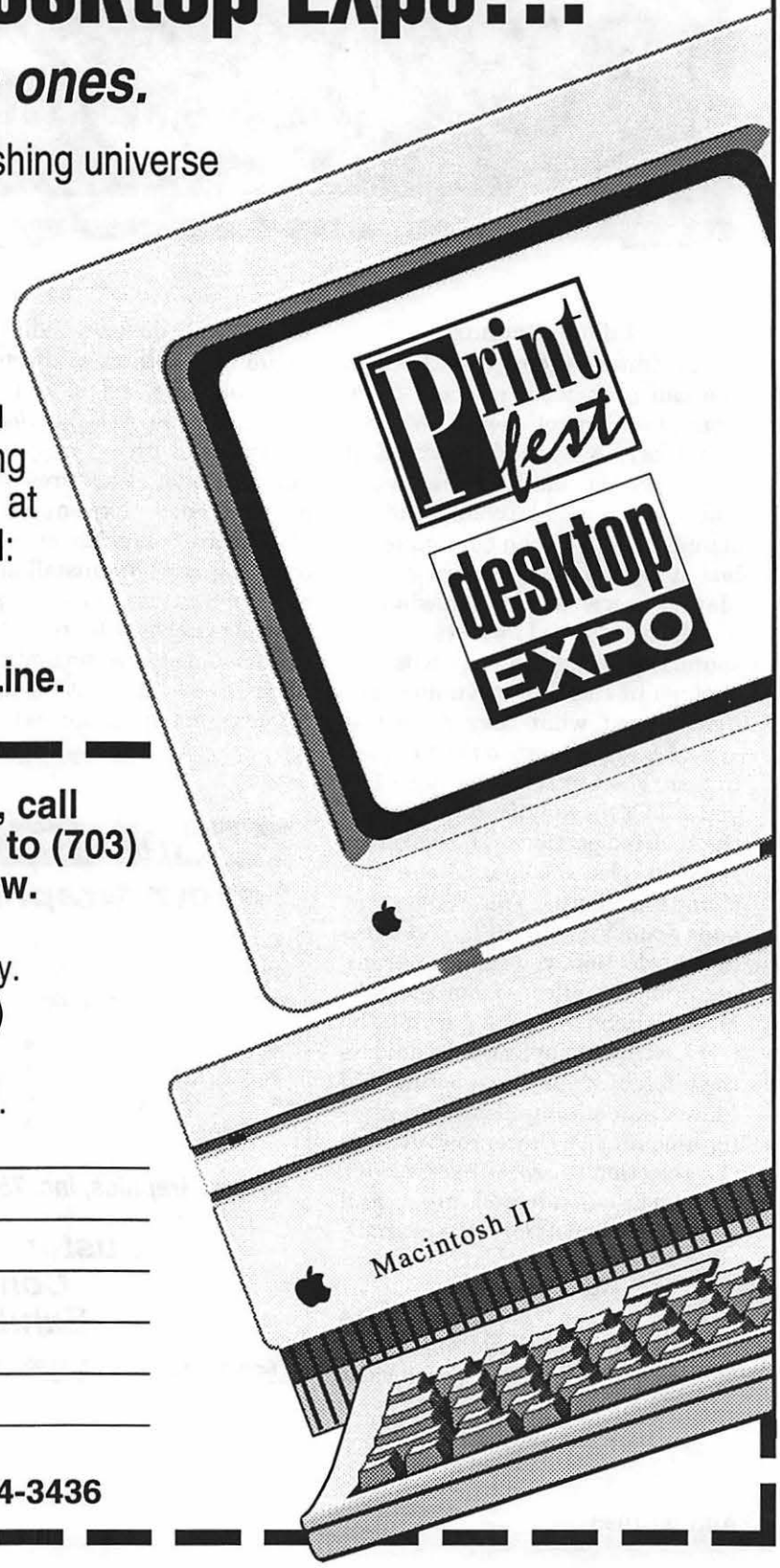

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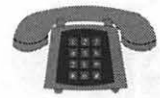

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8	9 *Intro to the Mac–Part 1*	10	11 DB SIG WAP BoD	12 Stock SIG	13	14 Annapolis Slice Frederick Slice
15	*Writer's Deadline* 16 W *Intro to the Mac–Part 2*	17	18 Excel SIG UM SIG	19	20	21
22	23 *Intro to the Mac–Part 3*	*Editor's Deadline* 24 E	*Maint'ing Your Mac* 25 NOVA EdSIG-Walnut Hill	26 Ed SIG	27	WAP 28 General Meeting AW SIG
29	30 IIGS SIG - Va	31				

September 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Mac Programmers SIG DTP SIG	2 Columbia Slice Game SIG	3	4
5	6 Pi SIG	7 Telecomm SIG	8 DB SIG WAP BoD	9 Stock SIG	10	A III SIG 11 Annapolis Slice Frederick Slice
12	13 *Intro to the Mac–Part 1*	14	*Writer's Deadline* 15 W Excel SIG HyperTalk SIG	16	17	18
19	20 *Intro to the Mac–Part 2*	21	22 *Maintaining Your Mac*	*Editor's Deadline* 23 E Ed SIG	24	WAP 25 General Meeting AW SIG
26	*Intro to* 27 *the Mac–Part 3* IIGS SIG- NIH NOVA EdSIG	28	29	30		

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; Dolley Madison Library, 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.

Education(Ed) SIG
4th Thursday; 7:30 PM; WAP office.

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

Frederick Slice
2nd Saturday; 10:00 AM; Frederick Mall.
CrackerBarrel BBS (301) 662-3131.

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.

Northern Virginia Apple & Macintosh Educators' SIG
last Wednesday, 7:30 PM; Walnut Hill Center, 7423 Camp Alger Ave., Falls Church, VA. Meeting changes location in September.

Programmer's Interface(PI) SIG
1st Monday (except Mon. holidays).

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, Nancy Seferian (202) 333-0126 for details.

Notice: Plans change! Anyone with calendar information please call the Calendar Editor, Bill Wydro (301) 299-5267, the Managing Editor, Debbie Hoyt (703) 450-0714, or Beth Medlin at the WAP office (301) 654-8060.

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HyperCard Scripting
Jamie Kirschenbaum evenings (703) 437-3921
Richard Kozloski (703) 352-1523

SoundEdit
Jamie Kirschenbaum evenings (703) 437-3921

MAC DISKETERIA LIBRARY

Dave Weikert (301) 963-0063

General

Assistive Tech
Missy McCallen (703) 323-6079

Games-Apple II
Charles Don Hall (703) 356-4229
John Wiegley after 2:15 (703) 437-1808

IBM
Leon Raesly (301) 599-7530

Math-OR Applns
Mark Pankin (703) 524-0937

Modems-General
Allan Levy (301) 340-7839

Hayes Smartmodem
Bernie Benson (301) 951-5294

Practical Peripherals
Allan Levy (301) 340-7839

Printers-General
Walt Francis (202) 966-5742
Leon Raesly (301) 599-7530

MX-80
Jeff Dillon (301) 662-2070

Stat Packages
David Morganstein (301) 972-4263

Stock Market
Robert Wood (703) 893-9591

MS/DOS
Tom Cavanaugh (703) 627-8889

Dvorak Keyboard
Ginny & Michael Spevak (202) 244-8644

Frederick Apple Core Help Line

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

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

Annapolis Slice Help Line

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Mac

Richard MacLean (Crofton)	410-721-8157	MacIIsi
Steve Toth (Edgewater)	410-956-6557	Mac+
Bob Peterson (Crofton)	410-721-9151	MacSE
Sandy Bozek (Annapolis)	410-974-6062	MacII,Scanner
Bill Arndt (Glen Burnie)	410-761-6997	MacII,CRABBS BBS
Lou Sapienza (Crownsville)	410-923-3415	MacIIsi,Canvas
Barry Conner (Annapolis)	410-573-7140	Mac Telecomm
Theressa MacGregor (Odenton)	410-551-5913	PowerBook, DOS
Dick Stewart (Millersville)	410-987-2057	Mac+
Bill Waring (Severna Park)	410-647-5605	Mac,Excel

Apple II

Seth Mize (Glen Burnie)	410-766-1154	IIGS,II+,III
Louise Tanney	410-647-0875	IIGS, AW
Helen Hamerstrom	410-647-1720	IIGS, IIe,DTP,HS
Manse Brouseau	410-757-5215	IIc,AW
Bill Derouin	410-647-0802	IIe,pc,AW,DB
Dick Stewart (Millersville)	410-987-2057	IIc+

Software Review

Yearn2Learn: Learning with the Peanuts Gang

by Ray Settle

Having a toddler has opened up a whole new area of educational computing to me–pre-school learning packages. I have probably indulged myself and my daughter a bit much in this area, but hey! it's better than Nintendo. Of the many packages that I have installed (and some deinstalled) on my hard drive, the new package from ImageSmith is the most interesting, diverse and flexible. My daughter and I have found the various segments delightful and instructive. Even though the program has relevant segments for a three year-old, I anticipate that it will hold her attention and be relevant through second or third grade.

Fortunately, when I purchased my LCII, I was prescient enough to insist on getting the Apple 13" monitor. *Yearn2Learn* (Y2L) apparently will not run on the usual 12" monitor that comes with the LCII. (While that 12" monitor is excellent, it is still just an enlarged 9" monitor ala the Classic and Plus. If you are considering one of the LCs, I heartily recommend a larger monitor–either the Apple or the NEC 4FG.) It is unfortunate that a 13" monitor is required since most LC bundles have the 12" monitor. I imagine that designing a package for the 12" monitor would require a reworking of the entire graphic package to fit the smaller resolution screen. I know that packages designed for the 9" screen and hence the 12" monitor (*McGee*) suffer some distortion on the larger monitors.

Most of these new pre-school packages require huge amounts of hard disk space and Y2L is no exception; it requires 11 megabytes of free hard drive space for installation and 9.3 megabytes for permanent residence–which is all the more argument for huge hard drives. Y2L is well worth the space, but beware, there are other packages out there that will demand even larger bites of your hard drive. The good news is that Y2L seems to be compatible with *AutoDoubler* 2.01 and the extensive list of INITs (including *KidDesk*) which infest my system.

Y2L consists of five segments: Comic Strips, Math Games, Geography Games, Coloring Book, and Flying Ace Games. Of the five, my daughter and I like the Comic Strips best. The five strips are interactive and animated if one finds the right hidden buttons. A percentage score at the end of each strip tells one how successful he/she has been in finding all the hidden buttons. Finding the buttons is half the fun. The captions are presented both in print and via digitized sounds. Each caption can be repeated entirely, or partially, to aid in word recognition and in reading skills.

The Flying Ace Games appear to be purely recreational. One part just animates various items in a circle around Snoopy. The other part is a flying game in which Snoopy flies his doghouse past various obstacles. The game flow is a little jerky on my LCII. I was disappointed that the Red Baron failed to challenge Snoopy in the sky, but I guess it's best that children save their involvement in shoot-em-ups at least until their Nintendo stage.

The Math Games offer instructional diversion at three levels of difficulty from simple counting to multiple number addition. All three have clever animation and sound effects. The first level includes addition and subtraction by having various members of Woodstock's social circle come and go; the second level features a bowling game in which pins must be subtracted then added together to get a score; the third level take place in a pumpkin patch and is mainly addition.

The Geography Games explode various maps so they can be reassembled by click dragging the states back into their proper places. Again there are two levels of difficulty (easy and hard). Another option is to name the states.

The Coloring Book offers an interesting interface; colors are selected by clicking on the various crayons pictured at the top of the screen; five pen sizes and five eraser sizes are available down each side of the screen. The bottom contains camera buttons which enable the artist to save a work at various stages of completion and to start over on a new picture. The selection of pens is rather limited making it difficult to maneuver and stay within the lines, but the program is very forgiving and redraws any lines colored over although the color spilling outside the lines remains. A unique feature allows multiple saves of the work in progress at various stages–if one messes up a selection in the latter stages of coloring, s/he can always go back to a previous level and resume. Overall, we found the coloring book the least appealing part of the package. I guess we were just too used to the paint can

tool in *Kid Pix*. I suspect that older children may find the pens more like real crayons and will be able to maneuver them better.

Taken as a group, the Y2L package is well worth the money and disk space; it is even worth upgrading to a bigger monitor. As a side note, I had difficulty loading the package when I first acquired it after waiting for over a month for it to be available at the cheaper discount mail order price. (I have seen it in Computer City recently for a good discount price.) I called the 800 order number and was about to get a non-toll-free tech support number, but when I objected to paying for a toll charge to California, the customer representative decided to send me replacement disks by FedEx instead of forcing me to place a toll call. I received the new disks early the next day (Saturday) and the program installed flawlessly. There appears to be some form of copy protection on the disks which somehow went awry on my copies and impolitely kept calling me a software pirate. For someone who runs only legal software on his computer (and who has a lot of discarded paid-for software), I found the name calling insulting; however, I do not object to such methods when it is deserved because I am tired of paying extra for pirates.

Title: Yearn2Learn

Manufacturer: Image Smith

System Requirements: High density hard drive, 13" color monitor; four megabytes of RAM; 11 megabytes of hard disk space; System 6.07 or higher.

SRP: $64.95

Discount Price: $45.00

MacNovice

Quicken 3.0 and System 7— A MacNotice

by Ralph Begleiter

Because Quicken, the home and small-business accounting software, is among the Macintosh community's most popular tools, here's an important notice about an unadvertised update to the program. This update fixes a "bug" in Quicken which applies to System 7 users who also use 32-bit memory addressing on their Macs.

Under System 7, when 32-bit memory addressing is turned on in the Memory Control Panel, Quicken 3.0 does not allow users to *edit* or *print* their Merchant Lists. When attempts are made to access the Merchant List data, Quicken crashes badly (freezing the screen and requiring a Restart to resume work). In the Mac developers' lingo, this problem indicates Quicken 3.0 is not "32-bit clean."

When I contacted Intuit, the developer of Quicken, by phone about this problem, the customer service representative who answered my call didn't even know what the phrase "32-bit clean" meant to Mac users. She also advised me (improperly) than the only way to recover/retrieve/edit my Quicken Merchant List data would be to recreate my entire Quicken file and reenter the data from scratch.

I knew this could not possibly be the only answer, so I experimented with various efforts to retrieve the data. One of my experiments was to shut off 32-bit. BINGO! My data was suddenly accessible.

A letter to Intuit produced a written response from Christopher Lee, Intuit Technical Support [(415) 858-6040 X7410], informing me that Intuit has "created a Maintenance Release for Quicken 3.0 which has corrected the problem with transmitting to Checkfree with the 32-bit Addressing enabled." This response suggests that there are other aspects of the 32-bit addressing problem beyond the one I was experiencing.

Mr. Lee informed me that a replacement program disk was on its way. The Quicken 3.0 "maintenance release" did, in fact, correct the problems I was having with the earlier release.

Be aware, however, that Intuit has not updated Quicken's version number on its "maintenance release." This means that aside from comparing the program's "Creation Date" and "Modification Date" in the GET INFO box, there's no way to distinguish between the latest version and the earlier ones. (If you're brave, you could use Resource Editor to update the version number or the program's icon to indicate the bug-fix version.)

Intuit is reachable at 66 Willow Place, P.O. Box 3014, Menlo Park, CA 94026-3014 and by phone at (415)322-0573 (Intuit does not have a CompuServe address).

Software Review

The Banker's Secret

by David Oliver

If you have a bank loan (car, student or house) and would like to save a bundle of money, then *The Banker's Secret* software from Good Advice Press just may be the ticket. Actually, the program consists of software and a book entitled *The Banker's Secret* written by Marc Eisenson. Marc introduces the concept of "pre-paying" a loan principal which saves you from having to pay the interest associated with an individual loan payment.

Installation

Installing *The Banker's Secret* is a snap! The program consists of one disk. You simply drag the contents of the disk (the program and two sample files) onto your hard drive. Open *The Banker's Secret* folder, double-click on the program icon and you're off!

Why Banks are Rich

When you borrow money from a bank or other lending institution, you pay back the amount borrowed plus an additional amount that is the result of interest on your remaining loan amount. Every payment you make consists of a combination of loan principal and interest. Depending on the loan amount and interest rate, the interest payment you make is usually much greater than the principal (the actual loan amount) that you repay every month (or whatever pay schedule you follow). For example, if you borrow $75,000 that will be repaid in 30 years at 10% interest, the amount you would have to pay the bank back every month would be $658.18. Of that, $625.00 is *interest* and only $33.18 is actually principal. In this example, your principal payment would not surpass your interest payment until year 23 of the loan (the 277th of 360 total payments)! You're predominantly paying interest for the first 23 years, barely making a dent in the original loan amount you borrowed!

How to Fight Back

Now please don't misunderstand me. Most of us need banks and other lending institutions in order to purchase such expensive items as houses, cars and college educations. But you have a right to use whatever legal means that are available to reduce the total amount of money you have to pay back. That's where *The Banker's Secret* can help. It automatically calculates repayment figures which borrowers are interested in: total interest for a particular loan, what interest rate you would need to have a certain payment, loan term-length effects, and one of my personal favorites: monthly payments (principal and interest only, not including loan insurance, taxes, etc.) for a given combination of repayment term, interest rate and loan amount. Figure 1, the main menu, shows what options are available.

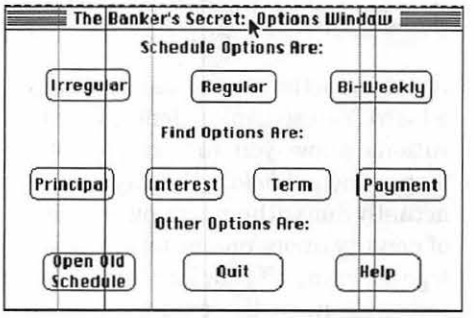

Figure 1

More importantly, The Banker's Secret calculates the effect that prepaying the principal has on the total cost and length of the loan (pre-pay-

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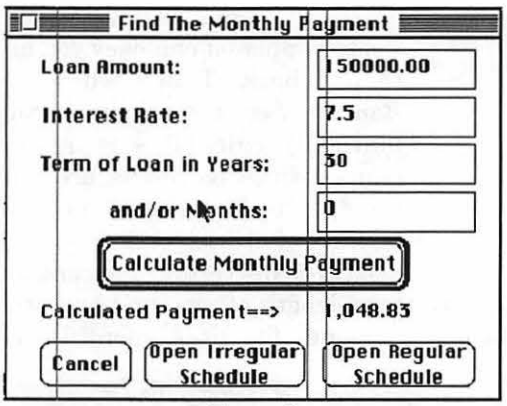


Figure 2.

ing reduces the time it takes to repay a loan). You see, many lending institutions allow you to "pre-pay" the loan principal *before* the payment is actually due without paying any kind of penalty (more money for the privilege of paying off your loan early). Let me explain. In the example I used above, I said that the principal payment is approximately $33. The interest associated with that principal payment is $625. Call these principal and interest payment #1. The next principal payment due is also approximately $33 with the interest also $625. Call these principal and interest payment #2. Now, you are (usually) allowed to pay principal payment #2 at the same time you pay principal and interest payment #1. When you do this, however, you do not have to pay the interest charge associated with principal payment #2! You just saved yourself $625! Aren't you happy! You can continue to do this throughout the life of the loan, amassing an enormous savings.

Eye Opening Figures

Talk (or in this case, words are) is cheap, so what tangible output will this program produce? Here is some sample output to better show off the capabilities of *The Banker's Secret*. There are two three-payment schedules available, Irregular, Regular and Bi-weekly. An Irregular payment schedule lets you pre-pay by matching the next month's principal payment whenever you can afford it. A Regular payment schedule assumes you will make the same pre-payment every month. Bi-weekly lets you pay in either of the above schedules, only it is calculated based on bi-weekly versus monthly payments.

For my example output, I will use a fictitious, fixed, 30-year, conventional loan of $150,000 with a 7.5% loan interest rate (which seems average these days). Figure 2 shows the monthly payment associated with this loan. Figure 3 shows a summary of the cash outlay associated with the life of this loan if no pre-payments are performed and also if $100 pre-payments are performed. Pay particular attention to the difference in the amount of total interest. Now look at Figure 4, which shows the total interest paid assuming a monthly pre-payment of $50. As you can see from these examples, there is a *huge* savings when the principal is pre-paid each month.

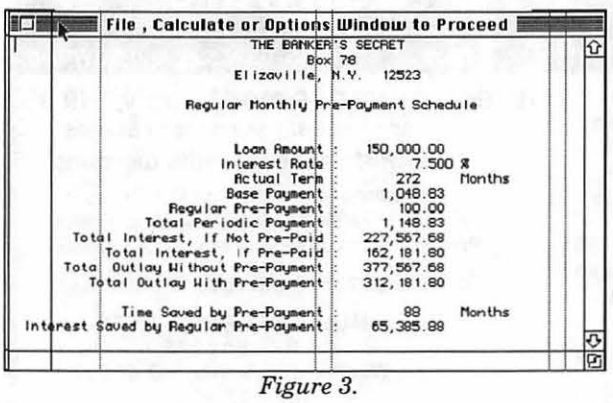


Figure 3.

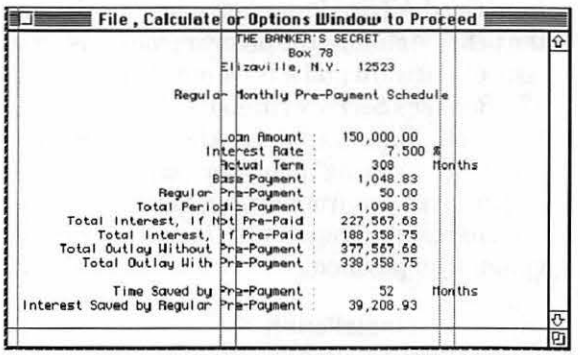


Figure 4.

The Bottom Line

I showed two very limited examples of what *The Banker's Secret* can do. Another application is to use *The Banker's Secret* to run a series of summary schedules for 30-year fixed, 15 year fixed, and various ARM (Adjustable Rate Mortgage) loans available. You will have in front of you the information you need to pick the best loan for you. *The Banker's Secret* is a gem of a program that can help you save a lot of money in the long run. The authors (or publishers) even have a *Banker's Secret Hotline* that you can call if you have any problems that are preventing you from pre-paying. Wow!

If you like to crunch numbers, you could perform all of this on a calculator. But I can think of other projects waiting for the extra time that using this program will save. At the very least, it will enable you to free up money to spend on yourself instead of giving it to the lending institution.

Title: The Banker's Secret (book and diskette)

Author: Marc Eisenson

System Requirements: Any Mac with 512K memory and up, floppy or hard drive, System 6 or 7.

Software Review

Building Your Wealth: Computerized Investing

by Chris Kagy

The home computer has opened up all sorts of possibilities for the personal investor. Almost immediately after its introduction, software became available to balance checkbooks and calculate loan amortizations. If you were using a spreadsheet like *VisiCalc*, you could do almost anything with the computer that you previously did with paper and pencil. As hardware evolved, so did the software. More complex analytical features which were previously available only to large brokerages were soon ported to personal computers; people could engage in the pastime known as technical analysis–tracking market fluctuations and using the information gained to predict the future.

This is not what *WealthBuilder* by Money Magazine does. Nor does *WealthBuilder* mimic software akin to *Quicken* and Andrew Tobias' *Managing Your Money*. These applications help you track where your money is going and how it is, hopefully, growing. They categorize your income and expenses, print budgets, and generally do other helpful things.

WealthBuilder (WB) fits somewhere in the middle of these two extremes. You feed WB information about your spending habits, income, investments and goals, and using that information, WB shows you how to grow your money to achieve your desires.

System Requirements

Before going into detail about the program's features, a brief word about system requirements and installation. WB requires, at minimum, System 6.0.5, one megabyte of RAM, five megabytes of hard disk space (up to ten megabytes if some of the optional databases are installed), and, optionally, a modem for automatic updating of security quotes. For this review, I tested WB on a 2.5 MB Mac Plus with too many INITs and gadgets. Due to lack of disk space, I was unable to make use of the on-line link and additional databases generously provided by Reality Technologies.

WB comes with Apple's Installer program to make the initial installation a snap. Be sure to disable *all* INITs. Your hard disk *must* have at least five megabytes free. My installation went without a hitch and I was soon playing around, entering my budget and current financial picture.

Who It's Meant For

While just about everyone who is working should be able to benefit from a program like WB, I have the feeling that it is most appropriate for people who are established in their careers and have a stable financial picture. My life, as a young professional with a new wife who is in law school, still has too many question marks for me to be able to use this program to its full potential.

I tested WB on two systems, a 2.5 MB Mac Plus with System 6.0.8 and a 4 MB Centris 610 running System 7.1. The program ran flawlessly on both, though the speed difference was astronomical! Whenever WB draws its "Timeline," a plot of your actual assets versus what you will need for retirement, for instance, it must do quite a lot of complex calculations. This made using the program on the Plus excruciatingly slow until I realized I could hide the Timeline.

The basic program takes up a minimum of five megabytes of space on a hard disk and up to ten megabytes if all of the extra stock, bond and mutual fund databases are added. Fortunately, not all of the files that come with the program are essential. For instance, there is a large and very complete selection of help files and tutorials that will answer quite a lot of questions that might crop up during a session. They do take up 1.5 megabytes, though, and the program will run very well if they are absent.

The *WealthBuilder* Way

Throughout the brief well-written manual, a concept called "The *WealthBuilder* Way" is referred to again and again. This is the plan and strategy around which WB is built. While using the program, you are walked through six steps that help you:

- organize your finances
- define your goals
- create a strategy
- choose the right investments
- follow through, and
- maintain your plan

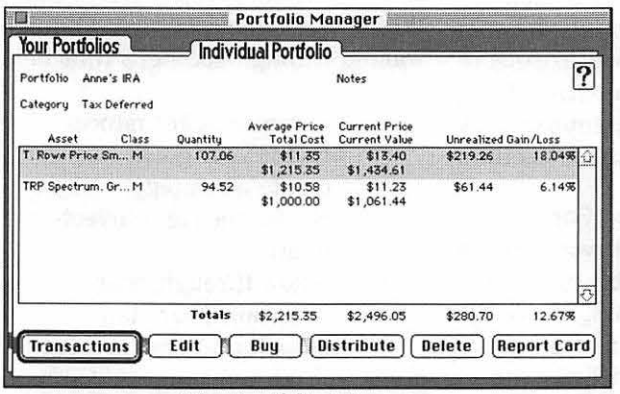
WB has tools and worksheets that assist you as you progress through the various steps that make up this strategy. There are worksheets and graphs to help you enter accurate information and to graphically see how different scenarios will play out. One of WB's big assets is its databases of stock, bond and mutual fund information which you can search to help find investments that fit your needs. By doing periodic re-assessments of your financial picture WB

claims its "*WealthBuilder* Way" will help you reach your goals.

Organize Your Finances

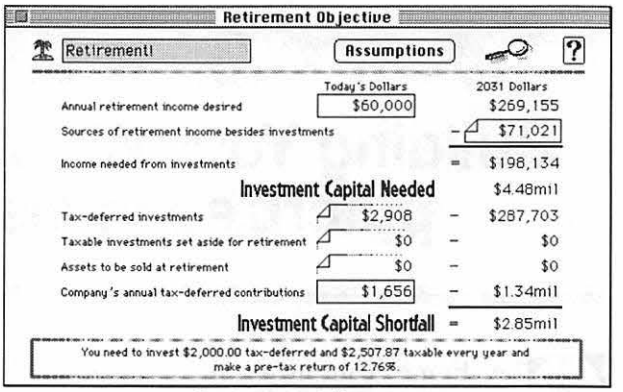
If financial planning can be likened to taking a trip, allow me an analogy. Before you decide what route to take to get to your destination you had better know where you are starting from! WB takes care of this by having you complete a balance sheet and a net worth statement. These form your current financial snapshot, showing not only how much money you currently have, but how much you owe, where the cash is coming from and to where it is going.

With a balance sheet, net worth statement, a calculator and a good eraser, quite a few people would be able to basically figure how fast their fortune has the potential to grow (or shrink!). This is exactly what WB does, too, although it can automatically take into account things such as paying off loans (which you will have entered in your balance sheet) and the effects of inflation.



The Portfolio Manager.

There is a very nice portfolio management section that allows you to easily track current investments and ease record keeping. Securities are grouped by portfolio, so you can set up one for your IRA, a separate one for your spouse, and a third for taxable investments. WB continually figures unrealized gains on entire portfolios, and average price, total cost, and unrealized gain on individual securities. Current price information can be entered manually or, if you choose, electronically. You also have the option of tracking any of the several indices are used to measure the performance of the national economy and use them as a measure of the performance of your portfolios. If you choose to have your pricing information updated electronically, the indices are automatically updated as well.



Retirement Planning.

WB also asks you to provide information about yourself, your spouse and any dependents so it can estimate how long you have to grow your fortune and, after retirement, how long your nest egg will have to last. This information is also taken into account by another tool that helps you estimate your insurance needs. You are also asked to estimate your tolerance to risk. In general, investments that entail more risk will return a higher growth, but high risk can also lead to sleepless nights for some. This tolerance is one more factor that is taken into account when WB offers a suggested portfolio to reach your goals.

Define Your Goals

WB will be of no use to you if you have no goals. Your goals don't have to be specific and they can change at any time. These are what WB uses to calculate how much money you are going to need, and, based upon your current savings habits, how much you are actually going to end up having. Once a goal or objective is defined, it shows up with your projected and required savings, as a graphical representation on a time line. It's the difference between these two amounts (sometimes a *large* difference!) that WB purports to help you fill.

In an attempt to give the most accurate picture possible, WB has six different types of "objectives" which you can select from: Education, Home, Retirement, Special, and Good and Bad Events. These respectively deal with sending someone to school, buying a home, retiring, and anything else you can come up with. Events concern themselves with things like raises or layoffs–anything that will increase or decrease your income or expenses. The information that is asked for in each case is slightly different, but each time it asks how far down the road you're planning on the event to occur and it gives you an option to earmark some of your current savings/investments to go toward this specific goal.

Some of the questions asked are very well thought out. While dreaming about my retirement I was filling in responses to how much per year I'd like to live on, etc., when I ran across a couple of radio buttons asking if, during the span of my leisure years, I'd like to draw down all my savings

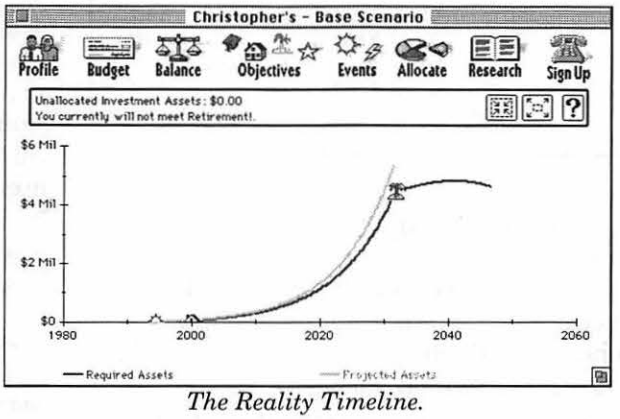
or save some percentage for my heirs. Initially, I was feeling generous. I'd like to have 50% of my nest egg left over for Junior and family. I then popped back to the timeline to see how far off I'd be, based on my current balance sheet & net worth. It looked as if Junior was going to be pretty poor if I didn't do something soon! I entirely removed Junior's stake in my retirement and my projected worth got closer to that needed, but it is clear I'll have to consider getting out of the non-profit sector!

I found one limitation with the objectives is that you're only allowed to define one retirement. If my wife decides to continue to work after I retire, there's no way (that I have found) to take this into account.

After collecting the information, WB then places your goal or event on its Timeline with any others and figures the assets you will need to accumulate to attain your desires. You can, at any time, add, delete or change the events, and WB will dutifully recalculate all its projections. This is done in order to help you...

Create a Strategy

The method of "asset allocation" investing revolves around the idea that by changing your mix of investments you can maximize your growth and, at the same time, minimize the risk of losing your principal. When entering your personal information, WB asks you to indicate your willingness to take risk and it now uses this to help figure out a suggested portfolio. In determining the mix of stocks, bonds, cash and precious metals WB thinks will maximize your return, it also looks at how long you have until you will retire. The closer retirement is, the less risk WB suggests you take with your money.



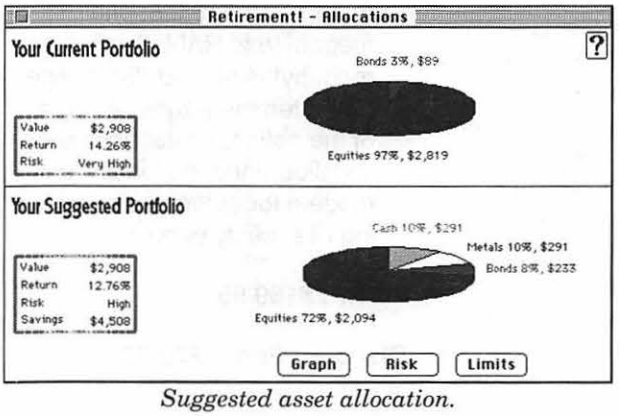
The Reality Timeline.

This suggested portfolio is displayed as a very nice pie chart under a second chart that shows you the way your money is currently distributed. Clicking on one of the slices of the pie will open up WB's database of stocks, bonds and mutual funds so you can use the tools there to select your investments.

You have the option of restricting how WB creates this asset allocation. You could, for instance, indicate that under no circumstances do you want to have more than 5% of your assets in precious metals–WB defaults to a maximum of 10%–and this limit will be obeyed when figuring the ideal division of your funds.

If you'd like to compare the performance of your current portfolio with that suggested by WB, you can have a graph drawn that uses historical data to graphically compare the two. Since this is historical data, and not a prediction of the future, it is interesting mainly for its educational value and for the ability to compare results across a variety of economic conditions.

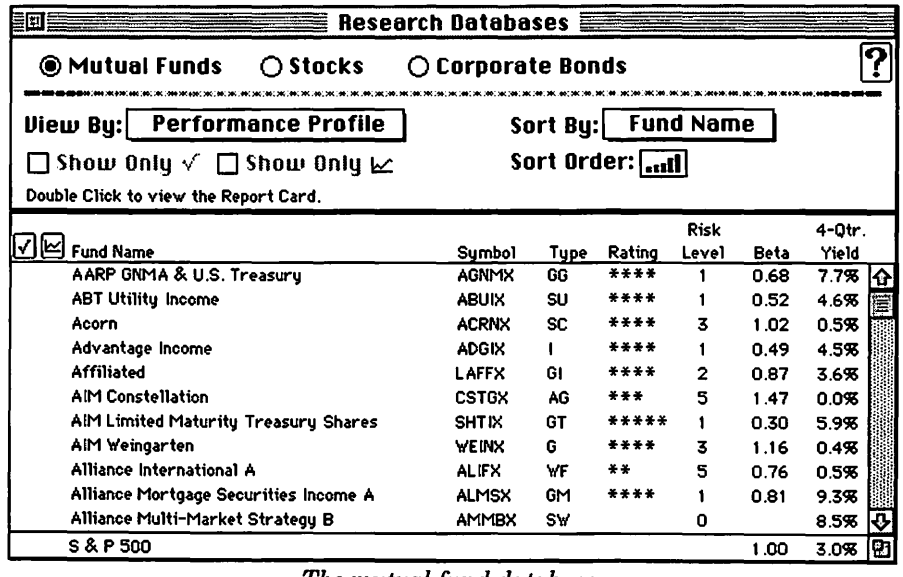
WB takes this a little further and, based on some estimations of inflation and other factors, computes and displays for you on the "Reality Timeline" a graph of how your value will grow over time. You can overlay this graph with another, showing how much money you will have to have in order to meet all the goals you specified. This can be either great news–or an honest reality-check. Having seen this, you may want to go back and fiddle with the way that you have allocated your savings.



Suggested asset allocation.

Choose the Right Investments

To help you choose the specific investment vehicles you will use to optimally allocate your money to defeat the evils of inflation and to reach all the goals you have previously defined, WB provides a very complete and extensive database of stocks, bonds and mutual funds which you can search on a variety of criteria to find just what you are looking for. Initially, the database contains information on 1500 securities; 500 each stocks, bonds and mutual funds. You can search the securities on 12 criteria including security type, one-, five-, and ten-year return, sales charge, total return, beta (a measure of volatility) and an adjusted risk rating developed by Money Magazine. Com-



Fund Name	Symbol	Type	Rating	Risk Level	Beta	4-Qtr. Yield
AARP GNMA & U.S. Treasury	AGNMX	GG	****	1	0.68	7.7%
ABT Utility Income	ABUIX	SU	****	1	0.52	4.6%
Acorn	ACRNX	SC	****	3	1.02	0.5%
Advantage Income	ADGIX	I	****	1	0.49	4.5%
Affiliated	LAFFX	GI	****	2	0.87	3.6%
AIM Constellation	CSTGX	AG	***	5	1.47	0.0%
AIM Limited Maturity Treasury Shares	SHTIX	GT	*****	1	0.30	5.9%
AIM Weingarten	WEINX	G	****	3	1.16	0.4%
Alliance International A	ALIFX	WF	**	5	0.76	0.5%
Alliance Mortgage Securities Income A	ALMSX	GM	****	1	0.81	9.3%
Alliance Multi-Market Strategy B	AMMBX	SW		0		8.5%
S & P 500					1.00	3.0%

The mutual fund database.

bined with the other aspects of the WB program, this is a very powerful tool.

WB may show you that in order to save the $35,000 you want to have available to use as a down payment in five years, you will have to add $300 dollars each month to the money you have already saved. Additionally, you will have to earn 12% annually on this stash. You can then search the database for all stock mutual funds that have a historical five year return of 15% (just to be safe), no sales charge, and will let you invest as little as $300 each month. WB will filter out all funds that meet your criteria and display them in a scrolling list, You can display much information about all of these choices that can help you narrow down your selection. If you "check" a security as in indication that you plan to purchase, it will be included on a report generated later that includes performance information and stock symbols.

This database, while initially including 1500 securities, can be expanded to include over 12,000. To avoid getting out of date, Reality has a couple options available on a subscription basis to keep your database up-to-date–either electronically or by a quarterly mailing of a disk set.

Follow Through with the Appropriate Actions

Having entered all your fiscal information, looked at your future plans, and selected investment vehicles, the time has come to actually do something! As an aid, WB will print a very nice report outlining your current budget, balance sheet, portfolio (including allocation of assets), objectives and purchase plans. All that's left is for you to go out and realign your finances along the lines suggested by WB.

Maintain Your Plan

Reality suggests that you update the information in WB every quarter or so; more often if there is some radical change in your life. You should update your balance sheet, budget and portfolio and check your asset allocation against that suggested by WB. By comparing the newly generated graphs and reports with those from the past, you'll be able to accurately track your financial progression toward whatever goals you have defined. There is work involved, but the potential rewards....

WB is not the kind of program that you'll use every week when you write checks, they say. I found that I update my mutual fund portfolio information on a weekly basis, but don't alter my budget and allocation information nearly as often–once a quarter is about right. The suggestion of reallocating your assets every quarter seems excessive to me. Once a year, barring extraordinary circumstances, is the usual suggestion.

There is no guarantee that by using this program and the investing method it advocates that you will get rich and enjoy life forever. At the very minimum, you will have an organized picture of your finances which will allow you to make some intelligent investment decisions. Reality has tried to include in WB some of the tools necessary to make those decisions.

Chris Kagy works for a non-profit organization in the field of international education. Every once in a while he has to remind himself why he chose not to be a writer.

Publisher: Reality Technologies, Inc.

Address: 3624 Market Street
Philadelphia, PA 19104

Telephone: (215)387-6055

System Requirements: Minimum, System 6.0.5, one megabyte of RAM, five megabytes of hard disk space (up to ten megabytes if some of the optional databases are installed), and, optionally, a modem for automatic updating of security quotes.

MSRP: $169.95

Discount Price: $70.00

New Files on the TCS

by Lawrence I. Charters

And now for something really different: Normally this column highlights some of the new Macintosh files uploaded to the TeleCommunications System (TCS) during the past month, in this case from mid-May to mid-June. But there are actually *two* TCS systems running right now, the old one and a new, turbo-charged one undergoing testing. By the time this reaches print, the old one will probably be retired, and the new one will be up and running. So–this month's column will be devoted to TCS:TNG (The Next Generation). Technically, none of this is available. But all of it might be by the time you read this.

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 signing on to the TCS, the Pi's "24 hour General Meeting."

New File Areas

On the old TCS, Macintosh files were divided up into Fonts, Games, Graphics, HyperCard, Technical Notes, Utilities, and DA/INIT/CDEVs. Additionally, Apple System Software, Music and MIDI, GIF images, and TCS Essentials were popular with Mac users.

TCS:TNG retains Fonts, Games, Hypermedia (formerly HyperCard) and Extensions (DA/INIT/CDEV), but Graphics has been subdivided into Graphic Images, Graphic Utilities, and Multimedia/QT (QuickTime). "Things which used to get dumped into Utilities" will now be subdivided between Utilities, Applications, Sounds, Telecommunications, Product Demos, Product Support and Education. "Things which used to be dumped into Technical Notes" are now subdivided into Information, Programming, and Technical.

Apple System Software will continue to mix Apple II, IIgs, and Mac offerings from Apple, but TCS Essentials has now spun off an independent Mac Essentials. Some non-Mac specific areas of interest will be the new MOD Music, MIDI Music, GIF Graphics, JPEG Graphics and Misc. Documents sections. Those with an interest in exploring the rest of the universe can also check out Newton, PowerPC, DOS/Windows/OS2, and Mini/Mainframe sections, as well as a wealth of Apple II and IIgs offerings. The Newton and PowerPC sections are, as you might expect, a bit sparse.

Apple System Software

System 7.0 (all disks): the complete Macintosh System 7.0 set, in disk image format. These images can be used to make your own factory-fresh copies of the original 800K diskettes.

System 7.0.1 (all disks): the complete Macintosh System 7.0.1 set, in disk image format. These images can be used to make your own factory-fresh copies of the original 1400K diskettes.

System 7 Tuneup 1.1.1: required for either 7.0 or 7.0.1.

AppleShare 3.02 patch: updates AppleShare 3.0 and 3.01 Print and File Servers to V3.02.

Network Software Installer 1.3.2: includes AppleTalk 58.02 and bug fixes to Apple's networking software.

System 6.0.8 (all disks): the complete Macintosh System 6.0.8 set, in disk image format. These images can be used to make your own factory-fresh copies of the original 800K diskettes.

Misc Documents

War of the Worlds: complete text of the H.G. Wells classic, "War of the Worlds."

The Bible (King James): entire text of

!!REPAIRS!!

Apple/Mac/I*M Motherboard Repairs
from $45.00 + S&H
Apple/Mac/I*M Power Supply Repairs
from $45.00 + S&H
Apple/Mac/I*M Drive Repairs
from $45.00 + S&H
Apple/Mac/I*M Monitor Repairs
from $60.00 + S&H
Apple/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!
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the King James version of the Holy Bible, in text format. To decompress and use it, you will need roughly 6 megabytes free on your hard drive.

Mrs. Field's Chocolate Chip Cookie Recipe: text file containing a recipe for very good, rich chocolate chip cookies. Good cookies, but not really the Mrs. Field's formula.

Oedipus Trilogy: complete text of the Oedipus Trilogy.

Time Machine: complete text of H.G. Well's "The Time Machine."

GIF Graphics

GREATWHITE.GIF: color picture of a living dinosaur

YODA.GIF: he belongs to a mysterious cult. He speaks in riddles. He claims strange and awesome powers. He's green.

WTDRAGON.GIF: cover art from the novel White Dragon, by Anne McCaffrey.

WOZ.GIF: designer of the Apple I and II, the man who introduced a color computer at consumer prices to the world.

JPEG Graphics

SPACESHUTTLE.JP: stunning night photo of space shuttle.

QUAKEDAMAGE.JPG: massive, stunning picture of the quake damage in Oakland, California, showing the collapsed elevated freeway (I-880).

LINCOLN.JPG: dramatic photo of the interior of the Lincoln Memorial, with Lincoln seated.

DMOORE.JPEG: Demi Moore, not wearing a thing but her birthday suit.

MOD Music

VALKYRIE.LZH: Ride of the Valkyries.

URALVOLGA.LZH: nice Russian flair.

TOCCATA.LZH: your basic Bach bash.

TAXI.LZH: theme from Taxi, well done.

SWANS.LZH: Tchaikovsky's "Dance of the Swans."

Mac Applications

OZTEX15.SIT: Macintosh implementation of the TeX typographic/scientific typesetting language.

ONBIBLE.SIT: a superb electronic Bible with different lexicons, different versions, a Boolean search engine and more. Expands to 7.7 megs, and worth every byte.

Mac Extensions

MOMENTUM101.SIT: a control panel which brings gravity and friction to window dragging.

GROUCH25B1.CPT: animated, singing trash can.

Mac Sounds

WAYNESWORLD.SIT: passel of System 7 sounds from Wayne's World.

Mac Graphic Utils

NIHIMAGE149.SIT: a freeware, superb graphics manipulation utility. This version *requires* that your Mac has an FPU.

NIHIMAG1.49.SIT: this version DOES NOT require an FPU.

NIHIMAGEDOC.SIT: documentation for NIH Image in Word format.

IMAGESTACK1.SIT: HyperCard overview of NIH Image.

DIGITALCAME.SIT: neat screen capture utility with many options, filters and output formats.

Mac Telecommunications

ARAWORKSHOP.SIT: HyperCard-based utility to write/edit/debug AppleTalk Remote Access CCL's. Also has a Word file defining the CCL language.

FIRSTCLASS2.09: version 2.09 of First Class Client software for calling any First Class BBS. The folder includes manuals, a list of First Class BBSs, and a custom palette.

CCLMODEMTOO.SIT: modem tool that uses ARA CCL's as modem definitions.

Mac Product Demos

CIVDEMO.SIT: functioning demonstration version of the game Civilization. You guide a band of people from the stone age to interstellar flight (if you are lucky) by deciding how they protect themselves, how aggressive they are, how much they spend on food, clothing, shelter, Macintosh computers, etc.

ENCOREDEMO.SIT: Encore is a widely respected MIDI (music) editing program, and this is a functional, working demo version.

PHOTOSHOP.SIT: working demo of Adobe Photoshop 2.0, the wildly popular, powerful color image and photo editing program.

PRODUCER.SIT: working demo of a very powerful, flexible multimedia program that can combine pictures, sound, MIDI and QuickTime movies into a finished product.

P51DEMO.SIT: demo of the P51 fighter simulation game.

Mac Product Support

TECHINFO3.5: Claris Technical Support Database 3.5I, a FileMaker Pro database composed of questions and answers, hints and tips on how to get the most from Claris products.

WP2WORD5.SIT: from Microsoft product support: a translator for opening and translating WordPerfect 2.x files into Word 5.x (only).

NOWUPTODATE.SIT: patch will update Now-Up-To-Date, the superb calendar and reminder package from Now Software, to Version 2.0.1.

MAINDICTION.SIT: version 2.3 of the Claris Main Dictionary replaces your Main Dictionary (most likely in your Claris folder in your System folder).

NECCDROM306.SIT: NEC's CD-ROM driver 3.06—latest version.

DWRITERC3.0.SIT: DeskWriterC 3.0 driver

FMPRO2.0V4.SIT: update FileMaker Pro to 2.0v4.

MWPRO1.0V2.SIT: update MacWrite Pro to 1.0v2; archive also includes a new table editor, place it in your :System:Claris:AddIts folder.

Mac Games

GUNSHYWOMEN.SIT: very addictive Mac adaptation of commercial game is loads of fun, and this particular version has a nice twist: the icons are pictures of women.

BLACKJACKDE.SIT: neat blackjack game that also teaches you how to count cards and all those nefarious activities frowned upon in Atlantic City.

DUBBELMOREL.SIT: fun, funny Swedish game in which you guide a man around and try to avoid the wife with the frying pan.

Mac Hypermedia

MACELECREF: Macintosh Electronic Reference, an electronic, searchable reference to all things Macintosh (as of 1991 or so), done as a series of interconnected HyperCard stacks. Quite useful.

SHAKESPEARE.SIT: complete work of William Shakespeare; stack expands to 6 megs.

FACTBOOK: HyperCard-based edition of the CIA's World Factbook with graphics and maps. A nice compendium of all sorts of junk but no state secrets.

Mac Multimedia/QT

STONEHENGE.SIT: quick tour of Stonehenge, a collection of rocks in England believed by some airheads to be proof of alien visitations to the planet Earth. In reality, most of the daytime talk shows are proof of alien visitations.

SPACEVIEW.SIT: this is unique: the first "movie" to show both the Earth and the moon in a single frame. Composed from data sent by the Galileo satellite, this clip shows the Earth rotating, with the moon rotating around the Earth. Spectacular, and humbling, and a tonic against solipsism. One of the best movie clips, not to mention QuickTime clips, ever.

SNLCRUSHKIDS: brilliant spoof of Apple commercials by Saturday Nite Live. They got the lighting perfect, the pacing perfect, the plot perfect — just slightly warped. This is one of the largest files on the bulletin board, and *worth* every second of time to download, and every byte of space on your hard drive.

SECRETSERPENT: award-winning video short by Apple was composed entirely on Mac II computers as an entry in an annual competition and exposition of computer graphics. It details the adventures of a serpent secret agent and his mission to recover a secret film canister.

SAXMANCLINTON: during the 1992 campaign, his voice in tatters due to constant campaigning, Clinton made history by playing his saxophone at the opening of the Arsenio Hall show. This clip shows that historic moment.

RODNEYKING.SIT: clip of the famous Rodney King videotaped beating by members of the Los Angeles Police Dept. This clip includes a voice-over by one of the jurors from the first trial explaining their view of what happened.

ENGSHOWER: the full title is something like "Engineers in the Shower," a QuickTime movie that shows what happens when you take a group of brilliant Apple engineers, a camera, a Macintosh running QuickTime, and the shower stalls in Apple's campus recreation center. You've never seen anything like it (and if you're lucky, you never will again...)

RUSTY.MOOV.SIT: a race car driver shows outstanding ingenuity in how he crosses the finish line: backward, at high speed, and airborne.

A1984.SIT: clip showing the ENTIRE commercial shown by Apple during the 1984 SuperBowl game. Apple paid a record amount to make this commercial, paid a record amount to show this commercial — and never showed it again. Powerfully done, but with a dark sense of whimsy, it announced to the world the Macintosh — without ever saying what the heck a Macintosh might be.

Mac Programming

APPLEEVENTS.SIT: some sample code to play with Apple Events. Unlike most such code, this does not require Frontier.

MODULA2COMP.SIT: complete Modula-2 compiler. Modula-2 is a Nicholas Wirth language. While he intended Pascal to be an "instructional" language, Modula-2 is a language designed to do useful things, like large projects.

Mac Technical

SUPRATMNOTE.SIT: technote for Adobe on SuperATM and how to work around common problems and incompatibilities.

MACTN6.93.SIT: Macintosh Technotes—Revised versions, Word format. Issued 6/93.

MACTECH31.SIT: the legendary (since withdrawn by Apple) Macintosh Technical Note #31, in which the legendary DogCow is discussed.

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APPLE II BYTS AND PYCES

by Gary Hayman

This is a regular monthly column which 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.

Screening

At one of the recent Apple IIGS SIG meetings, there was some discussion about using ProSel system of Screens vs. using ProSel Specs menus. This prompted David Jernigan to ask for additional help on the TCS. Our ProSel, technical person Neil Laubenthal came to the rescue:

"Dave, to create a screen; you go into Edit mode from the main menu just as if you were going to add an entry to your main screen. When ready to save it; press ESC to get to the editor menu and select the entry for "Save a screen" rather than "Save new PROSEL.SPECS." Give it a pathname and filename (I keep mine in a folder called /SCREENS which is inside my Prosel16 folder so my complete pathname to my Games Screen is /HD1/APPLICATIONS/UTILITIES/PROSEL16/SCREENS/GAMES. Now to activate the screen (and I haven't looked at the docs in awhile so this may not be exactly correct); create an entry on your PROSEL.SPECS main list. Use the Manual method and give the pathname (without filename) in the prefix line and the name of the Screen file (games in my case) as the application to run. Save your new PROSEL.SPECS and when selecting the Games entry, the screen will be run. In order to get back to the main screen; *don't forget* to put an entry on your alternate screen. This entry should invoke the 'Refresh command' (see manual), which reads PROSEL.SPECS from your main disk. The main use of screen is so that you can get an alternate screen to run a program and return back to your main PROSEL.SPECS screen after exiting the program (PROSEL.SPECS—> screen 2—> program—> PROSEL.SPECS). If you want to switch semi-permanently to the alternate screen; that is switch to your games screen and run several games in sequence with exit back to the games screen between each one you must use the CYCLER option. This is a little more difficult to set up; but is essentially the same. The key to remember with screens is that they are edited/loaded/etc. just like the main PROSEL.SPECS file; but just saved as screens rather than as PROSEL.SPECS. Hope this helps; it is in the docs, but with Bredon's usual flair is fairly well hidden. It's sort of like downloading; once you see how to do it, it's easy; but it is sort of mind boggling until you do figure out how. Ask if you need more help.

II+ to TV

Andy Jensen, writing on pro-line tells us, "I just bought an old (obviously) Apple II+ at an auction cheap ($20). It came with a disk drive but no monitor. I was wondering how you can connect it to a TV. My GS manual says you need an RF modulator. Is this true for the II+ as well? If so, any ideas where I can get one? I checked my local Apple dealer but they don't deal Apple II stuff anymore and told me to call Apple directly. (That sounds expensive, though.) Any help would be greatly appreciated."

David Lyons Apple II System Software Engineer of Apple Computer, Inc., answered with, "If your TV happens to have a "video in" then you don't need an RF ("radio frequency") modulator. Or, if you have a VCR with a video in, you could watch the computer through the VCR (effectively using the VCR's internal RF Modulator to make a channel 3 or channel 4 signal).

"Otherwise, you need to buy an RF modulator. Radio Shack sells one for $27.95 (part number 15-1273). This should be usable for Apple II Plus displays. (If you buy an 80-column card, though, don't count on viewing that on a TV.) I don't think Apple sells an RF modulator these days."

David always reminds us, "My opinions are my own, not Apple's."

But Are They Table Traine

WestCode Announces Table-Trained : Twenty New Font Tables For Use With InWords 1.1

WestCode Software, Inc., announces the release of TableTrained, a collection of twenty expertly trained

font tables for use with their InWords 1.1 OCR program. The TableTrained font tables are guaranteed to provide excellent results for twenty new source materials. The first TableTrained collection includes: II Alive, AppleWorks Educator, Car and Driver, Consumer Reports, Discover, Entrepreneur, Field and Stream, Golf Digest, Home Office Computing, Inc., InCider, Men's Health, Motor trend, National Review, New Yorker, Reader's Digest, Ski, Smithsonian, USA Today, and Wall St. Journal.

"However, the true power of TableTrained lies in its use with the new Font Search feature in InWords 1.1," said WestCode spokesman Tony Gentile. With the Font Search feature built-in to InWords 1.1, all of these tables can be used as a starting point for training additional font tables, drastically cutting down the time required to adapt InWords to new source materials.

Title: TableTrained

Creator: WestCode's resident InWords expert, Tony Gentile.

System Requirements: An Apple IIe or Apple IIGS with 512 KB of memory and InWords 1.1.

Price: $9.95

Address: WestCode Software, Inc.
15050 Avenue of Science,
Suite 112
San Diego, CA, 92128

Telephone: (619) 487-9200

SoundMeister Sounding Off

ECON Announces the SoundMeister Stereo Amplifier/Digitizer for the Apple IIGS

Econ Technologies Inc., announces the SoundMeister, a full featured stereo board for your Apple IIGS. The SoundMeister allows you to achieve high fidelity stereo output by connecting external, unamplified speakers to your IIGS. The SoundMeister's built in 1.5 watt per channel amplifier and unique filtering produces a smooth, clean sound that surpasses any other board ever produced for the IIGS. The outputs can even be connected to an external amplifier in order to achieve even higher fidelity and volume levels by using SoundMeister's true line-level outputs.

On the input side, the SoundMeister lets you connect a microphone or a pre-amplified source (such as a CD player) so that mono-recordings can be made. These recordings can be stored as waveform data that can be incorporated into System 6 events, HyperCard IIGS, HyperStudio, and any other application that supports sounds.

A copy of DigitalSession, the ultimate waveform capture/editing software is included with each Sound-Meister board. DigitalSession, written by D. Proni of Econ Technologies, allows you to record and fine tune digital sounds from a variety of sources with a variety of hardware including the Sound-Meister. With DigitalSession you'll be able to compose sounds and use them within popular applications such as HyperCard IIGS, HyperStudio, Sonics, SynthLab, and the Sounds control panel.

Title: SoundMeister

SystemRequirements: Unpowered speakers, amplified speakers or standard hi-fi equipment can be used as output. Of course, an Apple IIGS is required.

SRP: $89

The SoundMeister & Sound-Meister Pro Stereo amplifier/ digitizers for the Apple IIGS.

Both SoundMeister & Sound-Meister Pro offer:

- 2 channel amplified (1.5w) output for connection to speakers.
- 2 channel line level output for connection to external stereo equipment.
- Tuned low-pass filters for precise frequency rolloff.
- Software selectable input gain (allows easy hookup of mic level and line level signals).
- Software controlled sampling rates from 1KHz to 53KHz.
- Superior design to reduce harmonics and RFI interference.

Additionally, the Sound-Meister Pro features:

- Two channel input from mic or line level sources.
- High speed super linear A/D converter with track and hold.
- User selectable sampling rates from 3.5KHz to 110KHz.
- Software select between internal (GS) or SoundMeister A/D converters.
- Onboard RAM for queued storage of digitized sound relieving GS overhead.
- Routes internal speaker to amplified outputs for pre-GS sound applications.
- Input monitor allows amplified playback of an external source.

Inputs/Outputs:

- 1/4" stereo phone jack for mic or line level inputs (software selectable).
- 1/4" stereo phone jack for amplified output (connect to speakers).
- 1/4" stereo phone jack for line level output (both line and amplified output can be used

simultaneously).

Old Printers Never Die

Mark Rubin was having some difficulty with his printer and asked for help on the TCS. Our President, Lorin Evans, who is always helpful answered with, "Mark, I hope you mean the ImageWriter I when you say 'older.' There was a dot matrix printer sold by Apple earlier than the IW-1 called the DMP and people sometimes refer to it as an ImageWriter.

"Here are some things to check:

(1) There is a plastic "+" that drives the turning motion of the ribbon. The "+" is found on the bottom of the carriage that holds the ribbon. When you install a ribbon, you should turn the ribbon advance knob until you hear a click; that tells you that the "+" on the ribbon carriage has engaged the slot on the bottom of your ribbon– and thus it will turn as the carriage moves left and right. Now look to see that all four sides are there and nothing is chipped off.

(2) Check to make sure the impression control lever is properly set. Push it all the way towards the platen (the large black roller). The impression lever is the small lever on the right side of the platen, just under the cover of the printer.

(3) Check to see if the ribbon wire is still there. The ribbon wire is a thin wire that runs left to right under the ribbon carriage. This wire is what actually forces the "+" I mentioned earlier to rotate and turns your ribbon constantly so that you have a fresh piece of cloth ribbon in front of the printhead at all times. If the ribbon is missing (which is what it sounds like), you need a new one. If it is loose, the tension can be adjusted.

(4) There is the possibility that the print density adjustment is off. I doubt that is the problem because you indicated that the print quality improves if you rotate the ribbon advance knob. So, I won't describe how this is done.

"See if any of this helps you."

inCider/A+is Minused

Paul Statt placed this information on the pro-line network recently.

"This is the text of an internal memo circulated to the A+ Publishing staff today, 10 May, 1993, from Paul Boule, president and publisher. It's been a great 11 years and we stuck it out as long as we could afford to, but everything comes to an end.

"As of May 18, 1993, the subscription list of inCider/A+ has been transferred to Quality Computers who publish II Alive. The last issue we will publish is the July issue.

"Quality Computers, well-known in the Apple II market will fulfill the remaining issues of inCider/A+. We will offer MacComputing to those readers who own or use Macintoshes. This offer will be bound into the August issue of II Alive.

"There is a certain amount of sadness in putting inCider/A+ to rest. However, we must look ahead to the many new opportunities that MacComputing will offer."

Super II–What Is It?

Steve Craft writes, "It took a while, but, as promised last summer, the Super II board has been constructed. Super II is a MAJOR upgrade for II, II+, and IIe users.

Specifications:

- 4MHz 65C816
- 1-16MB SIMM RAM on the board (uses standard 1MB SIMMs)
- 128K system ROM on board
- plugs into an expansion slot
- price: $170 assembled with 0 RAM (you order your own and plug in)
- designed by Chuck Haight, editor of COMPUTIST* magazine

"Since, except for disk and similar I/O accesses, the board runs at the full 4MHz, it is faster than the 8MHz Zip chip (which averages about 3.9MHz) and the standard IIGS PLUS you get the advantages of direct, linear access to nearly 16MB RAM.

"Will Apple support the Super II? No way! Apple barely "supports" the IIGS. Super II is by and for II users!

"What software does the Super II run? It runs Super II software! There is no attempt to kluge the design so as to be compatible with the IIGS, Mac, or anything else. This is a 'clean' piece of hardware designed for speed and power which takes maximum advantage of the 65C816. Initially, the plan is to rely upon DOS 3.3 and ProDOS for disk I/O. An improved operating system and a more powerful BASIC remain to be developed.

"Will I need a bigger power supply? If you haven't already swapped-in for a heftier unit (such as the 83-watt model available from JDR Microdevices), then, Yes, you will.

"What about product support? Super II is a very new product; so, besides the assembled board, you can expect lots of special attention from Chuck and COMPUTIST. As the designer, Chuck has a vested interest in seeing that 'everything works' and that you are satisfied.

"If the $170 price sounds low that's because it is. Super II employs advanced Schottky (AS) IC's and, when the cost of the uP, other parts, and printed circuit board is added, the total is about equal to the price. Chuck wants to get some of the boards into the hands of users and developers as quickly as possible. To reduce the risk that purchasers might own an 'orphan machine,' Chuck will hold your check for a few weeks until enough orders are in to justify producing a fair number of boards. If II user interest is less than expected, your check will be returned.

"Since Chuck is a dedicated II user, the requirements for "commercial

success" are nothing like those of high-overhead producers such as [deleted–GH]. Of course, the Super II will automatically be supported by COMPUTIST. Besides 'free advertising' to attract Super II buyers, this means users can expect publication of SII programs, old-II and IIGS program conversions, and similar goodies. Best of all, you will have a 90's II you can 'get your hands on' (i.e. what most of us thought we were getting when we bought our IIGS's).

"An assembled Super II board sells for $170 at COMPUTIST, 33821 Orville Road East, Eatonville, WA 98328-9590"

He Talks Locally

"When I was looking for some LocalTalk connectors to expand my LocalTalk network to include ProNovapple," writes member Dave Harvey, "I ran across some very reasonably priced connectors from FOCUS, a company that sells all sorts of enhancements for the Macintosh. They have a special User Group Price sheet which has some real bargains. They sell their Turbo Net ST, Din-8 LocalTalk connector for only $9.99. Their line includes, in addition to LocalTalk products, Ethernet products, removable hard disks, and optical hard disks. The Local Talk connector is not only the lowest priced connector I've seen but it also has LED's on the unit that tell you when data is being sent. And it's self terminating; no longer do you need the resistors to terminate an unused plug on the unit. FOCUS's number is 1-800-538-8866. Their address is 800 West Cummings Park, Suite 4500, Woburn, MA 01801-9648.

"I now have a printer network set up using their connectors consisting of two Apple IIGS computers, one ImageWriter II, and one TI Microlaser printer. They all work great. One reservation I had was whether the ImageWriter II would work with ProDOS 8 programs such as Labels, Labels, Labels and Print Shop when going over the AppleTalk network. I find that these two work fine when printing via the network. Proline also works great via the network."

Another UltraMacros Convert

Ann Bennett, from Orlando, Florida, writing on the Pro-line system shares her thoughts concerning UltraMacros (UM).

"If you have not learned what TimeOut UltraMacros can do, you have not really experienced AppleWorks at it's finest!

"It can open any file, print, copy, delete, change, and quit all with one key stroke!

"It can open a template WP and type your return address, change you margins to fit your needs, and just about anything you can do in repetitive actions. UM 3.0 is as fine as any software that has ever been created for the Apple II computer. In fact, working in both the Apple II AND the Macintosh worlds, I find UM easier and MORE FUN... than anything else around. I work with an Apple computer all day, almost every day... teaching.. Take the time to learn what a fantastic program AppleWorks really is. It will challenge the giants when you add T.O. UM. Then when you begin to add some of the others, it boggles the mind–print sideways, print in font of choice, copy files and disks while AW is active, list all files and print them on any disk (including hard drive), see tree structure of disks and launch them, print small sections of your screen, and on and on There are so many TimeOuts, I can't do them all justice. But they will make working in AppleWorks, 3.0 a wonderful, timely experience. One that can be used with confidence for any individual in business, pleasure, or school."

We here at the Washington Apple Pi recognize the strength of the AppleWorks 3.0/UltraMacros combination and have formed a Special Interest Group to share our findings and to offer help. Give Gary Hayman, Chairman of the UltraMacros SIG a call to find out what it is all about. Or, if you have any questions concerning an UltraMacro problem, I am sure he would be willing to help you. Why not? He is me.

It's Hard to Drive

Since Lorin Evans has tremendous expertise in the Apple II hardware area, it is no wonder why people seek his advise. Mat Wilkerson was in the process of getting a hard drive and asked Lorin the following:

[Mat] "I have been offered a Connor 20 MB hard drive from a Mac. I don't know anything about hard drives. Would this work with a IIGS? I know that I would have to purchase a SCSI card. Would any SCSI hard drive work with a IIGS, or do only selected ones work? Also is there a way to daisy chain hard drives? I am trying this approach because we are on a limited computer budget."

[Lorin] "Yes, one of the best kept secrets is that Mac SCSI drives work on Apple II computers. If this is a used drive, it would be useful for you to check it out either with its present Mac formatting or with an Apple II formatting to check for bad blocks, etc. Also listen for mechanical sounds that indicate aging within the sealed mechanism.

"As for a SCSI card, there are two from Apple and one from a third party source RamFast. Decide if your are a middle-of-the-road operator or desire to spend money for speed. If you are buying used on a limited budget, you are most likely a candidate for the Apple High Speed SCSI (new around $100.00) or the [Apple] Revision "C" SCSI card (more or less $70.00 new) (yes there are lots of Rev

"C" models around!). Used, the [Apple] High Speed should go for $50–75 and the Rev "C" model which is most often seen used, not new, is $25–35. RamFast will be more than either.

"As to pay for a used 20 MB drive, first decide if that is big enough. If that is what the budget demands, don't worry about the size. You can daisy chain this twenty with other SCSI units to build up storage capacity. A used stand alone 20 MB drive isn't worth a whole lot. With no bad blocks and no mechanical sounds, you should pay under $100.00. Don't forget to get the cable and power cord for it and any formatting utilities, etc., that came with the drive when new (if the family still has them–notwithstanding that they are of no value to you and your GS).

"Now with your hard drive and System 6 you should be able to enter the real world of GS computing."

Does Lorin Click With His Answer?

I missed the original question from Geraldine Wright, but apparently she was hearing a strange "clicking" sound coming from her CPU and suggested a point of origin. Lorin Evans, an expert on "clicks" tried to help her out with, "Gerry, the clicking you are observing can come from another source. Open your CPU and see if you have a Molex connector connecting your power supply to the motherboard. Most GSs do; conversion units do not. They have the 2 x 3 connector found on II+, and IIe computer power supplies. The Molex [i.e., an inline] connector has some number of square stock pins embedded in the motherboard and spring contacts in a plastic female connector which is connected to the power supply via a cable.

"The problem comes when the spring contacts get loose inside the plastic housing. The lack of a tight connection causes arcing between the pins and the contacts inside the plastic housing. Here are a couple of things you can do to reduce this problem: (1) disconnect the power supply from the mains; (2) remove the Molex connector from the motherboard; (3) using a fine emery board or superfine sandpaper, 'polish' the vertical square pins coming up from the motherboard; (4) check the diameter of the sleeves inside the plastic shell of the Molex connector. If any look larger in diameter than the others, try to reduce their size by using a finish nail, etc., around the *outside* of the sleeve to narrow its opening. Reconnect the Molex and see what happens.

"In some cases, the pins inside the shell have enlarged to the point where I have had to replace the connector or use a pencil or non conducting 'thing' to wedge between the power supply and the Molex connector. What I am trying to do is to set the connector at an angle to the vertical pins so as to force a connection."

First Clicking, Now Crackling

Recently, two "heavy" users of their IIGS's contacted me on the Hot Line about "failure to boot" problems. We solved the problems by "chip pushing."

If your system is acting up, make sure that you re-seat all removable chips on the motherboard and all cards, including memory and accelerator.

Push each removable-type chip on the motherboard with two thumbs. Listen for a crackling noise as you do it. Remove the memory card and place it on a firm surface of support under the chips and push with two thumbs.

You may want to leave the accelerator in the machine while you re-seat chips, supporting the back as you do. I try not to mess too much with the thin legged connector to the mother board as the legs are too easily bent.

While you are at it, check the other cards you may have installed.

Heating and cooling plus the gravity of the moon seems to cause the chips to work out slightly–or at least get a coating of shellac on the pins that is overcome by the gentle but firm pushing.

I find that every once and a while, it is a good idea to do this even though you are not having problems. When you hear the "crackling" you'll know why.

Déjà Vu

Remember my column last month about how much a local well known repair facility wanted to charge me more for repairing my IIGS RGB monitor compared to what a new one would cost? Well here it is again, this time from Steve Craft in New Brunswick, NJ.

"For what it's worth, my GS monitor died. Think I dropped it in transit or it got bumped just too hard in the car. Anyway, I went to have it fixed, and the repair place fixed it lickety-split, and then tried to bill me for $550. Hah. Talk about [deleted] with [deleted]. From Sun Remarketing I can get a 19" monitor with sound for the price the repair depot wanted for the standard Apple 12."

Actually, Steve, you can get it for a lot less. Think in terms of approximately $175-$219 for a reconditioned Apple RGB monitor or $299 for one of those fantastic Magnavox RGB monitors–new.

Athens Is Shrinking

Bob Church writing from the Computer Science Department at Ohio University, Athens, Ohio, became very enthusiastic about the very, very popular program, Shrink-It–and a few others too.

Church, in his best Sunday manner, writes, "Although I've been a devoted IIc user for about seven years I've never used Shrink-It in the past. I recently bought a hard drive and

gave the program a try. This is an amazing program! It's not just its archiving work that's great, but it's rapidly replacing Copy2+ for most of my file management. The interface is much better. In fact, if it handled copying of subdirectories better I'd do away with Copy2+ altogether. I own tons of Apple II software. While I haven't bought everything ever released for the 8-bit machine, I've tried :-). Still, my best and most used software tends to be the FreeWare. Kermit literally changed my life. It allowed me to take some computer classes while working full time. With Kermit I did my Cobol programming in AppleWorks and transferred the finished code in the mornings when the mainframe was not so busy. One thing led to another, including becoming President of a Users Group and thus meeting the Chairperson of a department at the University. I changed jobs with his help. I went from a depressing job at the phone company to a great one at the University (from riding around in a gray truck to having my own office and department). Anyway, I wouldn't have gotten it without my IIc and Kermit. I own dozens of games but find myself playing Defenders and ST:FC the most often. There are a lot of great programmers and programs in the II world. I'll keep using my IIc until the Rocketchip blows up, and then move up to a GS with the fastest accelerator available. Anyway, to the Authors of Davex, Kermit, Shrink-it, etc., an extremely sincere thank you."

ProTerm Expertise

Gary Hayman had some questions concerning Transfer Preferences selections in ProTerm 3.0 (PT). Our resident expert, Dale Smith presented some interesting comments.

"I just leave mine alone most of the time–unless I want to play–I don't think you do so leave them alone. But you need to understand what they do for you. In most communication programs the default filetype is set to TXT; not so in PT3. Why? Because of a certain feature in ZModem. ZModem includes the capability to translate TEXT files from the form they have on the sending system to the form they must have to "work" correctly on the receiving system. The ability to work right is dependent on the form taken by the newline markers on different systems. On Apple systems (Apple II and Mac), a new line is marked by a CR alone; on MS-DOS-type systems a new line is marked by CR/LF pairs; and on UNIX-type systems a new line is marked by LF alone. Now to complicate the situations the American National Standards Institute has defined (with industry participation) an ANSI Standard ASCII Text — this standard recognizes ONLY CR/LF and LF as "standard ASCII Text" new line markers {Where was Apple when this was happening?}.

"Well, ZModem in it's Text mode will convert sent text to a "standard ASCII Text" stream and the receiver will take the "standard ASCII Text" and convert it back to the form needed by the receiving system.

"In PT2's ZModem this text conversion mode was present but not under the user's control and it could cause file corruption if this conversion occurred in files that were binary in content, such as a SHK archive downloaded from GEnie which would get a filetype of TXT under PT2.x. If you later sent that file, PT2.x would see the filetype TXT and proceed to send in its text conversion mode.

"Now, comes PT3 with the Transfer Prefs. First ZModem has a mode setting with three values: Text, Binary, and Auto, where Auto is the shipped default. And all the protocols, except Kermit, have a default filetype of BIN. What does the Auto mode do? It uses, just like PT2.x, the filetype of a file to determine whether to send it in Text mode or Binary mode. If you set it into Binary mode, ZModem will send all files in Binary mode regardless of filetype; likewise if you set it to Text, all transfers will be done in Text mode regardless of filetype.

"So the optimum choice is to set default file type to BIN and the ZModem mode to Auto so that downloaded files, which are most likely binary in content, will be uploaded subsequently by ZModem without text conversion and corruption of the resulting file. If you have a file downloaded that is really text, you can use the Set File Info command on the File menu to change the file type to TXT so that ZModem will do its thing or so you can read it into the Editor without special actions–yes, you can load *anything* into the Editor with some special actions.

"Maybe this gives you some insight into what the modes do and the default file types. You can set them to suit the way you operate if the defaults as shipped don't suit; just be aware that the file types have side effects."

The author is currently Chairman of the AppleWorks and Apple IIGS Special Interests Groups and is the organizer of the new UltraMacros SIG. 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. Professionally, he is a Certified Hypnotherapist in private practice in the Washington DC. metro area and does part-time Apple II family computer application programs consulting and teaching. His latest software programs, THE MAGIC FILE CABINET and MAGICAL MACROS–THE ABRACADABRA COLLECTION are presently selling internationally.

Profiles of Warren Williams and Cathleen Merritt

GEnieLamp Profile of Warren Williams and Cathleen Merritt, Founders of The National AppleWorks Users Group (NAUG)

GEnieLamp: Warren, can you tell a little bit about how you first became involved with AppleWorks and the Apple II?

Warren Williams: I started using mainframe computers in 1965 as a doctoral student at the University of Rochester. My statistical work and research continued with mainframes at Eastern Michigan University. By 1978 I thought that the newly invented microcomputers were going to have a significant impact on education, so I took a leave to learn about these new systems. In 1980 I started teaching classes on computers in education but struggled to find software that was powerful and easy to use. Apple's release of AppleWorks in 1984 filled that void.

I borrowed an Apple II from a local school district in 1979, bought my first microcomputer–a TRS-80 Model II–in 1980 and bought my first Apple II–an Apple IIc–in May, 1984 about a month after the computer was released.

During the summer of 1984, I wrote an AppleWorks manual for my classes. The class was well-received, so I continued to explore AppleWorks and write and do presentations on AppleWorks.

GEnieLamp: At what point did you team up with Cathleen Merritt, co-founder of NAUG?

Warren Williams: In 1984 Cathleen was pursuing her second Master's Degree, this one in Educational Technology. She was a star in our program and I hired her to help me develop presentations for conferences and professional meetings.

Cathy saw the implications of AppleWorks and soon found herself teaching the program to other graduate students.

GEnieLamp: Okay, so you and Cathleen developed an early proficiency at using AppleWorks. How then did the idea of forming a national user group for AppleWorks first arise?

Warren Williams: In early 1986, Cathy and I were giving a seminar at the Michigan Association of Computer Users for Learning conference. Someone in the audience suggested that we form a national user group for AppleWorks. The idea seemed to have some merit, so I asked those who had an interest in this association to stay after the seminar to talk it over.

I expected a half dozen people to stay, but to my surprise almost a hundred people stayed to talk about how to form a national user group.

GEnieLamp: So The National AppleWorks Users Group was formed in 1986?

Warren Williams: Yes, the organization took official form in 1986. We announced the organization at the National Educational Computer Conference in San Diego that April.

GEnieLamp: Was this before the first TimeOut AppleWorks enhancement was released?

Warren Williams: If my memory serves me, the first of the Beagle Bros TimeOut series was released in 1987. But even before the TimeOut enhancements, AppleWorks had plenty to offer.

GEnieLamp: After forming NAUG, how did you grow the organization to its current huge size?

Warren Williams: We publicized NAUG by giving seminars on AppleWorks throughout the country. In retrospect, the schedule for presenting these seminars was hectic. In 1987 and 1988 alone, I presented more than 75 seminars on AppleWorks in more than 60 cities around the US. Each seminar drew 80 to 150 people. Word spread quickly that if you wanted to learn a lot about AppleWorks, one of the best places to turn was NAUG.

GEnieLamp: Naturally you must maintain the NAUG membership database using AppleWorks itself. What is the total number of people in the NAUG database? And how many current active members?

Warren Williams: We have more than 60,000 AppleWorks users in our system. NAUG current has more than 8,000 active members.

GEnieLamp: I imagine you must have members in a couple of other countries?

Warren Williams: Yes, we have members in 42 other countries and in every state of the union.

GEnieLamp: How did NAUG come to set up its own bulletin board (BBS)?

Warren Williams: It soon became clear that we needed new ways to help our members share what they were learning about AppleWorks. Two of our members, Tim Harrison and Richard Lewandowski, stepped forward to spearhead the

bulletin board project. Originally, we had a school-group partnership and used equipment and office space provided by the Ypsilanti (Michigan) school district. By 1988 we outgrew that arrangement.

Tim Harrison nurtured the NAUG BBS from its beginnings on a single Apple II+, through its period with three networked Apple II's, to its current size.

Now the BBS has three phone lines and receives between 50 to 80 calls each day. We're constantly updating the system; for example, we just bought a new computer and some higher speed modems. We have more than 200 megabytes of files available for downloading.

GEnieLamp: Many GEnieLamp readers must wonder how NAUG goes about creating the AppleWorks Forum newsletter each month. Can you share with us a little about what happens behind-the-scenes?

Warren Williams: Members send Cathy articles on disk or through electronic mail. She also solicits articles in certain areas...like Stan Hecker's "My Favorite Template" and Keith Johnson's "My Favorite Macro" monthly articles.

Apple II users are a prolific bunch; we always have an abundance of excellent articles from which to choose. Cathy reviews the submissions to determine the most likely candidates for the newsletter. She circulates the articles that have merit to volunteer readers who advise her about the importance and timeliness of each piece. Then she does the editorial work necessary to get the articles ready for the AppleWorks Forum; I help with the process.

Cathy and I give the articles in AppleWorks format to Nanette Luoma, NAUG's full-time graphics designer and page layout specialist. Nanette transfers the material into Quark Xpress on the Macintosh and lays out the issue. We print proofs from NAUG's LaserWriter and fax them to the authors and other volunteer readers. Then we use a service bureau to produce the final copies on a Varityper at 2450 dots-per-inch and print the issues on sheet-fed presses.

GEnieLamp: In your role as an information clearinghouse for AppleWorks users, you must surely have encountered some unusual and amusing applications of the software. Care to share any?

Warren Williams: I don't think that Apple ever grasped the breadth of applications of AppleWorks. For example, people might be surprised to hear that for several years much of the ABC Evening News was composed with AppleWorks. Peter Jennings' chief writer was a staunch AppleWorks devotee and a member of NAUG.

Did you know that AppleWorks was used in the production of the Broadway play "Cats"? We sent a copy of the AppleWorks Forum monthly to the Cats office.

And another NAUG member uses AppleWorks to manage a $4 million pig farm. Did someone say that an Apple II can't be used for business purposes? To them I'd say "hogwash."

GEnieLamp: By any measure NAUG has experienced a great deal of success in its endeavors so far. But do you think the organization might live on right into the 21st century?

Warren Williams: I might be naive, but I expect NAUG to continue to flourish into the next century. We currently have a backlog of about two years worth of articles for the AppleWorks Forum. If people keep submitting articles and asking questions about how to get the most out of AppleWorks, the organization will continue to provide a clearinghouse for information about the program.

GEnieLamp: In 1992 you started up a sister organization, the ClarisWorks Users Group. Was this something that you approached Claris with, or did Claris approach you?

Warren Williams: NAUG has had close contact with Claris ever since Claris took over publishing AppleWorks in 1987. In late 1990, Claris called and indicated they were working on a breakthrough integrated program for the Macintosh. They asked us to form a support organization. After looking at the product, we agreed.

ClarisWorks is a spectacular program. But for shear speed of operation and ease of use, AppleWorks continues to outshine every integrated program on the market today. And that's saying a lot for a program that was developed almost ten years ago.

GEnieLamp: How can people get in touch with the National AppleWorks Users Group?

Warren Williams: Our phone number and address is:

National AppleWorks Users Group
Box 87453
Canton, MI 48187
(313) 454-1115 (voice)
(313) 454-1965 (fax)
(615) 359-8238 (BBS)

Annual dues are $30/year for US members; $41/year for Canada and Mexico; $45 overseas (surface postage), $68 overseas (air mail).

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How to Unpack Files Using ShrinkIt Apple IIe (v. 3.4)

by Phil Shapiro

Among the most useful Apple II telecommunications utilities, ShrinkIt, is entirely free for anyone to copy and use. This utility is essential for unpacking Public Domain and ShareWare files and programs from bulletin boards and national information services. Since its introduction in 1988, ShrinkIt has become the de facto standard program for packing and unpacking Apple II files that are sent via modem.

"Why do you need to pack files before sending them by modem," you might ask. Well, actually, you don't necessarily need to pack files to transfer them by modem. But you can achieve many economies of time and money by doing so. Files that are packed, or "shrunk," can be smaller than half their original size. The greater the compression, the less time the file will take for you to download. If you're being billed by the minute for your phone call, such economies of time quickly add up to serious monetary savings.

The real beauty of Shrinkit is that the program can be used to compress individual files as well as entire disks. So it's possible to download an entire 5.25 inch disk (or 3.5 inch disk) as one shrunk file. Once the file has been downloaded you can exit from the bulletin board (or information service), switch off your modem, boot ShrinkIt, and then unpack that file onto a blank formatted ProDOS disk. (It's helpful to note that ShrinkIt has the capability of packing DOS 3.3 disks as well even though the vast majority of shrunk disks and files are ProDOS files.)

Using ShrinkIt is not that difficult, although it's important to understand some basic concepts. The packed file is called an "archive." You can easily recognize ShrinkIt archives from the three character extension at the end of their name. This extension can be either SHK or BXY. You don't need to understand the difference between SHK and BXY to use ShrinkIt to unpack files.

The process of unpacking files with ShrinkIt starts with your booting the ShrinkIt software. Shortly the program will show you a main menu with about twenty choices listed down the center of your screen. You can use the up and down arrow keys to highlight which menu choice you'd like to choose.

To unpack "shrunk" files, choose "Open Archive." ShrinkIt will then give you a list of all the shrunk archives on the current disk drive.

Using ShrinkIt with One Floppy Disk Drive

Theoretically speaking it's possible to use ShrinkIt on a single floppy disk drive Apple II system. Practically speaking, you can only unpack smaller-sized files if you're using a single 5.25 inch disk drive as both your "source disk drive" and your "destination disk drive." If you're using a single 3.5 inch floppy disk drive, as with an Apple IIc+ system, you can unpack rather large archives. An ideal situation for using ShrinkIt is to have at least two 5.25 inch disk drives, and one or more 3.5 inch. (Note, too, that having a hard disk drive offers you the most flexibility in using ShrinkIt because you can unpack shrunk archives from one subdirectory to another on your hard disk drive.)

The same general procedure is used to unpack files regardless of the number of disk drives you have. Since the vast majority of ShrinkIt users will be using more than one disk drive, this article will use a multi disk drive set-up to explain about unpacking files.

Using ShrinkIt with More than One Disk Drive

Typically the shrunk file you want to unpack is on a disk in another 5.25 or 3.5 inch disk drive from the current drive (from which you booted ShrinkIt). To see the listing of shrunk files on any other disk drive, press the Tab key. Each time you press the Tab key, ShrinkIt will show you a list of the shrunk files on the next disk drive attached to your Apple II. Repeated presses of the Tab key will cycle you back around to the disk drive you booted ShrinkIt from.

When you see the packed archive that you want to unpack, use the down arrow key to move down to highlight the file name. Then you'll need to use the space bar to mark that file as a file you want to unpack. After pressing the space bar, you'll see a small check mark appear to the left side of the file name. Press <Return> to indicate that you're ready to choose the "destination folder" where you'd like to place the unshrunken archive.

ShrinkIt uses the term "destination folder" in its most general sense. You need not place your unshrunken archives into a folder (also called

"subdirectory"). In many cases you'll be unpacking your archive onto a plain ProDOS formatted floppy disk. In technical terms, this would be described as: "Unpacking the archive into the root directory." Here again, you need not be an expert in the technical difference between root directories and subdirectories to continue on with the unpacking process.

The process of choosing your "destination folder" is analogous to the process for choosing and specifying the file you want to unpack. Use the Tab key to have ShrinkIt switch between the various disk drives connected to your Apple II. When you arrive at the disk where you'd like to unpack your files, press the <Return> key when the words <Select current> are highlighted.

Pressing <Return> will then commence ShrinkIt's unpacking process. You'll be able to see on the screen a "thermometer" indicating the progress of files as they're being unpacked. If you've chosen more than one file to unpack, ShrinkIt will dutifully progress through the unpacking procedure of each archived file you previously selected.

In many cases the unpacking process takes all of fifteen to twenty seconds. When the packed archives are very large, the unpacking process make take more time. The largest archive I have ever unpacked took upwards of eight to ten minutes to unpack. But in that situation, I simply walked away from the computer. ShrinkIt does not require human supervision in performing its tasks.

Once ShrinkIt has unpacked an archive, you're likely to want to read more about the program or text contained in that particular archive. Conveniently enough, ShrinkIt allows you to display text or AppleWorks files on your Apple II monitor by pressing just two or three keystrokes. Use the down arrow key to move to the "Type" command on ShrinkIt's main menu to "type out on the screen" any text or AppleWorks word processor file you'd like to read. Use the Tab key to change drives, if necessary. Use the arrow keys to choose the file you'd like to "type."

ShrinkIt will then scroll such text up onto your screen one screen at a time. Carefully press the space bar to move from one screen to the next. If you accidentally press the space bar twice, you may skip over some of the text. But in that eventuality, you can always press escape and go back to choose the "type" command again.

Over the years a convention has arisen to designate the name of the file that contains important instructions and information contained in an archive. Look out for a file with the name: "Read.Me" or any file with the suffix "docs." The suffix "docs" is a shorthand for the word: "documentations."

If the archive is a Public Domain or ShareWare program that you'd like to run, the ReadMe file or docs may explain that you need to copy the files ProDOS and/or BASIC.SYSTEM onto your unpacked disk to make it run. You can copy such files from the Apple II System Utilities disk which came with your computer.

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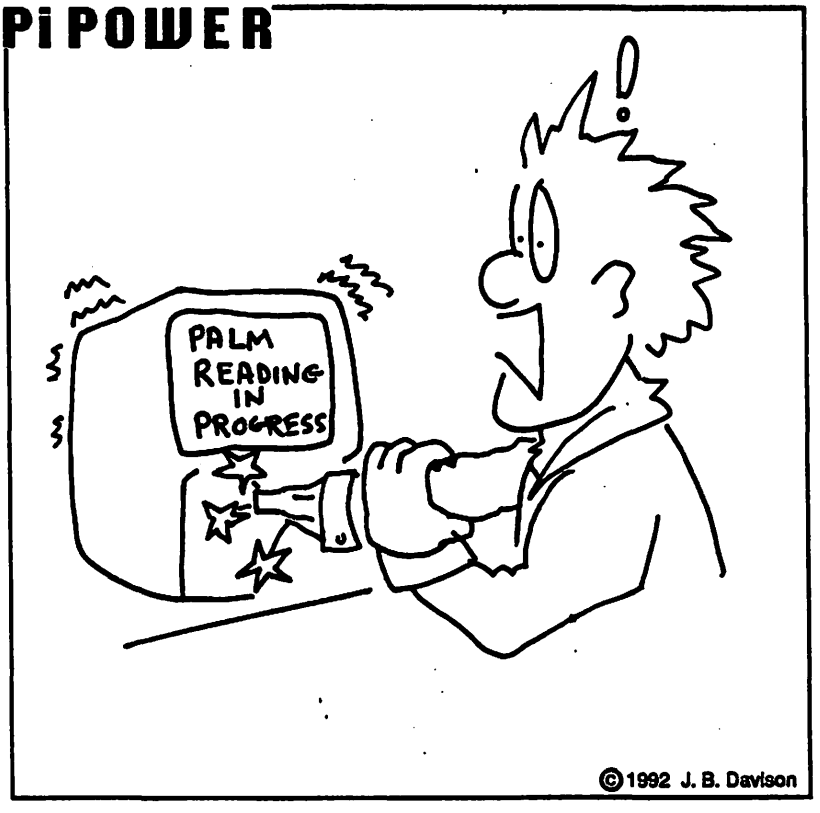


On the Trail of the Apple III

by David Ottalini
Apple III SIG Co-Chairman

Software Development Fund

The big news this month is that we have received enough funding to finance our first project with Bob Consorti! This actually happened in mid-June, and we may well have the updated version of SOS in beta testing as you read this.

Frankly, I was unsure we would have enough funds donated to get this project off the ground. But a couple of things happened that enabled us to get things going. First of all, Bob gave us a deadline. He is in the process of moving to MIT in Cambridge, Massachussettes to continue his education in a new career field–medicine. He said that while he had a chance to start his rotations early there, he was willing to go on with our first project IF we could come up with the funding by mid-June.

At that point, Paul Campbell and I shifted into high gear. Thanks to a soliciation letter put together by Paul and mailed to all SIG members (along with previous donations) we received some $500.00 in donations to the fund. That allowed our matching funds from the club to kick in (thank you Lorin Evans and the WAP BOD). And finally, our friends on the west coast, ATUNC (The Apple III Users of Northern California) came up with their $500.00 donation. That was enough to lock in development for the project.

That said, we also had to make some compromises on what we will get as part of this upgrade. As Bob told me on CompuServe:

I've been trying to get a 65C802 working on my III with no success. I've tried eight different chips on three different Apple III's with no luck. My guess is that there's some timing problem with the newer 802's that weren't in the original ones Rob (Turner) and I used on the III. Consequently, I won't be able to do the 65C802/SOS upgrade. I can still do the SOS upgrade with disk caching.

Also, in looking at what Catalyst does and also at how Selector does things, I don't know if I could guarantee compatibility with either. If I couldn't get it working with Selector, I would include a new program selector in the SOS upgrade package (which would be faster and easier to use). Because of the inability to get a 65C802 working, I don't know what kind of speed-up I could guarantee. I know that my disk caching scheme will greatly speed up things, but I was counting on being able to do 16-bit code to get the bulk of the speed-up. It might be better without the 65C802 anyway since the chip isn't cheap and that would add a fixed cost of about $35 to the price of the SOS upgrade.

One other item Bob hopes to change is the requirement to insert another disk and reboot after you quit a program. With the upgrade, we hope to have the option, as the Apple II folks do, of simply typing in a new pathname and hitting <Return> to boot a new disk (if you're not using a program selector).

Although there is some disappointment that we won't be able to use a 65C802 chip to help speed things up, any other upgrades we might look forward to–primarily an upgrade to the Communications Manager–would depend on improvements to SOS. Also, at this writing, Bob was just getting started with the project, so I will hopefully have a better idea of exactly what the new SOS.Interp will look like next month. He may surprise us!

The money donated to the SDF is being used to essentially buy copies of the update from Bob up front. We will then resell them to you once it has passed muster by Bob and selected beta testers. All funds received for the purchase of this and other projects we do in the future will be placed right back into the SDF, so that we can continue to work on upgrades for our SARA. Please watch this column and the TCS for an announcement about availability of the software and its cost.

Finally: Thank you to Ivan Munson, John Lomartire and David Rutenberg for their contributions to our Software Development Fund.

Titan Support

I'm sorry to report that Titan Support has passed. The owner, Greg Stuk, apparently wants to move on and has had his Titan Support number (which was at his home) discontinued. However, a IIIer in Tennessee, Matthew Thomas, has indicated an interest in possibly buying out the remaining Titan circuit cards and other materials and continuing support in some manner. Unfortunately, its hard to say when or if this will happen. But it might merrit a look from the SIG to help if we can find out what Mr. Stuk wants for all

those parts. It would be a shame for them to be tossed in the trash (we will work to prevent this!). I'll try to have an update for you next month.

IIIs Company BBS

This two month delay in getting information to you in the Journal really makes things tough sometimes. In this case, I was hoping to report to you that the SIG had successfully taken over Ed Gooding's IIIs Company BBS. But as of mid-June, equipment and software problems are causing major headaches that have made this project one of the most frustrating I have ever attempted.

Basically, we have agreed to take over the BBS and operate it as a seperate entity for one year. Ed supplied us with a backup of the BBS and even provided a 20 MB hard disk. BUT I have (at this writing) been unable to get the 20MB drive to work properly, and have been unable to get the Infonet files unarchived (using a special version of GoBack III). I hope to have better news for you next month!

. Our plan is to get this BBS up and running, then download the files and make them available on the new TCS. In the meantime, we'll invite all the current users of IIIs Company to join WAP and become part of our Apple III family.

Which SuperDrive?

Co-Chair Paul Campbell is going to bite the bullet and buy a 1.4 MB 3.5 Superdrive for his III. But he had some important questions to ask on the TCS first:

1) Which interface card should I order, the one for the IIe? 2) Will I be able to read the data on my stack of 800k disks with the SuperDrive? 3) What is the advantage of ordering the SuperDrive over another brand?

As usual, Dave Jernigan came to the rescue:

Paul, you must order the Apple hdfh (SuperDrive) Controller card for the II. AE uses different technology on their drive so don't get it. This is one thing you definitely want from Apple. With the Apple Superdrive, Controller card and Consorti's driver, you are in business. You can also use it in a II and, if you had a GS with system 6.0.1, you could read messy-dooze disks and save them to a better environment.

As we've discussed before, Bob could also have given our version of the SuperDrive the ability to read and write Mac and MS-DOS had Apple been willing to share some information. They were not, unfortunately, and thus, we can not get as much usefulness out of the hardware as we should be able to.

Three EZ Pieces Tip

Paul also offers this great tip when you're using 3EZPs or AppleWorks:

I was updating and removing duplicates from a huge database in Three Easy Pieces this week and made a discovery. When doing this kind of work, I usually make a few keypad macros to simplify things. For example, the enter key will be a down-arrow, the minus key an up-arrow, the decimal key will cause the current record to jump to the top of the screen, and the zero or some other key deletes the record that the cursor is on. The only problem is that once you delete a record in EZP, it's gone whether you wanted it gone or not. I've discovered a new way for a macro to delete records just like the normal "Open-Apple D, Return," with the exception being that you can *get back* the last deleted record. The retrieval macro is almost as simple; If you hit the delete macro by accident (Oh NO!), just hit the retrieve macro and you are back on track.

The trick to this is using the "Move to clipboard" command instead of the delete command. The move command will remove the highlighted record from the database and place it on the clipboard where it can be retrieved if you make an error. The record will remain on the clipboard until replaced by the next record that gets moved to the clipboard. The macro for moving records from the database instead of outright deleting them is "Open Apple-M,T,Return." The macro for retrieving the last record removed is "Open Apple-M,F." Ignore the commas, they only serve to seperate the commands for clarity. This procedure is just as quick as the delete but gives an extra margin of safety. I've also found that databases can be edited much faster because I can move with the confidence that records can be gotten back as fast as they were dumped.

And Another Tip..

This time from CompuServe, where Paul Lynd asked about moving 3EZP files over to the Mac. Bob Consorti did the honors:

You can do transfers of III E-Z Pieces files to the Mac very easily, without printing each file to an ASCII file. All you need to do is get the files on a 3.5" disk. If you have access to a 3.5" disk drive, simply copy your files to it, or save your files from III E-Z Pieces onto the 3.5" disk. Then on the Mac end of things run the Apple File Exchange program to transfer the files onto a Mac style disk. Then use the ClarisWorks program to directly import the "AppleWorks" files. Since III E-Z Pieces and AppleWorks share the same file format, the ClarisWorks program can directly import III E-Z Pieces files. If you don't have a 3.5" disk, find someone with an Apple IIe or GS who does and copy the files from 5.25" disk to 3.5" disks that way.

Bill Arnold (again on CompuServe added:

You don't need to transfer the Apple II ProDOS AppleWorks files to a Macintosh disk. There is a system extension available from Apple that allows you to read and write to a ProDOS disk.

And How About Moving Business BASIC Files To MS DOS?

This time it's Paul's turn to answer a question posed on the Internet:

There is an emulation disk that will allow an IBM to read Apple II ProDOS files and will also recognize Apple III SOS files since ProDOS is based on SOS. Your main problem will be running the programs once they are ported over to another platform unless that platform is the Apple IIGs. AppleSoft, which runs on the II and IIe does not contain features of Apple III Business Basic, so many functions would be lost and the programs probably would not run.

MS-Basic and QuickBasic for the IBM would have similar problems. Other factors are the multi-level nested interrupts which are natural to the Apple III and its built-in interrupt manager. The II will handle simple interrupts, but not on the same scale or level of complexity as the III which is completly interrupt driven. It gets worse for IBMs–MS-DOS has NO interrupt manager and interface cards must have the interrupts set manually by DIP switches.

Disk IIIs into Disk IIs

Closer to home, Ken DeVito asked on the TCS about using a Disk III as an Apple II disk. A while back, ComputerLand sold a number of Disk IIIs as Disk IIs by modifying the Disk III analog card (replacing a chip and installing a jumper or two as I remember). There was a suggestion to simply replace the III analog card and replace it with an analog card from a Disk II (but there have been some problems with this).

Dave Jernigan added:

There is actually an adapter that will take the standard DDIII and plug it in to a II. We have one buried around here. It looks just like the plug that fits into the II. You plug it onto the DDIII cable and then into the II. Problem is, forget which side of the DDIII to plug it into and you FRY the DDIII controller card chip. Computerland used to sell them.

The Titan cards can use the IIIs disk drives without a hitch in emulation mode (as can the older II+ emulation–so we know it can work.) If anyone has had any experience with this, I'd love to hear about it.

Finally

Our first SIG meeting of the Fall will be next month–on Saturday, September 11 at 10am in the WAP office. Please make plans to come. Hopefully, we'll be able to demonstrate our new SOS upgrade!

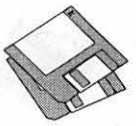
Looking out from the Inside.

Another day driving me insane,
Looking through the Windows Pain.
An Icon here, an Icon there
with files scattered everywhere.
A picture is worth a thousand words,
but confusing ones are for the birds.
A fake Macintosh may be fun,
but I'd REALLY rather get the job DONE.

Paul Campbell

Index to Advertisers

AllNet Service Center 79
Arminius Publications 47
Computer Age 6, 7
A Computerist 9
FC Business Systems 10
Hewlett Packard 1
HyperGlot 34
Greencastle Graphics 11
MacUpgrades ..... Cover 4
MacWorld Expo ..... Cover 2
Multisoft Resources 45
PC Resources 13
PrintFest/Desktop Expo 38
PSB ..... Cover 3
Severn Graphics 37
Supply Line 53
TCS 5



Macintosh Disketeria

by Dave Weikert

In Memoriam

Marty Milrod, Macintosh Disk Co-Librarian, passed away on June 24 of complications from the cancer that he had lived with so long. Marty was a wonderful friend and confidant not only to me but to many others. He was warm and personable and would help anybody who asked. He was a valuable source of knowledge for almost anything Macintosh. A long-time member of Washington Apple Pi, he had a long history of service as a volunteer in many areas. He planned and executed many of WAP's very successful forays to Mac Expo in Boston. Most recently, he fielded Macintosh questions as a hot-line volunteer. Marty was our primary source of downloads for the Mac Disketeria and provided valuable telephone support to our members with questions about programs in the Disketeria. His volunteer efforts in support of the Mac Disketeria outlasted three different new disk librarians which he supported. Marty had a wonderfully positive attitude even as he fought the cancer that ravaged him. He was an inspiration to me and many others, and I and those WAP members who knew him will miss him dearly.

New Disks

There are nine new disks this month; two Desk Accessories series #2.XX, two System Extensions (INITs & CDevs) series #9.XX and five Apple System Software related disks. Descriptions of the files on the new and revised disks are included below.

Desk Accessories

We added two disks of Desk Accessories, Mac Disks #2.13D and #2.14D. Most of the programs are revisions of files previously in the Disketeria. One of the revisions is Vendor DA developed by Bill Baldridge, one of our members. This is a very useful DA for anybody who needs quick access to the telephone numbers of companies that provide Macintosh related products. Although Vendor DA is no longer a Desk Accessory, we will continue to include it in the DAs category until Bill changes the name. Thanks, Bill!

Desk Accessories (DAs) are usually small programs of limited functional scope that are nevertheless very useful or entertaining.

DA suitcase icons are installed using the Font/DA Mover for System 6.0.8 or earlier and are available under the Apple ( ) menu. Under System 7, Desk Accessories may be used as independent programs by opening their suitcases and moving their application icons to a folder or to the desktop. DAs may also be installed under the menu by moving their application icons to the Apple Menu Items folder within the System 7 folder.

For Systems 6.0.8 and earlier, DAs and Fonts are installed with Apple's Font/DA Mover program which is found on your System Software Utilities 2 disk. Instructions for its use are found in the Apple Macintosh Utilities User's Guide or other documentation that came with your Mac.

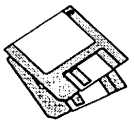
Installation of Desk Accessories is easy with System 7. No more tedious installation with Font/DA Mover (or Suitcase or Master Juggler). Just copy the DAs over to your hard disk. Double click the DA suitcase icon to convert them; the DA suitcase opens just like a folder and shows any included DAs in application (diamond icon) form. Then just move the DA application icons into any convenient folder. You may then run DAs at any time by opening the folder and double clicking the application icon. To access DAs from the Apple ( ) menu as in earlier systems, just move the DA icons to the System folder icon; you will then be asked to allow storing the DAs in the Apple Menu Items folder. These DAs are immediately available under the menu just as with earlier systems.

DAs may also be "accessed" using commercial utilities such as Suitcase II (5th Generation Systems, Inc.) or Master Font/DA Juggler (ALSoft) without the bother of installing the DAs in the System or in an application. Either utility is highly recommended. If you use these, just follow the instructions in their respective manuals.

System Extensions (INITs & CDevs)

We added two disks of System Extensions, Mac Disks #9.26B and #9.27B. Many of the programs are revisions of files previously in the Disketeria, others are new additions to the Disketeria.

INITs and CDevs get their names from the standard file types (type INIT and type cdev) that Apple has assigned to these system files. INITs are small auxiliary programs that are run when you start up your Mac. INITs modify the Macintosh operating system in some way. Control Panel Devices, CDevs, may be accessed from the Control Panel item under the Apple ( ) menu. They give



you a way of enabling and configuring modifications to the operating system. Control Panels may or may not have an INIT component which is run at start-up. Many of the INITs and CDevs display an icon along the bottom of the screen during start-up.

Under System 6.0.8 or earlier, place the INIT or cdev in the System folder and reboot for them to take effect. For System 7.0 or later, place the INIT or cdev on the System folder icon, answer yes to the prompt and then reboot. The Mac will place INITs in the Extensions folder and CDevs in the Control Panels folder located with the System 7.X folder. For either system, you may have to turn CDevs on or change their configuration via their respective Control Panels.

INITs may conflict with one another because they modify the operating system. In case of unexpected operation, remove all INITs to a separate folder and reboot. Then add one INIT at a time back into the System folder or Extensions folder rebooting each time until you isolate which one is causing the problem. Sometimes a problem may be eliminated by changing the alphabetic order in which the INITs load. In some cases you may change the order of loading by adding a character in front of the INIT name to change its position (to load before or load after) relative to others. Commercial programs such as INIT Picker and others are also available to enable or disable INIT loading and to control the load order of INITs.

Apple System Software

There are three new disks with Apple System Software this month. They include the Express Modem Disk, the Macintosh CD-ROM Setup disk and the Communications 1 disk.

LaserWriter 8.0 software released last month is now available in two separate disk formats; as two 800K disks or one 1.44M disk. The LaserWriter 8.0 driver supports the PostScript Level2 interpreters delivered in some printers over a year ago as well as also supporting the PostScript Level 1 printers. Since the new LaserWriter driver adds new functional capability, enhances performance it is highly recommended for all PostScript printers whether they use PostScript Level 1 or 2 interpreters. The older versions of the LaserWriter drivers are not removed by the installer on these disks so you may continue to use the older version if necessary to support specific features or if problems with the new driver are encountered.

About ShareWare Requests

Please honor authors' requests for ShareWare fees if you decide to add ShareWare programs to your software library. ShareWare is a valuable distribution channel for low cost software and it is important to encourage authors to use this channel by paying them for their efforts.

Disk #2.13D — DAs 13
Desk Accessories

*CptExpand 1.0 *f*: By Bill Goodman. A utility for extracting files from archives on this disk created by Compact Pro. **CptExpand Doc** is in text format.

Address Book DA 3.6.1 *f*.cpt: Address Book DA 3.6.1 and **Address Book 3.6.1**: By Jim Leitch. This is a Address and phone list, dialer and envelope and label generator in DA and application formats. You may view an index of 66 names (length limited to 40 characters) per page in three columns per page. Select name and double click to open record and choose one of three telephone numbers to dial automatically. Several pages of help and is System 6 MultiFinder and System 7 compatible. Files can be exported. **Installation** and **What's new in 3.6.1** are in text format. **Sample list** is a sample address list. *ShareWare – $30.*

Blender DA v1.4.1: By Rick Johnson. Calculate the number of steps necessary for smooth color blends used in programs such as Adobe Illustrator and Aldus FreeHand. *Donation accepted.*

Calculator+: A calculator with a "tape" that may be printed. In addition to the standard four functions this one has log, exponential, trig and financial functions.

Clipboard Magician DA .72 *f*.cpt: By Ed Lai. A desk accessory that displays the scrap. It is just like a clipboard but it also allows you to manipulate the data there. You can paste just about anything there from an application and convert it to something that can be read or displayed by another application. **READ ME FIRST, About Clipboard Magician, About Clipboard Magician 0.72** and **Simple Installation** are in text format. Requires use of ResEdit to install specific resources.

FlashWrite][1.1 *f*: By Andrew Welch. A super notepad DA which may have multiple pages, each with its own name and each containing up to 32,000 characters in any font face, size and style. It can import and export text and you may select your favorite word processor in a preferences setting. The DA also has a find function and counts characters, words, sentences and paragraphs. **FlashWrite][1.1 Docs** is in double clickable application format. **FlashWrite][Opener** is a Control Panel that goes in the System folder; it permits you to open FlashWrite][any time you press a definable "hot key." *ShareWare–$15.*

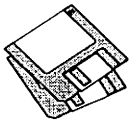
Little Black Book 1.6 *f*: By Bill Oliver. A phone book and address book combined that allows you to add as many name and addresses as you like along with as many phone number you wish. It has a find function and auto-dial feature using the Mac speaker or modem. You may also export the information to any word processor or a text file. *ShareWare – $20.*

MandelTV™ *f*: By Abbott Systems Inc. A fast high-resolution color Macintosh Mandelbrot generator. Requires a Macintosh with Color QuickDraw in ROM and a floating point co-processor. **MandelTV™ Read Me** is in text format.

Disk #2.14D — DAs 14
Desk Accessories

*CptExpand 1.0 *f*: By Bill Goodman. A utility for extracting files from archives on this disk created by Compact Pro. **CptExpand Doc** is in text format.

IntCalc 1.1 *f*.cpt: By James Preston. A programmable integer oriented RPN calculator available in both DA and application formats. It includes floating point arithmetic as well as binary, octal, decimal, hexadecimal and ASCII displays. **IntCalc 1.1 READ ME** is in text format, **IntCalc help** is in word format and **IntCalc help (MacWrite)** is in MacWrite



format. *ShareWare – $10.*

Pica Calc v2.2s *f*.cpt: By Jim Lewis. A programmable scientific calculator that incorporates an "algebraic entry" method. This calculator is very full featured as can be seen in the relatively detailed operators manual and programmers guide. PC2 Oper.Manual.Prelim.txt and PC2 Pgmr.Guide.Prelim.Otxt are in text format. *ShareWare – $25.*

RPN Calc: By Jonathan Hess. A RPN calculator based inspired by the more complex Hewlett Packard types. Plenty of scientific functions and some limited financial functions. Click the ? button on the DA for help. *ShareWare – $10.*

ScrapIt][DA: By John V. Holder. A replacement for Apple's Scrapbook DA; this one lets you create and access multiple files, import text, PICT, 'snd' (sound) and Paint files, export text, PICT, 'snd' and Paint files and perform other useful functions. *ShareWare–$15.*

Scrapz 1.3.1 *f*: By Lars Sundström. A replacement for the Apple scrapbook that has features such as import/export, resizeable window, partial selection of text and pictures ,multiple scrapbooks and more. Scrapz Read Me is in text format.

Super NotePad 1.21 *f*: By David W. Jung. A replacement for Apple's standard notepad. This one may have up to 1000 pages, multiple sizes, multiple files, text search and control over font characteristics. **About SuperNotePad 1.21** and **About SuperNotePad 1.21.mw** are in Word and MacWrite formats respectively. *ShareWare – $5.*

TattleTale 1.6 *f*.cpt: By John Mancino. Provides very complete information about your computer and its system related software. Information can be viewed on screen by category, printed, written to a standard text file or output in database readable format. The record of your system configuration can be used for reporting problems to software and hardware manufacturers, to compare configurations across multiple computers, or to simply learn about your machine. **TattleTale DA Docs.MWII** and **TattleTale DA Docs.Text** are in MacWrite II and text formats respectively. For Mac Plus and later, System 4.2 and later. *Helpware – "please give to an organization of your own choosing in an amount greater than you might normally."*

VendorDA 1.4 *f*.cpt: By Bill Baldridge, one of Apple Pi's own. A very useful list of 824 Macintosh computer product related vendors and their phone numbers. This version, no longer a DA, was created with Print2Pict by Baudoin Raulot. **About VDA 1.4** is documentation in double clickable PostCard application format. *ShareWare – $10.*

Disk #9.26B — I/C 26 INITs & CDevs

Apollo 1.0 *f*.sea: By Jerremy Roussak. An application launcher modeled after On Cue. You initiate Apollo from the Apple menu bar or by control key combinations. You can then launch files from a pop-up window to which you may add groups of applications or documents. **About Apollo 1.0** is in double clickable DOCMaker application format and **Read Me!** is in TeachText format. Compatible with Systems 4.1 and later including System 7. *ShareWare – $30.*

ApplWindows 2.0 *f*: By Hiro Yamamoto. Shows a window list off the Applications menu at the top right corner in the menu bar to permit easy selection of open windows. This extension is just loaded with useful features and options. **About ApplWindows (MacWrite II)** is in the format indicated. For System 7.0 and later.

autoboot 1.2 *f*.sea: By Karl Pottie. Forces a reboot of your Macintosh whenever a System Error has occurred. Particularly useful for Macs that must be on line at all times such as when used as a server, BBS, FAX receiver, etc. **About AutoBoot** is in BP Viewer format (included). *ShareWare – $20 for first Mac, $10 for each additional one.*

Basic Black 1.1 *f*: By Mason L. Bliss. A simple screen saver without any whizbang graphics. Its primary advantage is that it is very small and quick—letting other background applications run with little interference. **Read Me - Basic Black 1.1** is in text format.

BroadCast 2.1 *f*: By Joachim Lindenberg. A Chooser Document used to send short messages between Macs on a network. **BroadCast Info** and **BroadCast Info 2** are in text format. Not tested. *ShareWare – $25 a machine or $100 a network.*

Carpetbag 1.3.7 *f*: By James L. Walker. Carpetbag permits you to keep DAs, fonts, keyboard layouts, sounds and FKeys outside your System file much as Suitcase II or MasterJuggler. Ancillary files **CarpUnmount, Laser Path, Outboard Keyboard, Outboard Sound** and **Universal Suitcase** are also included. **Contents** is in TeachText format. *ShareWare – $5.*

Cleaning Lady 1.0 *f*: By Joe Zobkiw. Adds a dialog after selection of 'Clean up...' from Finder's Special menu so you do not inadvertently clean up a window such as the Desktop. **Read Me** is in text format.

Color Tracks 1.0.1 *f*: By J. Andrew Schafer. Enables the music tracks on your audio CDs to display color and/or small icons. Ever persistent **Read-Me file** is in TeachText format.

ColorSwitch 1.01 *f*: By Andrew Welch. Permits you to easily switch between color modes on one or more attached monitors. For color capable Macs running System 6.0.5 with Color QuickDraw and later systems. **ColorSwitch Notes** is in text format. *ShareWare – $10.*

Dialog View 1.0.6 *f*: By James W. Walker. (Previously List Font.) Allows you to change the font and size used in directory dialog file lists, and display the real icons of files in such lists. Requires System 7.0 and later.

DragWindow II 2.3 *f*: By Michael Großmann. Changes the appearance of a dragged window from an outline to the full window. **Read Me** is in text format. For Mac Plus and later; System 6.0.5 and later.

Disk #9.27B — I/C 27 INITs & CDevs

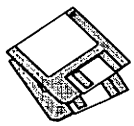
DoubleScroll 2.0.5 *f*: By Edward Voas. Places a double arrow on each end of your scroll bars, allowing you to scroll in both directions without having to move your mouse from one end of your desk to the other to scroll back and forth. For System 7.0 and later. *ShareWare – $10.*

Flash-It 3.0.2 *f*.sea: By Nobu Toge. Defines five hot-keys to: capture all or a selected part of the screen image, save it to the clipboard, scrapbook or to a disk file, and print it. It can also scale the image by a pre-specified ratio. **Flash-It 3.0.2 Doc (MW)** is in MacWrite format. System 6 and 7 compatible. *ShareWare–$15.*

Forker 1.0 *f*: By J. S. Howlett. Designed to fool ResEdit so that it permits editing data forks of files in addition to resource forks. **READ ME - Forker** is in text format.

Function Keys 1.2 *f*: By Berrie Kremers. Permits you to emulate extended keyboard Functions Keys 1 through 10 on your PowerBook. **Read Me** is in text format.

Greg's Buttons 3.0 *f*: By Greg Landweber. Replace the standard black and white push buttons, check boxes, and radio buttons with



shaded, color 3-D ones. The new buttons are designed to match the windows and scroll bars under System 7 and support the color tinges that you can select in the System 7 Color Control Panel. **Greg's Buttons Docs** and **Registration Form** are in TeachText format. For System 7.0 and later. ***ShareWare–$15.***

MeanScreen 7.0 *f:* By John Butler. A basic screen saver with selectable time until enabling. **MeanScreen 7.0.docs** is in TeachText format.

MoonIT 1.0 *f:* By Eiji Nitasaka. Displays the current moon phase at the bottom of your screen during startup (watch for it during INIT loading). **MoonIT Read Me** is in text format.

NewLook™ 2.1: By Philip W. Flack. Add color to window body, outline and text and radio and checkbox button controls. ***ShareWare–$15.***

Open-wide 3.5: By James W. Walker. Widens the Open and Save dialogs so that you can see long file names. Very useful when the only differences in a file name is near the end of a long name. ***PostcardWare.***

PrintOne 1.0.1 *f:* By CRA Z Software. Adds a PrintOne menu item to the File menu for most but not all applications with a Print menu item. **PrintOne Read.Me** is in text format.

Snap-To 1.0 *f:* By Trevden Sherzell. Snaps the "pointer" to the default box in an open dialogue. **Snap Docs** is in text format.

SuperClock! 4.0.4 *f:* By Steve Christensen. The classic full-featured menu clock; with timer and other features. Perhaps the best free software value available for the Macintosh. **SuperClock! README** and **SuperClock! 4.0.4 release notes** are in TeachText format. For System 6.0.7 and later. Free, but if you really want to send something, send it to Stanford Children's Hospital.

Trek Cursor *f:* By Michael Donahue. A modification of Matthias Urlichs' Color Cursor INIT to show a Star Trek communicator pin instead of a colored arrow. **Trek Text** is in text format.

WDef III - 3.1 *f*.sea: By Anthony D. Saxton; portions by Eric Celeste & Josh Pritikin. Modifies your windows so they looks like the ones displayed by NeXT computers. The NeXT Windows INIT includes true NeXT and modified NeXT windows. **Read Me First!** is in text format. Source includes C code and resources. ***ShareWare – $5.***

WithAView 1.1 *f:* By David P. Sumner. Change the view in a Finder window by clicking on any one of Name, Size, Kind or Date Modified to cause the window's view to change to that mode. For System 6 only. **WithAView Documentation** and **WithAView Documentation (text)** are in Word and text formats respectively.

Zipple 1.5 *f:* By Christopher Suley. Adds an animated image of your choice over the title of the Apple, Balloon Help or Application menu. **About Zipple 1.5** is in TeachText format. ***Betweenware – see documentation.***

Disk #SS.ExpModem
Espress Modem

This disk supports Apple's Express Modem for the PowerBook series of notebook computers.

Express Modem ReadMe, Installer 3.4 and **Installer Script 1.0.4.**

Express Fax Folder: **Fax Cover Folder** with **Fax Cover 1.1.1, Fax Extension 1.1.4, Fax Sender 1.1.2, Fax Terminal 1.1.2, Fax Viewer 1.0.1** and **My first fax.**

Express Modem Folder: **Express Modem 1.0.4, Express Modem Tool 1.0.2, PowerBook 7.1.2** and **System Enabler 111 1.0.2.**

Modem Documents: **AppleLink 9600 US Access, Express Modem 14400 1.0, Express Modem AT Cmds** and **Express Modem CCL 1.0.**

Disk #SS.CD-ROM
Mac CD-ROM Setup

This disk supports Apple's CD-ROM drives including the CD-300.

AppleCD 300 Read Me, CD Remote 1.3, Installer 3.4, Installer Script 4.0 and **TeachText 7.1.**

CD-ROM Software: **Apple CD-ROM 4.0.2, Apple Photo Access 1.0.2, AppleCD Speed Switch 1.0.2, Audio CD Access 4.0.2, CD Remote INIT 1.3, Foreign File Access 4.0.2, High Sierra File Access 4.0.2** and **ISO 9660 File Access.**

Disk #SS.CTB
Mac Commns 1

This disk lets you add the Communications Tool Box resources to System 6, specifically 6.0.4 through 6.0.8. System 7.0 and later already include the CTB resources built-in.

CTB Resources 1.0, Installer 3.2, Installer Script 1.0.2, Read Me 1.0.2 and **TeachText 1.2.**

Disk #LW.80-1.44M
LsrWrtr 8.0 Install

LaserWriter 8.0 Install allows you to install the LaserWriter 8.0 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.

Installer 3.4, and **Installer Script 1.0, Read Me** and **TeachText 1.2.**

Printing Tools: **Backgrounder 1.3, Laser Prep 7.2, LaserWriter 8.0.cmp, PrintMonitor 7.1.cmp, PrintMonitor.cmp., LaserWriter Utility 7.4.1** and Printer Descriptions containing descriptions for the current and past line of Apple PostScript printers (LW, LW Plus, IINT, IINTX, IIf, IIg, Pers NT, Pers NTR, Pro 600 and Pro 630).

Disk #LW.80-800K-1
LsrWrtr 8.0 Install

LaserWriter 8.0 Install allows you to install the LaserWriter 8.0 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.

Installer 3.4, and **Installer Script 1.0, Read Me** and **TeachText 1.2.**

Printing Tools: **Backgrounder 1.3, Laser Prep 7.2, LaserWriter 8.0.cmp, PrintMonitor 7.1.cmp** and **PrintMonitor.cmp.**

Disk #LW.80-800K-2
LsrWrtr 8.0 Disk 2

Printing Tools: **LaserWriter Utility 7.4.1** and Printer Descriptions containing descriptions for the current and past line of Apple PostScript printers (LW, LW Plus, IINT, IINTX, IIf, IIg, Pers NT, Pers NTR, Pro 600 and Pro 630).

Macintosh Library Order Form

Pi Library
- ___ 0.01 - C 01 Files
- ___ 0.02 - C 02 Sampler
- ___ 0.03 - C 03 MemDir
- ___ 0.04 - C 04 Catalog
- ___ 0.05 - C 05 PS.Catalog

Anti-Virus Utilities#
- ___ 1.01G - AV 1
- ___ 1.02J - AV 2
- ___ 1.03J - AV 3

Desk Accessories#
- ___ 14 disk set; $42
- ___ 2.01D - DAs 1
- ___ 2.02D - DAs 2
- ___ 2.03D - DAs 3
- ___ 2.04D - DAs 4
- ___ 2.05D - DAs 5
- ___ 2.06D - DAs 6
- ___ 2.07D - DAs 7
- ___ 2.08D - DAs 8
- ___ 2.09D - DAs 9
- ___ 2.10D - DAs 10
- ___ 2.11D - DAs 11
- ___ 2.12D - DAs 12
- ___ 2.13D - DAs 13
- ___ 2.14D - DAs 14

F Keys (Function Keys)
- ___ 4.01A - FKs 1
- ___ 4.02A - FKs 2

ImageWriter Fonts#
- ___ 5.01A - IW 1
- ___ 5.02A - IW 2
- ___ 5.03A - IW 3
- ___ 5.04A - IW 4

PostScript Fonts#
- ___ 19 disk set; $57
- ___ 6.01A - PS 1
- ___ 6.02A - PS 2
- ___ 6.03A - PS 3
- ___ 6.04A - PS 4
- ___ 6.05A - PS 5
- ___ 6.06A - PS 6
- ___ 6.07A - PS 7
- ___ 6.08A - PS 8
- ___ 6.09A - PS 9
- ___ 6.10A - PS 10
- ___ 6.11A - PS 11
- ___ 6.12A - PS 12
- ___ 6.13A - PS 13
- ___ 6.14A - PS 14
- ___ 6.15A - PS 15
- ___ 6.16A - PS 16
- ___ 6.17A - PS 17
- ___ 6.18A - PS 18
- ___ 6.19A - PS 19

TrueType Fonts
- ___ 14 disk set; $42
- ___ 7.01 - TT 1
- ___ 7.02 - TT 2
- ___ 7.03 - TT 3
- ___ 7.04 - TT 4
- ___ 7.05 - TT 5
- ___ 7.06 - TT 6
- ___ 7.07 - TT 7
- ___ 7.08 - TT 8
- ___ 7.09 - TT 9
- ___ 7.10 - TT 10
- ___ 7.11 - TT 11
- ___ 7.12 - TT 12
- ___ 7.13 - TT 13
- ___ 7.14 - TT 14

Graphics#
- ___ 6 disk set; $18
- ___ 8.01 - G 1
- ___ 8.02 - G 2
- ___ 8.03 - G 3
- ___ 8.04 - G 4
- ___ 8.05 - G 5
- ___ 8.06 - G 6

INITs & CDevs#
- ___ 27 disk set; $81
- ___ 9.01B - I/C 1
- ___ 9.02B - I/C 2
- ___ 9.03B - I/C 3
- ___ 9.04B - I/C 4
- ___ 9.05B - I/C 5
- ___ 9.06B - I/C 6
- ___ 9.07B - I/C 7
- ___ 9.08B - I/C 8
- ___ 9.09B - I/C 9
- ___ 9.10B - I/C 10
- ___ 9.11B - I/C 11
- ___ 9.12B - I/C 12
- ___ 9.13B - I/C 13
- ___ 9.14B - I/C 14
- ___ 9.15B - I/C 15
- ___ 9.16B - I/C 16
- ___ 9.17B - I/C 17
- ___ 9.18B - I/C 18
- ___ 9.19B - I/C 19
- ___ 9.20B - I/C 20
- ___ 9.22B - I/C 22
- ___ 9.23B - I/C 23
- ___ 9.24B - I/C 24
- ___ 9.25B - I/C 25
- ___ 9.26B - I/C 26
- ___ 9.27B - I/C 27

Miscellaneous#
- ___ 10.01A - M 1
- ___ 10.02A - M 2

Paintings (MacPnt)
- ___ 5 disk set; $15
- ___ 11.01 - P 1
- ___ 11.02 - P 2
- ___ 11.03 - P 3
- ___ 11.04 - P 4
- ___ 11.05 - P 5

Digitized Sounds#
- ___ 9 disk set; $27
- ___ 12.01B - S 1
- ___ 12.02B - S 2
- ___ 12.03B - S 3
- ___ 12.04B - S 4
- ___ 12.05B - S 5
- ___ 12.06B - S 6
- ___ 12.07B - S 7
- ___ 12.08B - S 8
- ___ 12.09B - S 9

Telecommunications#
- ___ 13.01B - T 1
- ___ 13.02B - T 2
- ___ 13.03B - T 3

Programmer/Hacker
- ___ 14.01A - PH 1
- ___ 14.02A - PH 2

Miscellaneous Utils#
- ___ 9 disk set; $27
- ___ 15.01B - MU 1
- ___ 15.02B - MU 2
- ___ 15.03B - MU 3
- ___ 15.04B - MU 4
- ___ 15.05B - MU 5
- ___ 15.06B - MU 6
- ___ 15.07B - MU 7
- ___ 15.08B - MU 8
- ___ 15.09B - MU 9

System Utilities#
- ___ 25 disk set; $75
- ___ 16.01D - SU 1
- ___ 16.02D - SU 2
- ___ 16.03D - SU 3
- ___ 16.04D - SU 4
- ___ 16.05D - SU 5
- ___ 16.06D - SU 6
- ___ 16.07D - SU 7
- ___ 16.08D - SU 8
- ___ 16.09D - SU 9
- ___ 16.10D - SU 10
- ___ 16.11D - SU 11
- ___ 16.12D - SU 12
- ___ 16.13D - SU 13
- ___ 16.14D - SU 14
- ___ 16.15D - SU 15
- ___ 16.16D - SU 16
- ___ 16.17D - SU 17
- ___ 16.18D - SU 18
- ___ 16.19D - SU 19
- ___ 16.20D - SU 20
- ___ 16.21D - SU 21
- ___ 16.22D - SU 22
- ___ 16.23D - SU 23
- ___ 16.24D - SU 24
- ___ 16.25D - SU 25

Word Processing Utils#
- ___ 5 disk set; $15
- ___ 17.01B - WP 1
- ___ 17.02B - WP 2
- ___ 17.03B - WP 3
- ___ 17.04B - WP 4
- ___ 17.05B - WP 5

Adobe Screen Fonts#
- ___ 18.01A - AF 1
- ___ 18.02A - AF 2

Fun & Games Series
- ___ 22.01 - F/G 1
- ___ 22.02 - F/G 2
- ___ 22.03 - F/G 3

Best of Pi Series
- ___ 10 disk complete set; $25
- ___ 5 disk revised set; $17.50

System Software
- ___ 6.0.3 - 4 disk set; $12
- ___ 6.0.5 - 4 disk set; $12
- ___ 6.0.7 - 4 disk set; $12
- ___ 6.0.8 - 4 disk set; $12
- ___ 7.0 - 9 disk set; $20
- ___ 7.0.1 - 6 disk set; $20 (‡)
- ___ Sys 7/7.0.1 Tune-Up $3
- ___ QuickTime 1.0-2 disk set; $6
- ___ QuickTime 1.6-1 disk; $3
- ___ Laser Wrtr 8.0-$3 (‡)
- ___ Laser Wrtr 8.0-2 disk set; $6
- ___ Sys Network Installer $3
- ___ TrueType - 2 disk set; $6
- ___ Basic Conn Set v1.1.1-1 disk; $3
- ___ Express Modem-1 disk; $3 (‡)
- ___ CD ROM Setup-1 disk; $3
- ___ Comm 1 (CTB)-1 disk; $3

HyperCard Update
- ___ 1.2.5 - 3 disk set; $9
- ___ 2.0 - 5 disk set; $15

(‡) on 1.44 Meg diskette
\# Revised disk series

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 your check to :
Disk Library
Washington Apple Pi
7910 Woodmont Avenue, Suite 910
Bethesda, Maryland 20814

Are you a member of Washington Apple Pi, Ltd.? Y/N __ If Yes, Member Number _____.
All payments must be in U.S. funds drawn against U.S. banking institutions.
Non-members add $3.00 per disk to listed prices.

Number of Disks	Member Price @	Extended
Singles		
__ 4 or less @	$4.00=	_____
__ 5 or more @	$3.50=	_____
__ Sets (marked above) + postage $1.00/disk, maximum $5.00.	$ (above)	_____
__ Disk Catalogs + $1.50 postage	$4.50	_____
TOTAL AMOUNT DUE		$ _____

Name

Box Number, Apartment, Suite, etc.

Street Address

City **State** **Zip Code**

Day Telephone **Evening Telephone**

Apple Disk Library

by John B. Ruffatto

Welcome 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 on 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 to them.

I would also like your comments in regard to Public Domain software that 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, IIGS, III and Macintosh disks containing your current disk library offerings can be exchanged for new disks at the Pi office free of charge. For exchanges made by mail, please be certain to include one dollar per disk to cover shipping and handling. Thank you.

GSCM-01 D–GenericTerm v3.31

In the /Alink.Easy/ folder–Alink.EasyPrint version 1.1 is a IIgs program that takes the drudgery out of printing files downloaded from AppleLink Personal Edition. It lets you print groups of files with one command. This program is freeware. By Paul Gauthier.

In the /Angel.v0.81b/ folder–Angel 0.81b is a file utility, written by Tony Marques of AGATE fame. It renames files, creates directories, views text files, locks/unlocks files, and calculates CRC's. This program also supports unpacking and viewing of files inside ZIP (including the new PKZIP 2.04 "deflated" format!), LHA (lh1 and lh5), ARC, ZOO 2.10, UNIX .Z archives (only up to 13 bits), and SHK archives. It will also create ZIP archives

In the /ASQ/ folder–The two programs in this folder, ASQ and AUSQ, squeeze and unsqueeze files so they may be transferred more efficiently via modem. ASQ is used for squeezing and AUSQ is used for unsqueezing files for faster file transfer or more efficient storage.

In the /Auto.UnSHK.v1.1/ folder– This is Auto-UnShrinkIt version 1.1 — it's primary mission in life is to just extract stuff from all sorts of archives. It also has an archive "scavnge" feature which will look through a damaged archive and try to extract whatever is still good.

In the /Binary2/ folder–This folder contains simple Binary II utilities to create and unpack Binary II files. BINARY.UP encodes a file before transfer. BINARY.DWN decodes the file once it is received.

In the /DiskCopyGS/ folder–This is a small Beta quality utility that will extract disk images from "dImg" files (Mac diskImage files) on your GS. With GS ShrinkIt you can extract these files from their StuffIt archives and then use this to make the disk. It is not directly launchable–you use the enclosed icon file to do the launching from Finder. Read the docs enclosed. By Todd Whitesel.

In the /GenericTerm3.31/ folder–GenericTerm version 3.31 by David D. Miller is a SHR-based ProDOS 8 ANSI terminal emulator. Supports the full IBM character set, all of which can be typed via special keyboard codes. Full-color ANSI with boldface and reverse. No file transfers, no scrollback, no frills, but what it does it does well. Version 3.2 fixed some bugs in the port driver while version 3.31 is a SYS file and fixes several bugs.

In the /GIF.Beheader/ folder–GIF is a machine-independent standard for storing and transmitting graphics files. There are some excellent GIF utilities available for the Apple IIgs which can display GIF files and translate them into standard IIgs graphics files. When you download Mac GIFs to your Apple II, however, the file will have a "header." Before an Apple II GIF utility can recognize a file as being a GIF, it may be necessary to strip off this header. This is the job that GIF Beheader does. FreeWare by Karl Bunker.

In the /Kermit.v3.88/ folder–Apple II Kermit version 3.88. Kermit-65 is a program that implements the Kermit file transfer protocol for the Motorola 6502 processor family (hence the name, Kermit-65) on the Apple II microcomputer system. Kermit features file transfers and VT52/VT100 terminal emulation.

In the /LineFeed.IR/ folder–Linefeed IR (Linefeed Inserter/Remover) by Karl Bunker inserts and removes linefeed characters from ASCII text files, and converts AppleWorks (Classic) files into ASCII text files with linefeeds inserted. When text files are shared between Apple II users and users of other computers (notably MS-DOS machines), linefeed characters can be troublesome. Linefeed.IR is FreeWare.

In the /Mac.Down/ folder–Macdown is a program that will convert MacBinary and Packit files to ProDOS format. It should work on any Apple // that can run ProDOS. It also will convert MacPaint pictures to Hires. Docs included.

In the /Mac.To.GS/ folder–This is a set of programs to convert MacPaint pictures to GS $C1 format. It includes the MacTransGS program which will copy the files of your choice from a 400K Mac disk onto a Prodos disk! If you want to read documents from MacWrite you must have saved them as a Text file. If you have problems with this program recognizing your prodos data disk, try quitting and setting the prefix to your data disk. The program, MacPaint.To.GS, reads a Macpaint file and allows sections to be converted to SHR format. Requires the MacPaint file to be on a Prodos disk. Vertical distortion! This program is

overshadowed by SHR Convert but it does allow you to strip the headers from Macpaint files if you download them from a Mac board. Run.MacPaint.GS is used to launch MacPaint.To.GS.

In the /NuFX.Messenger/ folder–NuFX Messenger allows you to read and write NuFX messages. "NuFX" is the name given to the file format used by ShrinkIt. One of the features of the NuFX format is that it supports "messages" contained within the archive file. NuFX Messenger can only display a single message per archive, the one attached to the first file (or "item") in the archive. FreeWare by Karl Bunker.

In the /Patch.TIC.Ed/ folder–This is a patch program for the v3.01 editor that shipped with the early copies of TIC 3.10. Do not apply the patch to any other version. The program does check for the version. Also, remember to always patch a copy of the TIC 3.10 disk and never the original disk!

In the /PT.RAM.Patch/ folder–This program allows you to use ProTERM 2.1 with Glen Bredon's ProSel RAM disk driver for auxiliary slot memory cards. Complete instructions are included for making the patch.

In the /ShrinkIt.v3.4/ folder–This is a file and disk archieving program by Andy Nicholas. This folder includes ShrinkIt together with its docs & the launcher file, ShrinkIt.System, needed to run it from BASIC or to make it boot from a disk with ProDOS 8 v1.8 [due to a bug in the latter].

In the /YankIt.v1.1/ folder–YankIt v1.1 is a //gs shell EXEcutable for extracting NuFX files from a library (like Shrinkit, only it only works with NuFx files). It permits you to see whats in the library without extraction, and also will do a "verify" without extraction. Works great from the ProSel 16 shell. This version fixes bugs that were found in versions 1.0 and 1.01. Ver 1.1 also has a new 'f' flag (force overwrite of existing files, as in "rm -f*"). Docs included.

In the /ZLink/ folder–Z-Link is a Telecommunications program for the Apple / / by David Whitney. It includes everything you'd expect from a good modem program including a text capture buffer, robust terminal emulation, and split-screen person to person chat mode. Z-Link can transmit and receive files using several protocols including XMODEM/Checksum, XMODEM/CRC-16, YMODEM/CRC-16, and YMODEM/ Batch and it is compatable with Ascii Express: The Professional and MouseTalk. The program runs on an Apple //c, //c+, enhanced //e, or / /GS under ProDOS 8. Apple //GS users can now push the baud rate up as high as 57,600 baud. Z-Link is shareware, $25 fee.

GSCM-02 C–SnowTerm

In the /GSHK.v1.1/ folder–This is version 1.1 of the IIgs file archiving utility, GSHK (GS/ ShrinkIt). This is the complete update pack including GSHK, its docs, Icons, and a form for bug reports. GSHK will handle SIT, ARC, ZOO, and compress (unix) files as well as all the kinds of Apple II archives. GSHK v1.1 can make Self-Extracting Archives (.SEA files), it's faster compressing, faster decompressing, and easier to use.

In the /GSVT.1.0/ folder–GSVT Version 1.00 is a communications program (VT100 Emulator) for the Apple IIgs. The emulator incorporates a subset of the VT100/ANSI control sequences and is useful for communicating with VAX computers or other mainframes that can drive a VT100 terminal. GSVT maps the GS numeric keypad to emulate the VT100 keypad for editing using EDT or other special functions. Uses the super high resolution screen for displaying its characters.

In the /NuPak.IIGS.2.0/ folder–This is the first GS-specific archive program and supports NuFX, BLU and Macintosh .SIT files. $15 shareware fee. This program is not fully functional. While it will unpack ShrinkIt, BLU/ACU, and StuffIt files, the file packing features are very limited. Main attraction: it is the first Apple II program to unStuff Mac files.

In the /Resource.Spy/ folder–This is a program to examine and convert Macintosh resource files into IIGS format. The Mac files have to be converted to a ProDOS disk with AFE before they can be read by the program. You can capture icons, fonts, etc. and save them in one of several formats for the GS.

In the /SnowTerm.v2.05/ folder–This is version 2.05 of the shareware VT100, VT52 communications program for the Apple IIGS computer. SnowTerm emulates the Digital Equipment (DEC) VT100 and VT52 terminals. SnowTerm runs in the super high resolution graphics mode of the Apple IIGS. It uses the graphics and color capabilities of the Apple IIGS to accurately emulate the VT100 terminal including: bold and blinking character attributes, the line drawing character set, and double high and double wide characters. Fixes a bug that would cause Snowterm to hang occassionally.

In the /UnZIP.2.0/ folder–UnZip is a small Zipfile extract utility. It will only work with the APW or ORCA/M shells. It is written to be as small and portable as possible; ideal as a starting point for handling .ZIP files in non-IBM environments. A STRIP program is included which makes porting MSDOS source easier. It replaces carriage-return/linefeed combinations with a single carriage-return, expands TABs to every 4th column, & gobbles the Ctrl-Zs that pad some MSDOS text files.

GSCM.03 B–MegaTerm v1.3

In the /a2fx.8/ folder–A2FX (Apple II File Exchange) is a program that will read an 800k Macintosh disk (HFS) on an Apple IIgs, IIe, IIc and convert them to a Prodos format as an Apple Single, Apple Double, or BIN file. You can convert files for use with Steve Chick's Resource Spy without needing a MAC! This program is still in beta but seems to be pretty solid. Fixes the infamous any slot as long as it's five bug.

In the /Agate.069/ folder–AGATE by Tony Marques is a basic telecommunications program. AGATE requires an enhanced Apple II computer with 128k. AGATE has not been provided with dialing facilities and acts as a dumb terminal. Consequently, dialing and other modem commands must be issued by users using the basic 'AT' commands. AGATE's ANSI (DEC VT100) emulation has been further refined and now also supports ANSI Music (which may someday be tuned for all computers). AGATE supports unZIPing and is capable of unSTOREing, unSHRINKing, EXPLODING members of .ZIP archives. Currently, only YMODEM and ZMODEM downloading has been implemented. ShareWare.

In the /DeARC.IIe/ folder–DeARC IIe lets you decode & unsqueeze files saved in the ARC format. ARC is used on the Amiga, IBM PC, Atari ST, and 8-bit Atari. It is a ProDOS 8 application.

In the /DeARC.v1.2/ folder–DeARC v1.2 lets you decode & unsqueeze files saved in the ARC format. ARC is used on the Amiga, IBM PC, Atari ST, and 8-bit Atari. Includes documentation.

In the /DigiPak/ folder–DigiPack IIgs is a new disk packing and unpacking program with some general utility functions thrown in for good measure. It support the Mouse, runs under Prodos 8, uses Mousetext, uses IIgs Memory, and is ShareWare. It supports both the traditional DDD type file and a new "optimized" format.

In the /Fixer.v1.21/ folder–File Fixer version

1.21 is a Super High-Res mode utility that you can use to clean up files downloaded from an information service. To operate File Fixer, first select a file to fix and then decide just how it should be modified. For example, if you just received a text file via XMODEM from an MS-DOS computer, you'll want to remove the linefeeds (required by MS-DOS) that are not needed by ProDOS. This is public domain software.

In the /gmail1.1/ folder–gmail/OL (gmail Off-Line) brings true Off-Line electronic mail reading, replying, and posting to your Apple / /gs computer. By Omega Software Solutions. ShareWare, $35.00 fee.

In the /HFS.Link.v1.0/ folder–HFSLink version 1.0 by Scott Blackman converts files from a Macintosh HFS volume into two ProDOS files: one for the data fork and one for the resource fork. Multiple file selection and directory conversion are supported. Conversion is supported for all HFS volumes from 800K 3.5" disks to 40 megabyte hard disks. Files and Directories selected undergo filename translation: all non-alphanumeric characters are replaced with periods ("."), and all lowercase characters are replaced with uppercase. Filenames are truncated at 15 characters if necessary. This program is FreeWare.

In the /MegaTerm.v1.3/ folder–MegaTerm is an ANSI terminal emulator program for ProDOS 8 which takes advantage of the Super Hi-Res screen to emulate color ANSI implementation of MS-DOS color text. Includes a font editor and instructions on fine-tuning the colors. Version 1.3 is much faster than previous versions, but doesn't contain any new features.

In the /Shar/ folder–This is a quick'n'dirty port of a shar utility that was originally ported to the Amiga, now available on the Apple //GS also. Shar puts readable text files together in a package from which they are easy to extract. Includes sopurce code.

In the /Unshar.EXE/ folder–UNSHAR is a //gs shell command which extracts files from UNIX shell archives ("shar" files). This version was ported from a public domain Amiga version, so it too is PD. It has a number of useful features.

In the /UnZIP.Apr.07.91/ folder–PMPUnzip version 1.01 is a ZIP File Extractor for the Apple IIGS by Paul Parkhurst. Use it examine and/or extract ZIP archives. Well written by the author of ANSITerm. Requires a shell such as ORCA. ShareWare.

In the /uuEncode.Decode/ folder–UUencode/ decode v1.1 by Andy Tefft allows you to create and unpack Unix-style archives. UU is a SYS file which should run on any // which runs ProDOS. This program is freeware.

GSCM-04 B–Telcom v0.28

In the /CommSys.v2.5/ folder–This is Comm.System v2.5 by Jim Ferr. It is a small (~13K) freeware telecommunications program that will work on any 64K Apple II capable of running ProDOS. It has a small capture buffer and supports all varieties Xmodem file transfer protocol and other good stuff. From Apple Canada. FreeWare.

In the /Dial.Dir/ folder–Dialing Directory for TIC 3.31. New dialing directory for Talk is Cheap v.3.31. Rename this file TIC KEY.D and use option-D to access.

In the /LHextract.v2.1/ folder–LHExt v2.1 by Atsushi Ushiroda is a Sys16 program which will extract lha and lzh compression formats. It is fairly slow, but it gets the job done, and it doesn't require Orca M 2.0. Source code is included. LHA Extractor can extract files from any LZH archives. Ofcource, Amiga's Module files too. LHA Extractor is a FreeWare program.

In the /Modem.Man.v1.2/ folder–This is the latest version of Modem Manager, a tool set for easy modem programming under C, Pascal, and assembly. All necessary headers and interfaces included, as well as a sample dumb-terminal program written in C. By Jawaid Bazyar. ShareWare, $20.

In the /Mouse.Trap/ folder–Full-featured text editor for ProTerm Special emulation text files. Useful for Apple II-based BBS systems. By Maxia Fariina & Wise Guy.

In the /MuGS.v2.00/ folder–MuGS v2.0 by Brian Tao is a MicroEMACS-based offline Internet mail reader for the Apple IIGS. It requires a shell (preferably GNO), MicroEMACS 3.11c and preferably a hard drive. The next version will not require GNO. ShareWare fee ($10? $15? Whatever you think MuGS is worth).

In the /NDP.v1.0a7/ folder–NDP <N>odelist <D>ifference <P>rocessor version 1.0a7. NDP helps you handle the FIDO nodelist. At the moment, it just merges the weekly nodediff into it. Support for version 7 nodelists will follow. Due to a bug in NDP 1.0a6 it was not useful under ORCA/Shell. This bug fixed in this version 1.0a7. NDP needs one parameter, the nodediff file to process. It then automagically searches for the proper nodelist and creates the new one. For more detail, see the man-page. If you don't know what a nodelist is, you don't need this utility. NDP is not restartable from memory. NDP is freeware. By Soenke Behrens.

In the /Telcom.v0.28/ folder–TelCom GS is a 16-bit, text-based communications program. While it is not yet a full fledged terminal emulator program, it does provide the most commonly used functions: YModem and XModem receive, XModem send, scrollback, dialing directory, and various emulations (VT100, VT52, Proterm Special). This program that can be run either from the desktop or from a shell such as GNO. By Jawaid Bazyar (one of the authors of GNO). FreeWare.

In the /UnARJ.v2.30/ folder–This is version 2.30 of UnARJ. It has some significant improvements over the previous versions (more "user friendly" now). Requires either ORCA or GNO/ME and System 6.0 or later. It unpacks .ARJ files, which GSHK won't handle. UnARJ does now set modification date & time and file access attributes. The bits for volume label, directory and system file are ignored, however. The utility now uses the JudgeName() call to make sure the pathname fits the used FST. Thus, UnARJ will only run under System 6.0 or later (GS/OS 4.0 or later). By Soenke Behrens.

GSCM-05 A–Misc. Telcomm Files 1

In the /Act.v3.03/ folder–Apple Conference Terminal v3.03 is a term program with an emphasis on chatting and sending messages rather than on manipulating and transferring files. It will transfer files, but that's not one of the primary features. Quite interesting.

In the /Booz.2e/ folder–Booz2e Version 1.0 by Rahul Dhesi. "Zoo" is a file archiver written by Rahul Dhesi that is often used in the IBM PC world for storing files in compressed form. Versions also exist for Amigas and for Unix machines. FreeWare.

In the /Booz.v2.0/ folder–Booz v2.0 is a small, memory-efficient, public domain Zoo archive extractor/lister. It is not fancy. It does not recognize the advanced features available in current versions of Zoo, such as long filenames, directory names, comments, and multiple file generations. It will extract all archives created by all versions of zoo including version 2.1, which uses a newer compression method. Needs ORCA, GNO or some other shell. By Rahul Dhesi.

In the /CR.Stripper/ folder–This program will take any text file with carriage returns at the

end of each line (captured document like a e-mail, library, or BB string) and will take the returns out of the paragraphs. This is handy if you would like to put the document into a word processor and edit it in any way, since the carriage returns make things look funny when you edit a document.

In the /crlf3/ folder–CRLF3 version 1.0 is a desktop program for converting text files. It will convert text files to Apple, MS-DOS, and Unix Formats. FreeWare.

In the /GSciiPlus2.3.1/ folder–GScii+ will do binscii (decode and encode), binhex (just decode), uuencode, uudecode, and apack (both ways). This version fixed a problem starting up in an environment that didn't already have the StdFile tools started up.

In the /LF.Convert.NDA/ folder–This is short little NDA that converts line feeds in texts files to carriage returns, thus making them readble. Many text files have line feeds at the end of each line, generally files from UNIX systems.

In the /lf2cr/ folder–This version of lf2cr supports CR-to-LF translation–click on "CR to LF" in the NDA or include "+c" in the command line.

In the /PMPunZip.v1.02/ folder–PMPUnzip version 1.02 is a ZIP file extractor for the Apple IIGS by Paul Parkhurst, the author of ANSITerm. Version 1.02 fixes several problems with disk handling and user interface. This program will extract files stored in ZIP archives originating on the PC. It should work fine for any archive zipped with PKZIP version 1.1 or below. ShareWare, $15 fee.

In the /QWK.s16.v106/ folder–This is QWKGS v1.06 in S16 form. Now anybody can run it from any launcher and not have any problems. This one reads messages like if you're using a telecomm prog and calling one of those boards. There is no docs.

In the /QWKgs2/ folder–This is QWKGS v1.05 — Primary SCREEN reader. This one reads messages like if you're using a telecomm prog and calling one of those boards. There is no docs. Useable by ORCA, GNO, or Prosel-16 Shells. (ECP 16 maybe) To use — type: #QWKGS2 <filename w/ directory name>

In the /udl/ folder–udl can freely convert between LF, CR and CR/LF (i.e. Unix, Apple, MS-DOS). This utility needs ORCA/Shell 2.0 or GNO/ME 1.0 or later versions. The way it works has been changed, it now creates a temp file instead of reading in the whole file and then overwriting it. Advantage: If you abort udl, the original file is not lost. It takes less memory, so that even very large files can be processed. Disadvantage: You need to have enough space on 3/ to create the temp file. Source is included.

In the /UnPackers/ folder–This folder contains source code for SCIIBIN and other unpacker programs for encoded Apple II binary files.

In the /UnZipIIe/ folder–This is a self-contained extractor program for ZIP files, modeled after ShrinkIt. It makes extensive use of MouseText. You can look at Zipped text files without actually unpacking them. ShareWare.

In the /z8530/ folder–Enclosed is Merlin 16+ source code for accessing the serial ports on the IIGS directly at speeds from 300 to 57,600 bps without using firmware, but without "breaking" the system. The code is lightning fast, intercepting the main Interrupt Manager vector and passing non-SCC interrupts to the firmware. Public domain written by Jim Ferr.

GSCM-06–GENIE

In the /GECoPilot/ folder–GEnie Co-Pilot Version 2.1.0 by Kenneth I. Gluckman is a freeware version of Co-Pilot. Co-Pilot works in conjunction with your communications program to provide easy access to GEnie RoundTables. It can be configured to work with up to eleven different RoundTables plus GE Mail.

In the /GEM.Lamp/ folder–Lamp TIC/User Script v1.1 by Steven Weyhrich. The accompanying text file, GEM.TIC.USR, is a GEnie Master (GEM) "user" script specifically for use with the Talk Is Cheap (TIC) terminal program and GEM scripts. The Lamp User Script will use the format currently being used to make the Lamp available, that being as a downloadable file instead of a straight text listing. As before, the time needed to download these newsletters is "off the clock" and part of GEnie Basic*Services.

In the /GEM.v4.21/ folder–GEM v4.21 GEnie Manager. Now freeware, this utility will log on to Genie and retrive mail, messages and d/l files, upload your mail and msgs, all automatically. Requires TIC, Point to Point or Proterm 3.0, AW 3.0 with at least 100K desktop, and a hard disk or 2 3.5's. UM 3.1 and Timeout are optional. Docs are included, although they are not very complete. Revised Docs should be available soon on Genie.

Mail this form with your check to :
Disketeria
Washington Apple Pi
7910 Woodmont Avenue, Suite 910
Bethesda, Maryland 20814

Number of Disks	Member Price @	Extended
3.5" Singles		
___ 4 or less @	$4.00	$_____
___ 5 or more @	$3.50	$_____
___ Sets (as marked)	$(above)	$_____
5.25" Singles		
___ 4 or less @	$2.00	$_____
___ 5 or more @	$1.75	$_____
___ Sets (as marked)	$(above)	$_____
+ postage $1.00/disk, max. $5.00.		$_____
TOTAL AMOUNT DUE		$_____

Are you a member of Washington Apple Pi, Ltd? Y/N __. If Yes, Member Number _____.
All payments must be in U.S. funds drawn against U.S. banking institutions.
Non-members add $3.00 per disk to listed prices for 3.5" and $1.50 per disk for 5.25" disks.

Name

Box Number, Apartment, Suite, etc.

Street Address

City **State** **Zip Code**

Day Telephone **Evening Telephone**

Please write disk numbers on a separate sheet of paper and include them with your order.

Apple II Disk Library Order Form

5-1/4" DISKS

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

Apple Disk Catalog
___ 4 disk set #3

AppleWorks
___ APWK-01
___ APWK-02

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

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

Eamon Adventures
___ 24 disk set = $36.00
___ EAMN-01
___ EAMN-02 #4
___ EAMN-03 Eamon Master
___ EAMN-04 #4
___ EAMN-05 #4
___ EAMN-06 #4
___ EAMN-07 #4
___ EAMN-08 #4
___ EAMN-09 #4
___ EAMN-10 #4
___ EAMN-11 #4
___ EAMN-12 #4
___ EAMN-13 #4
___ EAMN-14 #4
___ EAMN-15 #4
___ EAMN-16 #4
___ EAMN-17 #4
___ EAMN-18 #4
___ EAMN-19 #4
___ EAMN-20 #4
___ EAMN-21 #4
___ EAMN-22 #4
___ EAMN-23 #4
___ EAMN-24 #4

Education
___ 20 disk set = $30.00
___ EDUC-01
___ EDUC-02
___ EDUC-03
___ EDUC-04
___ EDUC-05
___ EDUC-06
___ EDUC-07
___ EDUC-08
___ EDUC-09
___ EDUC-10
___ EDUC-11
___ EDUC-12
___ EDUC-13
___ EDUC-14
___ EDUC-15
___ EDUC-16
___ EDUC-17
___ EDUC-18
___ EDUC-19
___ EDUC-20

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

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

Logo
___ LOGO-01
___ LOGO-02

Membership Directory
___ MEMD-01

Miscellaneous
___ 25 disk set = $37.50
___ MISC-01
___ MISC-02
___ MISC-03
___ MISC-04
___ MISC-05
___ MISC-06
___ MISC-07
___ MISC-08
___ MISC-09
___ MISC-10
___ MISC-11
___ MISC-12
___ MISC-13
___ MISC-14
___ MISC-15
___ MISC-16
___ MISC-17
___ MISC-18
___ MISC-19
___ MISC-20
___ MISC-21
___ MISC-22
___ MISC-23
___ MISC-24
___ MISC-25

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

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

Pilot
___ PILT-01

Utilities
___ 24 disk set = $36.00
___ UTIL-01
___ UTIL-02
___ UTIL-03
___ UTIL-04
___ UTIL-05
___ UTIL-06
___ UTIL-07
___ UTIL-08
___ UTIL-09
___ UTIL-10
___ UTIL-11
___ UTIL-12
___ UTIL-13
___ UTIL-14
___ UTIL-15
___ UTIL-16
___ UTIL-17
___ UTIL-18
___ UTIL-19
___ UTIL-20
___ UTIL-21
___ UTIL-22
___ UTIL-23
___ UTIL-24

3-1/2" DISKS

System Disk
___ 2APS-01 #5

Apple Disk Catalog
___ 2ADC-01

AppleWorks
___ 2AWK-01

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

Education
___ 2EDU-01

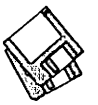
Membership Directory
___ 2MRD-01

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

(#1) System Disk V. 4.0.1 - $1.50; (#2) DOS 3.3 System Master - $1.50; (#3) Apple Disk Cat.-4 disk set -$4.00; (#4) Requires EAMN-03; (#5) - System Disk - V. 4.0.1 - $3.00

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

Apple IIGS Disk Library Order Form



System Software
___ GSAS-0 (*1)
___ GSAS-02 (*2)
___ GSAS-03 (*3)
___ GSAS-04 (*4)

Communications
___ 5 disk set = $15
___ GSCM-01C
___ GSCM-02C
___ GSCM-03A
___ GSCM-04A
___ GSCM-05

Demos
___ 24 disk set = $24 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-13
___ GSDM-14
___ GSDM-15
___ GSDM-16
___ GSDM-17
___ GSDM-18
___ GSDM-19
___ GSDM-20
___ GSDM-21
___ GSDM-22
___ GSDM-23
___ GSDM-24

Desk Accessories
___ 19 disk set = $57
___ GSDA-01
___ GSDA-02
___ GSDA-03
___ GSDA-04
___ GSDA-05
___ GSDA-06
___ GSDA-07
___ GSDA-08
___ GSDA-09
___ GSDA-10
___ GSDA-11
___ GSDA-12
___ GSDA-13
___ GSDA-14
___ GSDA-15
___ GSDA-16
___ GSDA-17
___ GSDA-18
___ GSDA-19

Developer
___ 17 disk set = $51
___ GSDV-01
___ GSDV-02
___ GSDV-03
___ GSDV-04
___ GSDV-05
___ GSDV-06
___ GSDV-07
___ GSDV-08
___ GSDV-09
___ GSDV-10
___ GSDV-11
___ GSDV-12
___ GSDV-13
___ GSDV-14
___ GSDV-15
___ GSDV-16
___ GSDV-17

Disk Catalog
___ 2 disk set = $6

Education
___ 8 disk set = $24
___ GSED-01A (*5)
___ GSED-02A (*5)
___ GSED-03A (*5)
___ GSED-04A (*5)
___ GSED-05A (*5)
___ GSED-06A (*5)
___ GSED-07A (*5)
___ GSED-08 (*5)

Fonts
___ 27 disk set = $81
___ GSFT-01
___ GSFT-02
___ GSFT-03
___ GSFT-04
___ GSFT-05
___ GSFT-06
___ GSFT-07
___ GSFT-08
___ GSFT-09
___ GSFT-10
___ GSFT-11
___ GSFT-12
___ GSFT-13
___ GSFT-14
___ GSFT-15
___ GSFT-16
___ GSFT-17
___ GSFT-18
___ GSFT-19
___ GSFT-20
___ GSFT-21
___ GSFT-22
___ GSFT-23
___ GSFT-24
___ GSFT-25
___ GSFT-26
___ GSFT-27

Games
___ 42 disk set = $126
___ GSGM-01A
___ GSGM-02A
___ GSGM-03
___ GSGM-04
___ GSGM-05
___ GSGM-06
___ GSGM-07
___ GSGM-08
___ GSGM-09
___ GSGM-10
___ GSGM-11
___ GSGM-12
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___ GSGM-24
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___ GSGM-34
___ GSGM-35
___ GSGM-36
___ GSGM-37
___ GSGM-38
___ GSGM-39
___ GSGM-40
___ GSGM-41
___ GSGM-42

Graphics
___ 36 disk set = $108
___ GSGX-01
___ GSGX-02
___ GSGX-03
___ GSGX-04
___ GSGX-05
___ GSGX-06
___ GSGX-07
___ GSGX-08
___ GSGX-09A
___ GSGX-10
___ GSGX-11
___ GSGX-12
___ GSGX-13A
___ GSGX-14
___ GSGX-15
___ GSGX-16
___ GSGX-17
___ GSGX-18
___ GSGX-19
___ GSGX-20
___ GSGX-21
___ GSGX-22
___ GSGX-23
___ GSGX-24
___ GSGX-25
___ GSGX-26
___ GSGX-27
___ GSGX-28
___ GSGX-29
___ GSGX-30
___ GSGX-31
___ GSGX-32
___ GSGX-33
___ GSGX-34
___ GSGX-35
___ GSGX-36

HyperCard
___ 6 disk set = $18
___ GSHC-01
___ GSHC-02
___ GSHC-03
___ GSHC-04
___ GSHC-05
___ GSHC-06

HyperStudio
___ 23 disk set = $49
___ Demosr (1-10)=$10
___ GSHS-01 D/Ver.
___ GSHS-02 D/Ver
___ GSHS-03 D/Ver
___ GSHS-04 D/Ver
___ GSHS-05 D/Ver
___ GSHS-06 D/Ver
___ GSHS-07 D/Ver
___ GSHS-08 D/Ver
___ GSHS-09 D/Ver
___ GSHS-10 D/Ver
___ Others (11-23) = $39
___ GSHS-11
___ GSHS-12
___ GSHS-13
___ GSHS-14
___ GSHS-15
___ GSHS-16
___ GSHS-17
___ GSHS-18
___ GSHS-19
___ GSHS-20
___ GSHS-21
___ GSHS-22
___ GSHS-23

Icons
___ 13 disk set = $39
___ GSIC-01A
___ GSIC-02A
___ GSIC-03A
___ GSIC-04A
___ GSIC-05A
___ GSIC-06A
___ GSIC-07A
___ GSIC-08
___ GSIC-09
___ GSIC-10
___ GSIC-11
___ GSIC-12
___ GSIC-13

Membership Directory
___ GSMD-01

Miscellaneous
___ GSMS-01

Music
___ 64 disk set = $192
___ GSMU-01B
___ GSMU-02
___ GSMU-03
___ GSMU-04
___ GSMU-05
___ GSMU-06
___ GSMU-07
___ GSMU-08
___ GSMU-09
___ GSMU-10
___ GSMU-11
___ GSMU-12
___ GSMU-13A
___ GSMU-14
___ GSMU-15
___ GSMU-16A
___ GSMU-17
___ GSMU-18A
___ GSMU-19A
___ GSMU-20A
___ GSMU-21A
___ GSMU-22
___ GSMU-23A
___ GSMU-24A
___ GSMU-25A
___ GSMU-26A
___ GSMU-27A
___ GSMU-28A
___ GSMU-29A
___ GSMU-30A
___ GSMU-31A
___ GSMU-32A
___ GSMU-33A
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___ GSMU-35A
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___ GSMU-37A
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___ GSMU-39A
___ GSMU-40A
___ GSMU-41
___ GSMU-42
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___ GSMU-60
___ GSMU-61
___ GSMU-62
___ GSMU-63
___ GSMU-64

Sounds
___ 21 disk set = $63
___ GSSN-01A
___ GSSN-02A
___ GSSN-03
___ GSSN-04
___ GSSN-05
___ GSSN-06
___ GSSN-07
___ GSSN-08
___ GSSN-09
___ GSSN-10
___ GSSN-11
___ GSSN-12
___ GSSN-13
___ GSSN-14
___ GSSN-15
___ GSSN-16
___ GSSN-17
___ GSSN-18
___ GSSN-19
___ GSSN-20
___ GSSN-21

Utilities
___ 15 disk set = $45
___ GSUT-01B
___ GSUT-02
___ GSUT-03A
___ GSUT-04A
___ GSUT-05A
___ GSUT-06A
___ GSUT-07A
___ GSUT-08D
___ GSUT-09
___ GSUT-10
___ GSUT-11B
___ GSUT-12
___ GSUT-13
___ GSUT-14
___ GSUT-15

(*1) System 5.0.4 - 2 Disk Set = $6.00; (*2) Hyper Mover v1.1 - 2 Disk Set = $6.00; (*3) GS Bug & Debug Tools v1.6 = $3.00; (*4) System 6.0 - 6 Disk Set = $18.00; (*5) Astronomer - 7 disk set (GSED-01 to -07).

Note: Some disks may contain ShareWare. Please send the requested remittance to the author if you use the program.

Apple III Disk Library Order Form

Accounting
___ 3 disk set =$4.50
___ 3ACT-01A
___ 3ACT-02
___ 3ACT-03

3 Easy Pieces Templates
___ 11 disk set = $16.50
___ 3AWZ-01
___ 3AWZ-02
___ 3AWZ-03
___ 3AWZ-04
___ 3AWZ-05
___ 3AWZ-06
___ 3AWZ-07
___ 3AWZ-08
___ 3AWZ-09
___ 3AWZ-10
___ 3AWZ-11

Business Basic
___ 9 disk set = $13.50
___ 3BSB-01
___ 3BSB-02
___ 3BSB-03
___ 3BSB-04
___ 3BSB-05
___ 3BSB-06
___ 3BSB-07
___ 3BSB-08
___ 3BSB-09A

Disk Catalog
___ 5 disk set = $5 or $1 per disk
___ 3CAT-01 - Text Version - Disk 1***
___ 3CAT-02 - Text Version - Disk 2***
___ 3CAT-03 - Text Version - Disk 3***
___ 3CAT-04 - 3EZP Version - Disk 1
___ 3CAT-05 - 3EZP Version - Disk 2

Games
___ 5 disk set = $7.50
___ 3GAM-01
___ 3GAM-02
___ 3GAM-03
___ 3GAM-04
___ 3GAM-05

Graphics
___ 43 disk set = $64.50
___ 3GRX-01
___ 3GRX-02
___ 3GRX-03
___ 3GRX-04
___ 3GRX-05
___ 3GRX-06
___ 3GRX-07
___ 3GRX-08
___ 3GRX-09
___ 3GRX-10
___ 3GRX-11
___ 3GRX-12
___ 3GRX-13
___ 3GRX-14
___ 3GRX-15
___ 3GRX-16
___ 3GRX-17
___ 3GRX-18
___ 3GRX-19
___ 3GRX-20
___ 3GRX-21
___ 3GRX-22
___ 3GRX-23
___ 3GRX-24
___ 3GRX-25
___ 3GRX-26
___ 3GRX-27
___ 3GRX-28
___ 3GRX-29A
___ 3GRX-30
___ 3GRX-31
___ 3GRX-32
___ 3GRX-33
___ 3GRX-34
___ 3GRX-35
___ 3GRX-36
___ 3GRX-37
___ 3GRX-38
___ 3GRX-39
___ 3GRX-40
___ 3GRX-41
___ 3GRX-42
___ 3GRX-43

Information
___ 36 disk set = $54
___ 3INF-01C WAP PD Catalog
___ 3INF-02D
___ 3INF-03
___ 3INF-04
___ 3INF-05
___ 3INF-06
___ 3INF-07
___ 3INF-08
___ 3INF-09
___ 3INF-10
___ 3INF-11
___ 3INF-12
___ 3INF-13
___ 3INF-14
___ 3INF-15
___ 3INF-16
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___ 3INF-19
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___ 3INF-30
___ 3INF-31
___ 3INF-32
___ 3INF-33
___ 3INF-34
___ 3INF-35
___ 3INF-36
___ 3INF-38

Membership Directory
___ 3MRD-01
___ 3MRD-02

Miscellaneous
___ 20 disk set = $30
___ 3MSC-01
___ 3MSC-02
___ 3MSC-03
___ 3MSC-04
___ 3MSC-05
___ 3MSC-06
___ 3MSC-07
___ 3MSC-08
___ 3MSC-09
___ 3MSC-10
___ 3MSC-11
___ 3MSC-12
___ 3MSC-13
___ 3MSC-14
___ 3MSC-15
___ 3MSC-16
___ 3MSC-17
___ 3MSC-18
___ 3MSC-19A
___ 3MSC-20

Pascal
___ 20 disk set = $30
___ 3PCL-01
___ 3PCL-02
___ 3PCL-03
___ 3PCL-04
___ 3PCL-05
___ 3PCL-06
___ 3PCL-07
___ 3PCL-08
___ 3PCL-09
___ 3PCL-10
___ 3PCL-11
___ 3PCL-12
___ 3PCL-13
___ 3PCL-14
___ 3PCL-15
___ 3PCL-16
___ 3PCL-17
___ 3PCL-18
___ 3PCL-19
___ 3PCL-20

Repairs
___ 11 disk set = $16.50
___ 3REP-01
___ 3REP-02
___ 3REP-03
___ 3REP-04
___ 3REP-05
___ 3REP-06
___ 3REP-07
___ 3REP-08
___ 3REP-09
___ 3REP-10
___ 3REP-11

TeleCommunications
___ 11 disk set = $16.50
___ 3TEL-01
___ 3TEL-02
___ 3TEL-03
___ 3TEL-04
___ 3TEL-05
___ 3TEL-06
___ 3TEL-07
___ 3TEL-08
___ 3TEL-09
___ 3TEL-10
___ 3TEL-11

Utilities
___ 48 disk set = $72
___ 3UTL-01
___ 3UTL-02
___ 3UTL-03
___ 3UTL-04
___ 3UTL-05
___ 3UTL-06
___ 3UTL-07
___ 3UTL-08
___ 3UTL-09
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___ 3UTL-37
___ 3UTL-38
___ 3UTL-39
___ 3UTL-40
___ 3UTL-41
___ 3UTL-42
___ 3UTL-43
___ 3UTL-44
___ 3UTL-45
___ 3UTL-46
___ 3UTL-47
___ 3UTL-48

Word Processing
___ 7 disk set = $10.50
___ 3WDP-01B
___ 3WDP-02
___ 3WDP-03
___ 3WDP-04
___ 3WDP-05
___ 3WDP-06
___ 3WDP-07

Note: Some disks may contain ShareWare. Please remit to the author of the program the requested amount if you use that program.
*** Available at a later date

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Franklin	**Mac Duo**
Apple III (SARA)	**Quadra 700**
Mac 128	**Quadra 900**
Mac 512/512e	**Quadra 950**
Mac Plus	**Newton**
Mac SE	**Performa 200**
Mac SE/30	**Performa 400**
Mac Portable	**Performa 600**
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- Mac 800k

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