

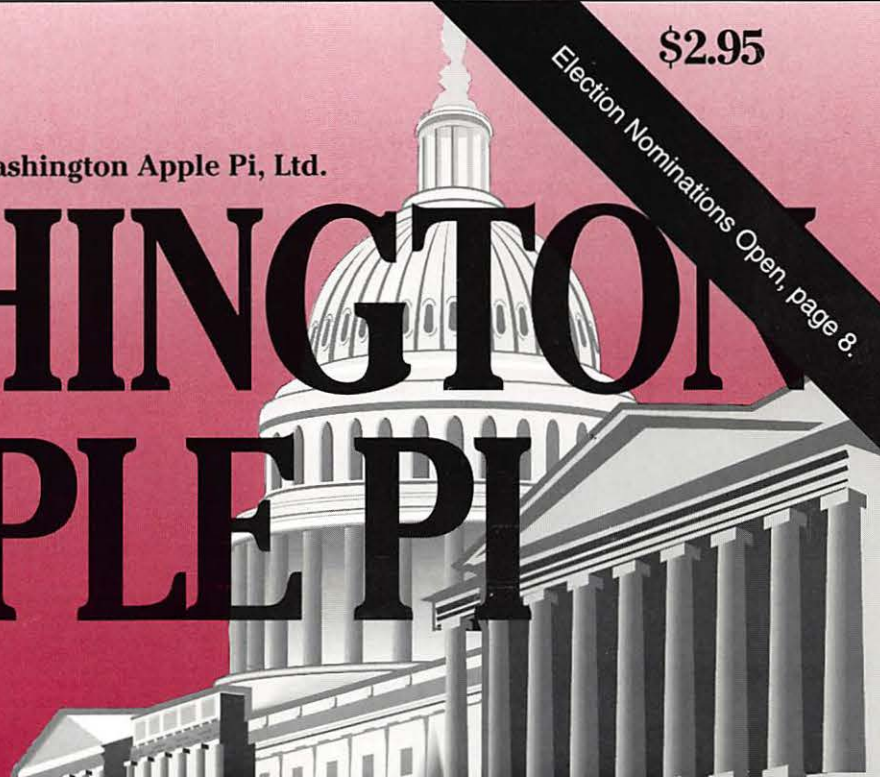
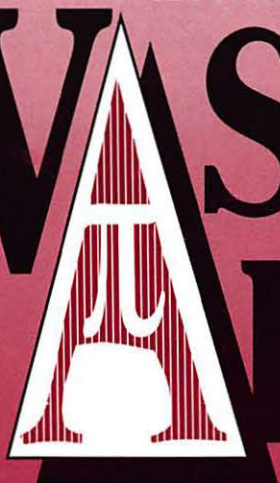
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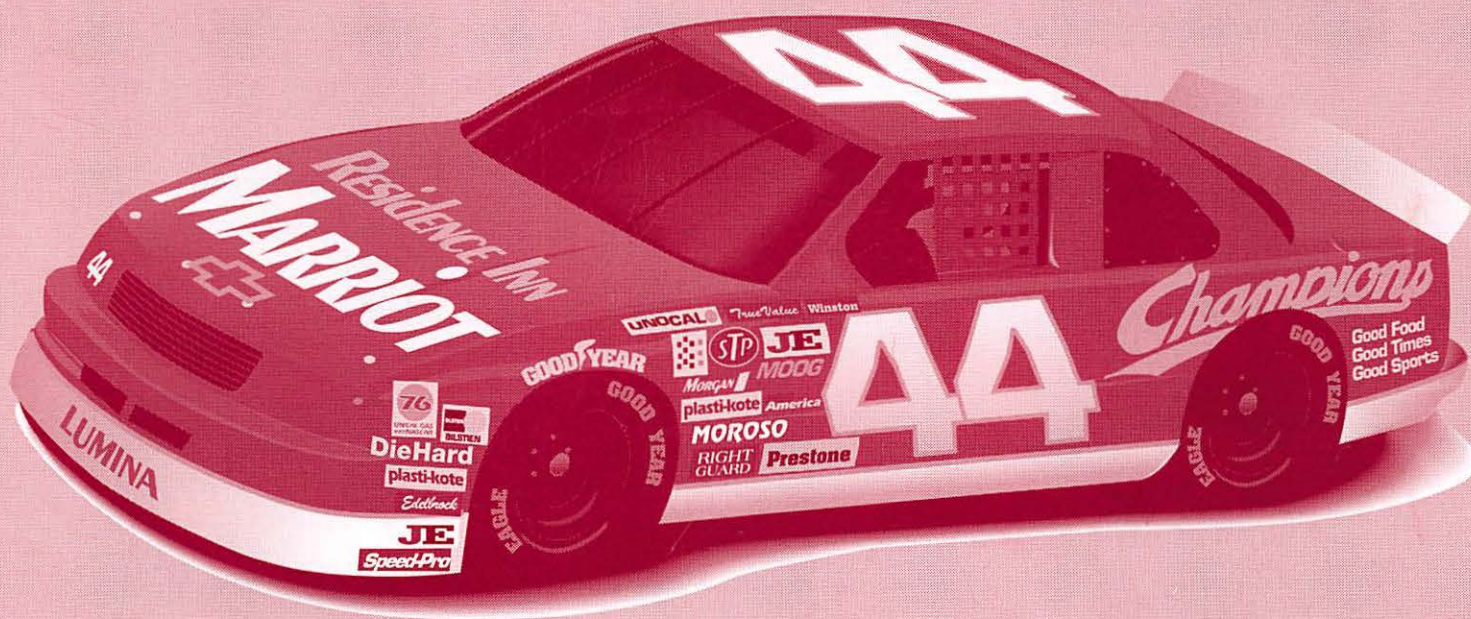
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The Journal of Washington Apple Pi, Ltd.

WASHINGTON APPLE PI



Volume 15, Number 2



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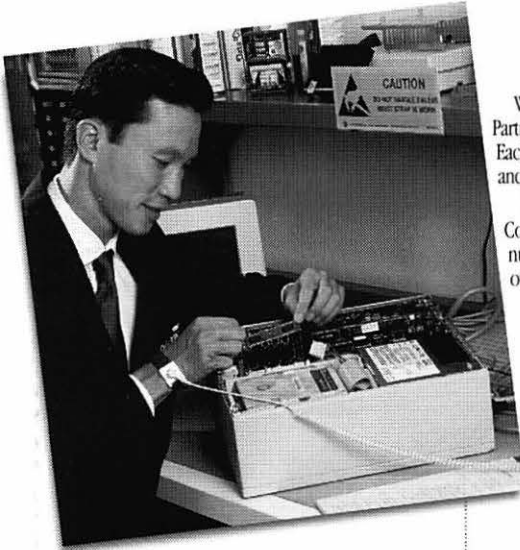
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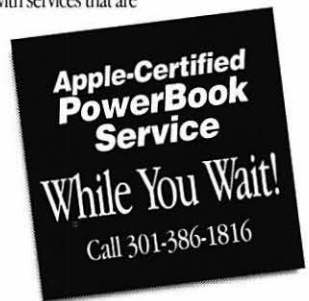
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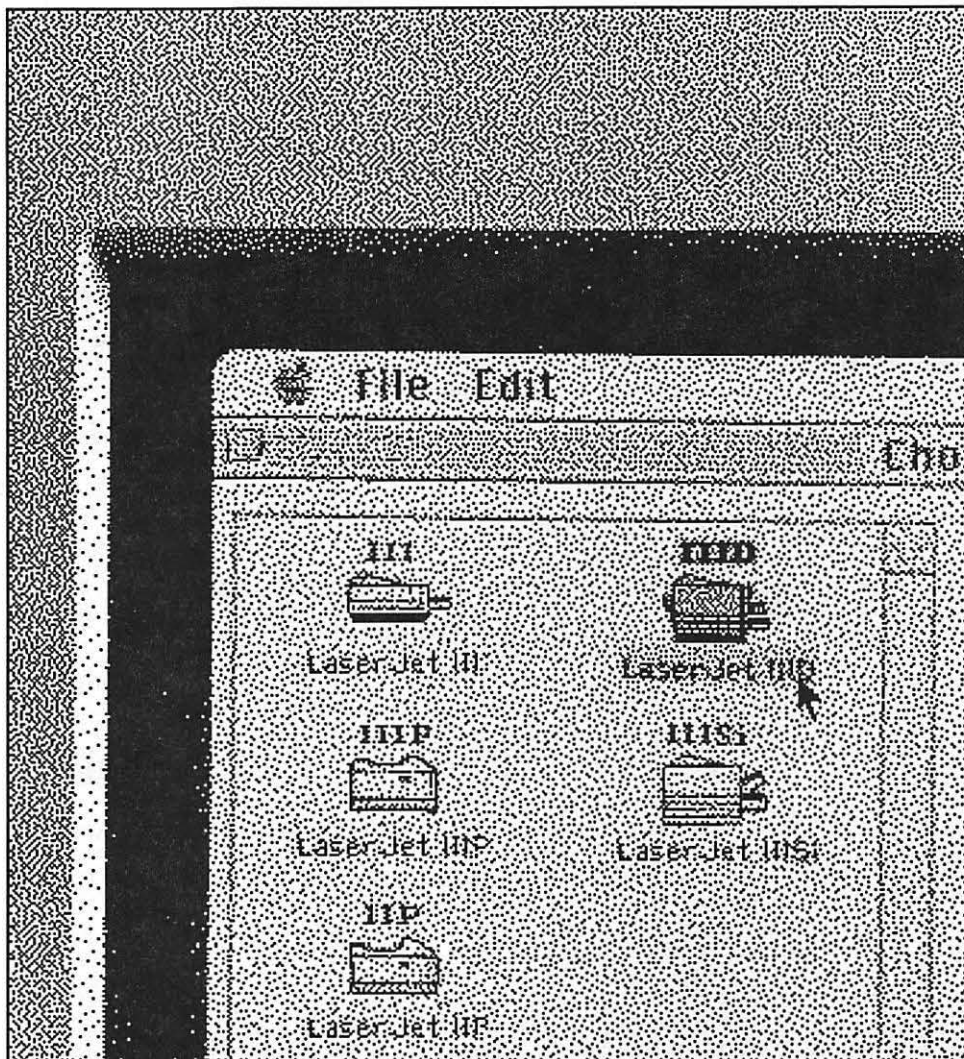


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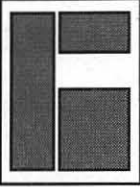



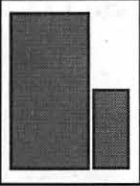

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The Washington Apple Pi Journal is published monthly. The ad copy deadlines and ad space reservations are listed below for your convenience.

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

Washington Apple Pi









This issue of the Washington Apple Pi Journal was created on a Mac IIci, proofed on an HP DeskWriter, and produced by electronic typesetting at The Publishers Service Bureau.

The page layout program used was PageMaker 4.2a, the word processing programs were Word Perfect 2.1 and Microsoft Word 5.0; the principal typeface is New Century Schoolbook (10/12) for the articles; and Helvetica for headlines, subheads, and emphasis.

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

Icon Guide

	Macintosh		Calendar Pages
	Apple II, IIe, and IIGS		Apple Disk Libraries
	Apple III (SARA)		Macintosh Disketeria
	Hotline or Phone List		General Interest
	TeleCommunications System (TCS)		

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Deadlines

Writers' submissions	
April	Feb. 16
May	Mar. 15
Editors' submissions	
April	Feb. 24
May	Mar. 23
Ad space reservations	
April	Feb. 19
May	Mar. 18
Camera-ready ad copy	
April	Feb. 26
May	Mar. 26

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Change of Address should reach us 60 days in advance of the move to ensure that your Journals continue uninterrupted.

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UltraMacros SIG		

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1993 WAP Annual Election

Call for Nominations

Nominations are now being accepted for people to serve as Officers and Directors of Washington Apple Pi, Ltd. (WAP) for the 1993-1994 term, one year starting June 1, 1993.

The positions open for nomination are:

- President
- Vice-President for Apple II Programs
- Vice-President for Macintosh Programs
- Secretary
- Treasurer
- Directors-at-Large

The business and affairs of WAP are managed by the Board of Directors, which is composed of the Officers and Directors elected each year. Those elected are expected to attend monthly Board meetings and to exemplify the service and leadership that our active volunteers provide in support of our activities and programs.

Members in good standing of WAP may nominate themselves or others. (Please check that the nominee would be willing and able to serve.) Nominations should be addressed to the Secretary, and must be received at the WAP Office by the close of business on Friday, February 26, or at the General Meeting on Saturday, Feb. 27.

Additional information may be found in the WAP Bylaws, which have precedence over this notice in case of differences. Current Officers and Directors can answer questions, as well.

Help is still needed on the Election Committee to conduct the election. Please call the office to assist.

Watch for your annual Ballot in the May Journal.

EdSIG

by Phil Shapiro

A feisty group of parents and teachers gathered together for the December EdSIG meeting. Several new faces showed up to share their voices, visions, and views.

The meeting started off with the usual introductions going around the room. Retired federal employee Carl Wilbur shared with us his experiences as a new computer instructor in an inner-city Catholic school. His school has eight Apple IIe computers shared between 200 students. In some of his classes three students are required to share one computer.

In a serendipitous turn of events, at the very moment Carl was telling us about his school's needs, club president Lorin Evans was in the adjacent room repairing an Apple IIe computer that had been donated to the club to pass along to a deserving school. Since Lorin was able to get the computer up and running, it looks

like Carl's students may not be grouping up in threes much longer.

Carl then asked a question frequently asked by teachers at our EdSIG meetings: "What grade is appropriate to start teaching students touch typing skills?" The consensus amongst our group is that fourth grade is the lowest grade at which touch typing skills should be started. Younger children have barely learned to tie their own shoelaces, asking them to learn to coordinate ten fingers at the same time is really too much.

Superdad Tom Scarcella then told of how he's using his new Mac LC II with his five year old daughter. The Kid Pix children's paint program is naturally a big hit at home. But he's also had success using Reader Rabbit with his IIe card. Tom explained that he bought a IIe card and a 5.25 inch disk drive to tap into the wide variety of educational software for the Apple II line. He's especially interested in the educational software from the Minnesota Educational

Computing Consortium (MECC). Teachers and parents who're interested in MECC software can request a free copy of their catalog by calling: 1-800-685-6322.

Following Tom's short talk, retired aerospace engineer Howard Heydt then told us about how he's had good success using a Public Domain math program, *Math Olympiad*, with his junior high school students. This program features ten competitive "math events," where students are asked to solve a host of different math questions. Before the game begins, the students choose a country to represent at the Olympiad. If their particular country wins the entire Olympiad, the country's national anthem is played on the Apple II speaker.

Persons interested in acquiring this game are directed towards disk EDUC 17 in the Club's Disketeria library. *Math Olympiad* is one of two math/logic games on the flip side of the disk. All the programs on that particular disk will run on any 64K Apple II, including the older Apple

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Π SIG's and Slices

II+ computers.

We spent the last part of the meeting booting a half dozen commercial educational programs and discussing their particular merits. Even though our meetings last for two and a half hours, we always seem to run out of time to see and talk about educational software of interest.

EdSIG meets on the fourth Thursday of every month at the club's office in Bethesda from 7:30 PM to 10 PM. We welcome any and all who have an interest in the subject. For more information about upcoming meetings, please give me a call at my home/office, (202) 686-5465, evenings before 10 PM.

UltraMacrosSIG

by Gary Hayman

On a rainy night in December, a fairly good crowd showed up at the first UltraMacros SIG meeting held at the Fairlington Community Center in Arlington, Virginia. Gary Hayman had the room set up in class room style for his presentation "The Evolution of a Macro." As people arrived, they were given numbered slips which later would allow the first 10 to pick their choice of gifts which were supplied by Gary.

Gary had been working several days to prepare a macro which would include many of the available UltraMacro 3.1 commands. His spreadsheet column or row macro numbering macro was an ideal tool for this. He included error trapping, conditionals, big screen messages, message line messages and many bells and whistles. Each macro line was fully annotated so that the audience could follow easily. Even the novices were able to learn a lot about how to write their own macros.

Gary mentioned that

first the focus of the SIG would be on UltraMacros 3.1 then, when all have experience, move on to the more complicated *Ultra 4*, Randy Brandt's new macro program for *AppleWorks*.

There was plenty of time for Questions and Answers and a discussion of the use of Task Files was pursued. We also agreed on a format of presenting macros on the Telecommunications System (TCS) so that we can post new developments or just seek answers to macro problems.

It was noted that even though the meeting place was in Virginia, 100% of the WAP members who attended were from Maryland and the only Virginia attendee was a guest. Some Marylanders traveled from as far away as Columbia to the meeting site. Because of this fact, we decided that future meetings of the UltraMacros SIG will be held in Maryland at a more convenient location to those interested in attending. It was noted that other Marylanders who wanted to attend found the Virginia meeting place too far. So, by meeting in Maryland, we hope to increase the attendance. Don Raino advised that he has access to a conference room at the Capitol Office Park near the Beltway and Kenilworth Avenue (PG County, close to College Park and Greenbelt). Gary can also make arrangements for the community cen-

ter meeting room at the Windsor Green housing area in Greenbelt.

Prizes, including an UltraMacros course on disk and an *Ultra 4* audio tape presentation by Randy Brandt, were presented to the numbered ticket holders. Everyone received printed copies of the evenings presentation which Gary printed directly from *AppleWorks* to his laser printer.

The next meeting of the UltraMacros SIG will be held in February. Please contact Gary Hayman (301-345-3230) for date, time and place or see a meeting announcement on Conference 2, the *AppleWorks* Board on the TCS.

StockSIG

by Morris Pelham

Boy have we had bad weather! At three of the last four meetings, we have had rain, snow, wind, dark, or some combination of these. I know it can be discouraging to arrive at the outside door to the office building where we meet and find it locked, particularly at night in bad weather, but persistence will get you in. Really, it will. Try the other door around the corner. Remember to use the security phone on the outside of either of the doors. They can be a little slow to answer, but eventually they do

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and then they let you in. Really, they do. I've had trouble too, but I have always gotten in eventually.

If you have had much difficulty getting in, or worse have become discouraged and left, please call Beth Medlin at the WAP office (301) 654-8060. Right now the outside doors are locked at 7:00 PM and our meeting starts at 7:30. The people I see at the meeting have by definition not had too hard a time of it, but if there are others who feel they have been turned away by the locked doors, we need to know about it.

Our December meeting was on a day that began with snow, turned to rain, and ended in a windstorm at meeting time. Only three of us showed up inside at the meeting. We talked about our strategies for doing better than the market averages, then went home early.

Our meetings are held in the WAP office on the second Thursday of each month at 7:30 PM, and we welcome both experts and novices to join us.

IIGS SIG

by **The Mystery Scribe,**
 subbing for **Paul Tarantino**

A very enthusiastic crowd showed up on a cold and rainy December night for the Special Laser Printer/StyleWriter Demonstration presented by our Chairperson, Gary Hayman. Gary must have brought every piece of equipment on the East Coast for this show.

The major announcement of the evening was that the IIGS has found a new Virginia home. Starting with the February meeting, and every "even" month of the calendar, meetings will be held at the McLean Government Center, 1437 Balls Hill Road, McLean, Virginia, which is only a hop, skip and a jump from the current meeting place. Look for the new 1993 Virginia meetings on Monday evenings; February 22, April 26, June

28, August 30, October 25, and December 27. The "odd month" 1993 Maryland meetings will continue to be held at the National Institute of Health (thanks, Carol Vogel) on Monday evenings; January 25, March 29, May 24, July 26, September 27 and November 29. All meetings start promptly at 7:00 pm.

Gary explained that most IIGS people have been using 8 and 16 bit programs, printing to the ImageWriter dot matrix printer, and although output was respectable, it was not "first quality." With GS/OS System 6 and certain driver programs, quality output could be directed to "better" printers that provided more dots per inch or even PostScript type. Gary demonstrated the use of his PostScript Laser Printer, the GCC BLP Elite and the WAP's StyleWriter Printer. The use of HP printers for output is being reserved for a future meeting.

Gary showed us the use of laser printers with 8-bit programs. He launched *Publish-It! 4* (a preferred desktop publishing program) and printed out two pages of the award winning Novapple Newsletter which he edits monthly. In order to do this he showed us how to adjust the Control Panel to use AppleTalk to communicate with the printer. Output was crisp and clear and rivaled any DTP output. He pointed out how the printer used its internal PostScript fonts in some cases and bit mapped graphic fonts in other cases. All graphics in the document were excellent.

Next, he changed the Control Panel for a Direct Connect printer and showed us how to download the ImageWriter Emulator to the Laser Printer. He then launched *AppleWorks Classic* (an 8-bit program), loaded a document and sent it to the Laser Printer via a IWLASER printer which he had earlier established in his *AppleWorks* printer selections. The result was a crisp Courier (non-proportional) font print-out.

He then activated P1 and P2 printer options and printed the same document in a Times font, elite and pica appearance that would be highly acceptable to any business or professional document.

He moved to the second section of his program, printing from 16-bit programs to the Laser Printer. For this he used both *GraphicWriter III* (GWIII) and *Teach*. He printed various documents showing a multitude of TrueType fonts that were manufactured by *Pointless* (v 1.01). This showed subtle differences in the outputs from each of the programs. GWIII offered more adjustments, but *Teach* was quicker.

The third part of the program included printing these documents on a StyleWriter Printer. The model he was using has been discontinued by Apple, but they are still available and can even be purchased "used" for under \$200. The output, in "some" cases, equaled or exceeded, the \$1200 Laser Printer production. But, sometimes it didn't. We had the opportunity to compare the differences—something that we probably wouldn't have had the opportunity to do at the store—using the same programs.

In the fourth section, Gary showed us the trick to making TrueType fonts even smoother when printed to the Laser Printer. [Gary wrote about the procedure in a previous *Byts & Pycs* monthly column.] There was a remarkably impressive difference.

Finally, we played around with using a multitude of TrueType fonts to see how they looked on printed documents.

The presentation offered us a chance to examine and use both printers so that we might make more knowledgeable purchase decisions. This was a great opportunity.

The Q & A part of the meeting helped one person who had a ROM 0, Apple IIGS and another who was interested in reading Mac word processing files on their IIGS.



Request for Bid for the Position of Managing Editor

The Washington Apple Pi is seeking applicants for the position of Managing Editor, Washington Apple Pi Journal. Interested applicants should submit:

- A résumé, outlining qualifications, experience and abilities relevant to the position.
- A list of computer equipment and software that will be used for the preparation of the Journal. Indicate whether the equipment is currently owned or whether acquisition is planned. If planned, indicate whether it will be available through ownership, rental or lease or describe any other access alternative (such as a via service bureau). For equipment not currently owned or available, a planned acquisition date should also be included.
- Samples of work products that demonstrate the qualifications, experience and abilities described in the résumé.
- A bid, based on a flat rate monthly payment for fulfilling the following tasks:

1. The principal task of the Editor is the page layout and blue line production of the Journal. The Editor will arrange submitted articles and ads so as to prepare a Journal each month. The Journal will be 80 pages in length, unless otherwise specified by the Board of Directors.
2. The Editor must be able to work with copy provided in Macintosh and Apple II file formats as well as hard copy. In addition the Editor must be able to accept files by modem. Generally file transfers will be made through downloads from the Washington Apple Pi Telecommunications System, where a file area has been established for this purpose. However, the editor must have the capacity for direct modem transfer from individuals when extenuating circumstances make such the most expeditious means of data exchange.
3. The Editor is responsible for all information contained in the Journal. The Editor is responsible for working with authors and volunteers in a proactive, positive fashion to ensure the timeliness, accuracy and completeness of all material. Although a specific task (e.g., recruiting writers, soliciting articles) may be delegated to volunteers, the Editor retains primary responsibility for the final result.
4. The Editor reviews submitted material for suitability for inclusion. It is not the job of the Editor to rewrite articles. The Editor may make grammatical changes or any minor changes needed to improve the quality/clarity of an article. When a contributed article is of such poor quality that it needs sub-

stantial improvement before it can be used, the Editor provides the author with comments indicating steps needed to make the article suitable. These comments must be positive, aimed at encouraging the author to make the needed changes/improvements.

5. In general, the Editor is expected to use all articles submitted. When a backlog of articles exists, the Editor will give priority to previously submitted articles. However, articles which are time critical, such as descriptions of upcoming events or reviews of important new products, should receive priority over backlog material.
6. When insufficient Pi-generated material is received to support a complete issue, the Editor shall acquire and use material from other sources, such as material identified by volunteers or SIG chairs or other articles from user group publications. The Editor is responsible for maintaining a sufficient supply of this material to ensure a complete Journal every month.
7. At the Editor's discretion, an editorial column may be included. The column should be one that is supportive of WAP, reports or comments on events in the computer field and/or suggests ideas for consideration. The column shall never contain personal criticisms of individual WAP members. The Editor may also choose letters received for publication in a Letters to the Editor column. Only letters commenting on WAP policy (either supporting or suggesting improvements) or commenting/reporting on events in the industry or personal computer-related experiences may be included. No letter shall be included that criticizes a specific individual or group of individuals.
8. The Editor will keep the WAP President informed of the progress of Journal produc-

tion and any potential problems that will have a negative impact on the Editor's ability to meet established deadlines and/or requirements.

9. The Editor will establish, publish and adhere to a schedule for submission and production deadlines. The schedule will cover both article and ad copy.
10. The Editor will deliver all production copy and mechanicals to the printer at a designated time each month. Delivery to the printer will be in such time as to ensure second class mailing in sufficient time (estimated twelve calendar days lead time) to ensure delivery to local members prior to the fourth Saturday of the month (normal meeting day) as resolved by the BOD.
11. The Editor will deliver a copy of the Journal (in page layout format on disk(s)) to the WAP Office Manager within five days of delivery of mechanicals to the printer.
12. The Editor is expected to establish and maintain a pro-active relationship with the Washington Apple Pi office, initiating regular contact designed to insure that all parties are up-to-date regarding matters concerning the Journal's content, advertisers, etc.

Applicants must submit all materials described above. Materials may be submitted in person or by US Mail at the offices of the Washington Apple Pi; 7910 Woodmont Avenue, Suite 910; Bethesda, MD, 20814, ATTN.: Editor Search Committee. All submissions must be received or postmarked by April 1, 1993. Late or incomplete submissions cannot be considered.

Questions should be directed to Lou Pastura, Chair, Editor Search Committee, at (703)560-1477.

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Is My Laser Printer My Friend?

by Jack Reed and David Grant

Most laser printer owners and operators, usually in the middle of trying to get a high priority job completed, have asked this question: Is my laser printer my friend? The answer to the question, with few exceptions, is "Yes." All that's needed is a little training, knowledge and especially some Helpful Hints.

Why Should I Read this Article ?

Information related to the proper operation of laser printers is difficult, if not impossible, to obtain. Some is documented, but a large portion is obtained through trial and error. This article provides some insights and information on the proper operation and problem resolution for almost all brands of laser printers. Hopefully, some of the mystery (and problems) surrounding laser printers will go away.

How Do Environmental Conditions Affect My Prints ?

High humidity results in moisture in the paper and white splotches. Proper, sealed paper storage may help out during periods of high humidity (such as when the air conditioning is turned off for the weekend).

Dry air causes static build-up in the paper and paper jams occur. Dispersing the static charge is required. An easy way to rid the paper of static is to hold the paper in one hand while touching a doorknob.

Toner cartridges stored in abnormal temperature or humidity will not perform properly. Keeping the cartridge sealed in the aluminum bag prior to installation will help.

Printer location must allow for proper circulation of air for cooling the internal components or printer mechanical and electronic failures may result. In addition, it must be located on a flat, relatively level surface with all four "feet" on the surface or problems will result that will be very hard to diagnose.

How Do I Keep the Laser Printer from Causing Problems?

Proper and frequent preventive maintenance is highly recommended and required by printer manufacturers. Proper cleaning, inspecting, testing and adjusting will improve print quality and extend the life of your laser printer. A quality print is not possible from a printer that has a dirty paper path or is not properly adjusted.

Know how print darkness is set and experiment to get the blackest, clearest image. This adjustment allows each operator to personalize their prints for darkness and clarity.

Always close the printer cover gently. Both the printer and toner cartridge are fragile and require gentle handling. Toner in the printer will usually result from hard closing of the cover.

Replace the fuser wand, if appropriate, when required. It is usually

supplied with the toner cartridge and should be replaced with every cartridge. A clean wand will aid in improving print quality and extend the life of the fusing assembly, which failure is the most common required repair.

As with computers, laser printers should be powered through an electrical surge protector. Laser printers contain significant amounts of electronics and require this protection. Some laser printers (those with corona wires) generate ozone gas, which is an irritant to your eyes, nose, throat and lungs. An excess of ozone can usually be detected by a bad smell emanating from the printer. Each printer has an ozone filter that will "capture" the ozone, but it must be changed periodically. It is highly recommended that an ozone filter replacement program be put in place.

How Does the Toner Cartridge Affect Us ?

The toner cartridge (or drum/developer/receiver units) is the most critical part of most laser printers and is the key to getting quality prints. Some laser printers do not have everything contained in a single cartridge, but for simplicity we will assume "cartridge" covers all cases.

Toner cartridges are fragile and must be stored and handled with care. Improper handling may cause toner deposits in the printer as well as low quality prints.

The biggest source of toner cartridge problems is related to the corona wire (or roller) in the cartridge becoming dirty and causing print defects that appear along the long dimension of the paper. Cleaning this corona wire is easy in most cases and recommended as the first corrective action for print problems.

Getting the proper page count out of your supplies is important and most laser printers have provisions for supplying the user with a page

count. It is recommended that after each supply (cartridge, toner, etc.) replacement, a page count be obtained and recorded to insure you're getting the proper number of prints. Some cartridges require removal and shaking to get the maximum number of prints. The thing to remember here is that the number of prints that you receive is directly related to the amount of toner put on each page. Most estimates of print numbers to expect are based on 5% coverage, which is not a very detailed document.

When installing a replacement toner cartridge, always remove the seal and properly shake the cartridge to distribute the toner. The photo sensitive drum must never be touched. Touching the drum with your fingers will cause an oil deposit that is almost impossible to remove. The first thing blamed for print problems is usually the cartridge, but

How Does a Laser Printer Work ?

In order to create an image (text and/or graphics) on paper, the laser printer:

First, receives the image that has been generated either by a computer or within the printer itself,

Second, translates that image into commands to the laser gun which then "paints" the image on a photo (laser) sensitive drum,

Third, places toner (ground up plastic and additives) on the paper in the correct amounts and positions (utilizing electro-mechanical means), and

Fourth, fuses the toner image to the paper using elevated temperature and pressure.

It's not really complicated, but there are a number of things that must work together to get quality prints.

remember that there are four other areas where problems lurk.

Is Paper a Major Contributor to Problems ?

It can be, with improper paper selection. In some cases, the only way to solve a paper problem is to completely change to a new type or source of paper. Paper selection should stress quality. Quality is not necessarily expensive. It must be uniform and consistent in dimension and not too smooth or rough. Paper weight should be between 16# and 45#.

Some unique print problems can be caused by variations in paper width (unwanted images in the middle of the page) and paper squareness (an unwanted horizontal line about 1" from the bottom of the page). The best method of paper selection is to try a number of paper types out and pick the one that best satisfies your requirements.

Letterheads and labels that are not laser compatible can cause major problems and potentially damage the laser printer. Insure that other types are not used. The extra money spent will more than pay for itself in avoiding problems.

Static build-up and the resulting paper jams can easily be avoided as mentioned above. In addition, limiting paper to one pass through the laser printer will help avoid paper jam problems.

Envelopes have their own set of problems and may require special attention. One common occurrence is a complete grey shading of the envelope. The only cure is to set the intensity setting darker, not lighter as common sense might dictate; it works.

Is Operator Education and Training Necessary ?

Believe it or not, this is the most important thing that can affect the proper operation of your laser printer

and usually doesn't take that long, especially if you've used a laser printer before. Some suppliers provide this through free seminars or user orientations.

It consists primarily of the "do's" and "don't's" associated with the four items discussed above. After the User Orientation, operators usually can diagnose and fix most problems before they become catastrophic. As a minimum, trained operators usually won't cause any problems because of lack of knowledge.

Is There a Happy Ending ?

Yes! With an appreciation of how the different "things" affect the output of laser printers, most problems can be avoided; or easily diagnosed and fixed if they occur. If operated properly, laser printers are capable of reliably providing the highest quality prints available. Hopefully, this article has helped to make your laser printer your friend.

What Affects Laser Printer Operation ?

The "things" that can affect the output of your laser printer are:

I Environmental Conditions of Printer Operations

II The Condition of The Laser Printer

III The Quality of The Toner Cartridge

IV The Type and Condition of The Paper

V Proper Operator Education and Training

Each of these is important to understand so that problems can be avoided and, if encountered can be diagnosed and resolved easily.

[Co-Authors, Jack Reed and David Grant, GM and Service Manager respectively, of AmeriComp Imaging Systems, Alexandria, VA. Copyrighted 1992 by AmeriComp Imaging Systems. All rights reserved.]

Growing Up Creative

by Phil Shapiro

A few months ago, public television broadcast a series of shows entitled "The Creative Spirit," examining the nature of human creativity. While generally well done, the shows did not explore the subject in great depth or detail. But they did succeed in piquing my interest in the subject. So I trotted off to the public library to unearth some books on creativity.

A computerized search of the library's holdings turned up a recently published book entitled, "The Creative Spirit,"—obviously the "companion book" to the public television series. Before seeing the book, I surmised it might suffer from the chronic and notorious "Public-Television-series-companion-book-syndrome." Such books, customarily suffer from chronic intellectual anemia. These books are sumptuously illustrated with gorgeous, spacious typography. Visual feasts, they invariably leave you hungry for more content.

My suspicions were confirmed when I laid eyes on the book "The Creative Spirit." Browsing through the book I saw the occasional interesting idea standing lonely and undeveloped on the page. Yet the book included some references and pointers that I felt could lead to further inquiry. One reference that caught my eye was to a recent new book by Dr. Teresa Amabile, "Growing Up Creative: Nurturing a Lifetime of Creativity."

The Basic Premise of the Book

The basic premise of the book is that creativity can be cultivated just

as surely as corn can be cultivated. Plant a child in loving soil, shower with affection and praise, feed with intellectual stimulation and questions, and before the end of summer (childhood) you'll have yourself a tall-standing critter capable of yielding great yellow kernels of wisdom.

In the preface to the book, Amabile sets out five goals for the book:

In this book you'll learn:

- What children's creativity is, and how you can recognize it.
- The basic components for children's creativity and stages of the creative process.
- The importance of motivation in creativity.
- How home and school environments can destroy children's creativity.
- Several specific techniques that parents and teachers can use to keep children's creativity alive.

By and large, by the end of the book the author covers all of these subjects in some detail, giving anecdotal evidence as well as evidence from various psychological studies.

Some of the most gripping parts of this book are the interviews with people who have produced astounding creative works in their lives. Much of these persons' history has already been recognized. But some are yet-to-be-famous, uniquely creative children who've shown great initiative and talent. You can read about the twelve year old playwright, Jason Brown, who penned uncannily perceptive dialogue. His play about di-

vorce, *Tender Places*, was produced for television, won an award from The Foundation for Dramatists Guild and received high praise from The New York Times.

And this book tells the story of ten year old Jason Hardman, from a small town in Utah, who organized and staffed the town's only public library. (The town's library had been closed for several years prior to Jason's initiative.)

You can't help but be absorbed with Amabile's stories about the childhood experiences of Albert Einstein, Marie Curie, Margaret Mead, Pablo Picasso, Pablo Casals, Isaac Asimov, and Wolfgang Amadeus Mozart. What aspects of these creative masters' lives helped nurture their drive to produce creative wonders? And how were their lives just as ordinary as yours or mine?

The Two Forms of Motivation: Intrinsic and Extrinsic

A sizable chunk of this book is devoted to examining which factors serve to motivate children and adults to be creative. Not surprisingly, the strongest forms of motivation is found to be intrinsic motivation—that motivation which causes people to create for creativity's own sake.

Extrinsic motivation (such as money, candy, or toys) can actually dampen creativity. (Although when such extrinsic motivation is an unexpected "bonus," its effects on creativity are not so harmful.) Even the proverbial "gold star" sticker placed on children's first writings may not be entirely wholesome. A short written note of praise may be more meaningful and effective in the long run.

Helping Children Take "Ownership" of Their Creative Work

In the chapter entitled, "Keeping Creativity Alive in School: Suggestions for Teachers," the author tells of ways to help publicly "celebrate" creative works in the classroom. A

large bulletin board displaying student work is a good first step. But to maximize the beneficial effects of such "public celebrations," students in the classroom must become active participants in deciding what is placed on the bulletin board. And they should have the right and privilege to ask that their creative works be taken off the board.

Bulletin boards are not the only way of celebrating students self-expression, though:

"I know one teacher, very interested in students' writing skills, who held an "Author's Hour" once or twice a week. Students would sign up for time slots in the Authors' Hour, during which they would have the opportunity to sit in the Author's Chair (a kind of film director's chair) and read their most recent creative writing to the class. This would be followed by a period of commentary and suggestions from the class (with at least some positive comments being required!), which the author would use in doing revisions."

Showing by Doing

A recurring theme in the book is that adults can promote creativity in children by engaging in creative behavior themselves. Students imitate adult behavior. So if kids see creative behavior and speech at home and at school, they'll internalize the creative approach within their thinking patterns.

Simply by talking through the creative process out loud, adults can help instill a "habit of creativity." Teachers can incorporate these "creativity commentaries" into just about any lesson plan:

If your students consistently hear you say, "Let's find a really creative way of doing this," and "How else can we do this?" and "Let's come up with as many new ideas as possible," they [the students] will gradually, habitually adopt a more creative thinking style themselves.

Dr. Amabile has made it her life's work to understand the processes and nature of human creativity. In this book she does an outstanding job of telling us what each of us implicitly knows, but haven't given due thought. The true value of this book is in raising creativity concerns to a new height of awareness in the rearing and education of children. By looking at children's creativity through Amabile's eyes and following her suggestions and recommendations, chances are very good that the children we care so very much about will find creative fulfillment in their lives.

[The author of this review develops educational software professionally and takes a keen interest in creative expression and creativity issues. He can be reached at: Balloons Software, 5201 Chevy Chase Parkway, NW, Washington, DC 20015-1747. Or via electronic mail on GENIE at:

Title: Growing Up Creative: Nurturing a Lifetime of Creativity, second edition

Author: Dr. Teresa M. Amabile

Publisher: Creative Education Foundation

Address: 1050 Union Road, Buffalo, NY 14224

Telephone: 716-675-3181

Length: 208 pages

ISBN: 0-930222-921

SRP: \$12.95

P. Shapiro; on America Online at: pshapiro; on Internet at: pshapiro@pro-novapple.cts.com]

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From the President

In Appreciation

by Lorin Evans

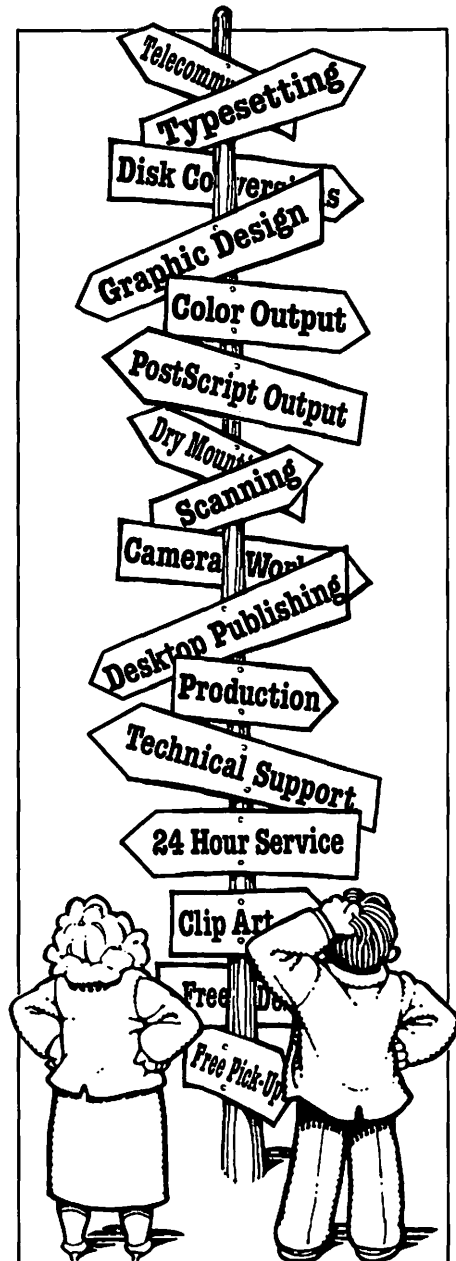
I was asked to write an obituary for the Apple IIGS computer. As you may know, Apple deleted this model from its price list this past December. The Apple II community feels vulnerable as another year passes with no new models or national advertising for their favorite computer. Now the only computer being produced under the Apple name is the IIe. Apple sells it principally to schools - although it is possible to order one from an Apple retail dealer. While the II line of computers is now 15 years old, it is today a better value for homes and schools than it was in 1977.

But an obituary? Obituaries are for one-of-a-kind things: you, the family pet or me. I am willing to write an obit for my copy of some mass produced item when it croaks especially if we have been good to each other. Just because Apple stopped manufacturing a computer is no reason to write an obituary - for your computer or for mine.

People are fond of looking for analogous events from the past to confirm their death and dying stories about the Apple computer. Osborne and Kaypro come to their minds; Freddie Krueger to mine. An Apple II owner uses a computer that has a wider installed base, a greater wealth of software and a much deeper advisory and maintenance infrastructure than any of its 'dead' contemporaries. It also has one important legacy: the profits from its sales helped pay for the R&D that created your Macintosh.

Someone always has to go first. In our world, it was the Apple III. Dave Ottalini and his merry band of III'ers are models for others to examine when the question arises as to how to support a computer orphan. The example falters because while all facets of the III were discontinued, system software development for the GS continues. The example holds, however, because as Washington Apple Pi organized to become the premier support center for the Apple III, so too can we be it for the II. As long as there are folks like you out there who are willing to band together to derive the synergistic benefits from this kind of association, we will be there for you and the second generation owner and the third.

Oh, about that obituary I am supposed to write; I think the announcement of the death of the Apple II is premature. Sorry. :-)



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Washington Apple Pi General Meeting

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February 27, 1993

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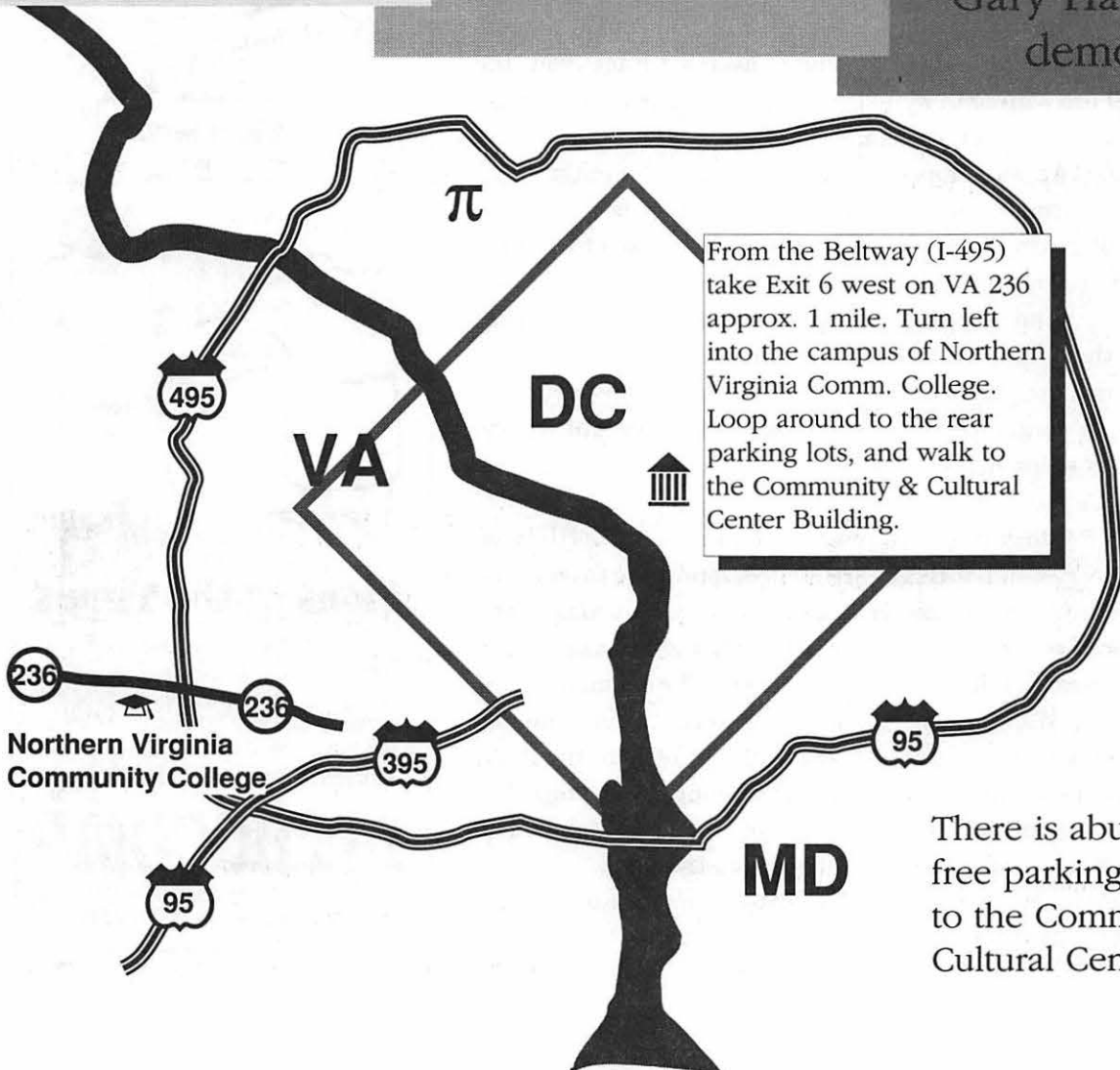
Apple II: Home
Control,
Comp. Maintenance

March 27, 1993

Mac: Symantec,
Canon printers
Apple II: Printers,
Pointless

April 24, 1993

Mac: One Mile Up
Graphics Special
Apple II: Scanners,
Gary Hayman
demos



From the Beltway (I-495) take Exit 6 west on VA 236 approx. 1 mile. Turn left into the campus of Northern Virginia Comm. College. Loop around to the rear parking lots, and walk to the Community & Cultural Center Building.

There is abundant free parking adjacent to the Community & Cultural Center.



Summary of Activities

Washington Apple Pi, Ltd. Board of Directors Meeting

October 14, 1992

Officers and Directors Present: Lorin Evans, Ken De Vito, Charlie Froehlich, Dana Schwartz, Bill Campbell, Jon Hardis, Tom Witte, Bill Wydro, Bob Shaffer, Dave Weikert, Bernie Urban, Guy Durant, (Vacancy filled during meeting by Lawrence Charters).

Officers and Directors Absent: Lee Raesly, Tom Vier.

BOD Vacancy: The Board filled a vacancy in a Director-at-Large position with the nomination and confirmation of Lawrence Charters.

Membership Criteria: In order to formally define a policy of Washington Apple Pi, a motion was passed stating that members may not use handles or aliases in their participation in WAP activities.

Apple Expo East: Heard a report from Lorin Evans on our successful showing at Apple Expo East in Boston Massachusetts, both financially and in terms of goodwill generated.

Request for Candidates to Staff an Audit Committee: The BOD is looking for candidates to staff an audit committee. Anyone interested was asked to contact Lorin for further information.

Garage Sale: Tom Witte reported on site options being considered for the garage sale in December, along with a potential pricing schedule. Tom and Lorin will proceed with negotiations.

-Dana J. Schwartz, Secretary

Summary of Activities

Washington Apple Pi, Ltd. Board of Directors Meeting

November 11, 1992

Officers and Directors Present: Lorin Evans, Ken De Vito, Charlie Froehlich, Dana Schwartz, Bill Campbell, Jon Hardis, Tom Witte, Bill Wydro, Bob Shaffer, Dave Weikert, Lawrence Charters.

Officers and Directors Absent: Lee Raesly, Tom Vier, Bernie Urban, Guy Durant.

Meeting location: A discussion of possible future locations for the monthly meeting concluded that unless further research is done, the meeting site will remain in Virginia.

Macintosh System 7.1: The Board discussed possible National User Group actions with respect to the Apple decisions ending the ability for User Groups to obtain right-to-copy licenses for critical pieces of Apple system software. The President reported that WAP and other users groups were negotiating with Apple to obtain a special price for user group members.

Director Tom Vier: The Board of Directors voted to recommend to the membership that Tom Vier should be removed as a director.

-Dana J. Schwartz, Secretary

SF 171 Software

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<ul style="list-style-type: none"> • 9 of 10 in WAP Review • Forms appear on screen • Modified pages for jobs • Makes unlimited copies • Prints form and answers • Creates typeset 171 • SF 171 software since 1987 • Updated manual describes <ul style="list-style-type: none"> - Federal employment - Job descriptions - Personnel terms - Interview tips - Organizing a SF 171 	<p style="margin: 0;">Career Advancement - only \$59.95 (Add \$3.00 s/h; MD res. add 5% tax)</p> <p style="margin: 0;">WAP Members get 10% discount Requires Macintosh and MacDraw; specify version of MacDraw (1, II, Pro) Printer must be able to print at 50% reduction</p> <p style="margin: 0;">Questions???? Contact us</p> <p style="text-align: center; margin: 0;">MULTISOFT RESOURCES P.O. Box 235 Washington Grove, MD 20880 (301) 977-6972</p>
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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*.

I am very pleased with the response to our call for volunteers. We encourage and welcome additional support for the training program. Graphic designer, desktop publishers, and illustrators—we could use your help in promoting our program with brochures and fliers. For further information, call Craig Eastman (202) 234-1088.

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 # M10293)

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., Feb. 8, 7-10 pm.

Introduction to the Macintosh, Part II (Course # M20293)

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., Feb. 15, 7-10 pm.

Introduction to the Macintosh,

Part III (Course # M30293) 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., Feb. 22, 7-10 pm

Maintaining Your Macintosh

(Course # OS30293) 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., Feb. 24, 7-10 pm.

Introduction to Microsoft Word 5.X, (Course # MW020993)

For those with limited experience of Microsoft Word, this will be a basic introduction to the powerful word processing program. Topics will include, based on student needs: how and when to use Word, its environment, features, menus and commands, window icons, keyboard shortcuts, formatting exercises, dif-



ferent views, and the purpose of style sheets.

Materials Required: Your Macintosh, external drive or hard drive, startup disk, and a copy of Microsoft Word, preferably version 5.X or later.

Course Date: Tuesday, Feb. 9, 1993, 7:00 PM-10:00 PM.

Advanced to Microsoft Word 5.X, (Course #MW021693) For those who have taken Intro to Microsoft Word and those with more experience in Microsoft Word. Topics will include, based on student needs: How and when to use special features, menus and commands.

Materials Required: Your Macintosh, external drive or hard drive, startup disk, and a copy of Microsoft Word, preferably version 5.X or later.

Course Date: Tuesday, Feb. 16, 1993, 7:00 PM-10:00 PM.

Introduction to the Washington Apple Pi Teleconference System (TCS) Course # (021393) This class is designed for telecommunications novices or new WAP members. This is the perfect seminar for those of you wanting to enjoy the many benefits of the WAP TCS. Topics for discussion will include how to apply for a password, sign on, configure a user profile, read messages, leave messages, reply to messages, upload, download or transfer files and use of the Librarian.

Course Date: Saturday, Feb. 13, 1993, 9:00 AM-12:00 NOON

Introduction to Microsoft Excel 3.X, Part 1 (Course #ME021893). For the beginning Excel user, or those wishing to brush up on fundamentals. Topics covered are: the many uses and applications of Excel., Excel windows and tools, menus and menu commands, keyboard shortcuts, advanced features, System 7 savvy Excel 3, exercises, and other subjects.

Materials Required: Your Macintosh, external drive or hard drive, start-up disk, and a copy of Microsoft Excel, preferably one of the 4.X versions.

Course Date: Thursday, Feb. 18, 1993, 7:00 PM -10:00 PM.

Using Claris FileMaker Pro, Part 1 (Course #FMP 022393). An introduction to the popular and powerful flat-file database program from Claris will include the basic database management terminology, how to create, change, edit, and sort records; and how to structure, preview, and print reports. (Note: This is a two-part course and a homework project will be assigned at the end of the first class for review and discussion during Part 2., which will be scheduled for March. Part 2 will cover creating and changing layouts and fields, using graphics, formatting reports, and scripting.)

Materials Required: Your Macintosh, external drive or hard drive, start-up disk, and a copy of Claris FileMaker Pro.

Course Date: Tuesday, Feb. 23 1993, 7:00 PM-10:00 PM.

Other Educational Opportunities

I've listed some training resources to supplement our class schedule. I am not endorsing the listed resources. Call or write me about your training experiences outside the Pi. I am very interested in documenting courses at local schools, colleges, universities, adult and continuing education programs, courses at the Smithsonian, and other Macintosh or Apple II training. Any information would be very helpful in this regard.

If you are interested in college, graduate, or professional study involving the Macintosh in a field like graphic design, photography, filmmaking, animation, training design, etc., write to me at 9505 Draycott Court, Burke, VA 22015-3253, en-

closing a SASE, and I'll get some options and info to you.

- **Rochester Institute of Technology, Technical and Education Center of the Graphic Arts** (Frank E. Gannett Memorial Building, P.O. Box 9887, Rochester, NY 14623-0887, (716) 475-5000) The T&E offers graduate and professional-level study including seminars, credit courses, degree and other programs in color pre-press, digital photography, desktop publishing, and other fields of interest to the Macintosh communicator.
- **Personal Training Systems** (828 S. Bascom Avenue, Suite 100, San Jose, CA 95128): 1-(800)-TEACH-99. Personal Training Systems offers a pretty 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 Beauregard 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 Macintosh classes are Computer Graphics I and II. Advanced projects and seminars are required for degree students.

- **AFI-Apple Computer Center for Film and Videomakers**, 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 Los Angeles 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 Macintosh-based. If you are 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 Macintosh color computing, design, illustration, art, and electronic pre-press. Courses in Georgetown.
- **The Eastman Kodak Center for Creative Imaging**, Camden, Maine: 1-(800)-428-7400. State-of-the-art, Macintosh-based imaging, digital photography, and electronic pre-press. Courses on beautiful Maine campus in a building Kodak calls 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 Macintosh. 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.

Washington Apple Pi Tutorial Registration Form		Washington Apple Pi 7910 Woodmont Ave., Su. 910 Bethesda, Maryland 20814 301-654-8060
Basic Information	Course Numbers	
Name _____	<i>Please fill in the course number of the class(es) that you wish to attend.</i> Class #1 _____ Class #2 _____ Class #3 _____ Class #4 _____ Class #5 _____ Class #6 _____	
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? <input type="checkbox"/> Yes <input type="checkbox"/> No		
WAP Form #CL006 (mod. 7/90). Mail registration and payment to the above address.		



ejected disk thus ensuring no sensitive data left on your systems or the floppy disk.

System Requirements

Trashmaster with Incinerator operates with System 6 but can't use its filters option except with System 7, so System 7 is the ideal environment.

Install by dragging the *Trashmaster with Incinerator* icon to the System folder and restarting. If for any reason it needs to be temporarily disabled, this can be easily done by checking an On/Off box.

Trashmaster with Incinerator was tested on a MacPlus, an SE, an SE/30, and a Mac II with no problems noted. If you need a trashcan with more bells and whistles, select *Trashmaster with Incinerator*.

Name: *Trashmaster with Incinerator*

Publisher: Handoff Corp.

System Requirements: Systems 6 or 7

[Jim Campbell, P.E., is an enthusiastic Mac user always trying to increase personal productivity with the Mac. He works at Interlog, Inc. Falls Church, VA as the Principal Operations Research Analyst. He is also Chairman of the Greater Washington Chapter of the Society of Logistics Engineers (SOLE).]

Trashmaster with Incinerator

by Jim Campbell, P.E.

Surprise! Surprise! No doubt you thought that you had mastered operating the Macintosh trash can. That's usually among the first things new Mac users learn. Well...back to class! *Trashmaster with Incinerator* from the Handoff Corporation is a trash management utility for your Mac. If you need more trash management options than simply "trashing" your files, *Trashmaster with Incinerator* warrants your careful consideration.

Not "All or Nothing"

When you put a file in the trash can using a Mac operating system, it will eliminate all files when the can is emptied. With *Trashmaster with Incinerator*, you are shown a menu from which to select where the file comes from. Thus you could only empty the trash on your hard drive but not from an external disk drive. No longer is the choice all or nothing. I will confess, however, that going through the trash emptying routine can become somewhat tedious if you have placed trash from all drives or disks in the trash without using the immediate removal option or other filters.

Automatic File Deletion

Empty Trash filters can be defined to empty automatically:

- Immediately upon dragging to the trash can
- Hourly
- Daily
- On disk ejection
- On disk insertion
- On startup
- On shut down

Similarly file size or age can be placed into filters. So files greater than 100K, for instance, or over 56 days old could be deleted. Filters exist to search for specific file formats such as TEXT, PICT, *MacWrite*, etc., or you can search for a specific file extender such as .Ext. For instance, you can define a filter to delete all *MacWrite* files older than six days that are greater than 60K.

Several options available include skipping the trash warnings and skipping the trash progress bar graph. If you need confidence that files are actually rendered unrecoverable rather than the address just eliminated from the directory, an incinerator filter can be created. This ensures that the deleted or trashed files are overwritten three times, once with zeroes, one with ones and a final time with zeros to comply with the Department of Defense's specifications.

With a little thought, filters could be created to incinerate files on an



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Artists on exhibit

by Ann Aiken

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

Artist info: C.J. Correnti is originally from the Washington D.C. area. He studied Visual Communications at the Art Institute in Pittsburgh. C.J. started using a Mac in 1985 at the ripe old age of 15! He worked mainly in *MacPaint* and *MacDraw* and spent 20-30 hours a week during the summers making view graphs and storyboards for International Information Systems. He is currently a partner of an advertising agency relocating to the Herndon/Reston area.

Tools: MacIIci, Adobe *Illustrator*, *PageMaker*, *PhotoShop*, *Free-Hand*, and *Quark Express*

Technique: "For the *Champions / Marriott Racecar*, I got the idea to do the car because I wanted to present a proposal to Mid-Atlantic Management to sponsor a racecar. I used to pit-crew for Morgan Sheppard and Harry

Gant and to build cars by hand so I was very familiar with the actual cars and how they looked. I started drawing the car's outline first, then visualized a light source and shadows. I usually have a very detailed idea of how I want things to look before I start. Everything goes a lot smoother that way. Next I drew the front grill and bumper blends. My style optimizes blends and patterns, and I create patterns as much as blends for the same effect because they're easier to assimilate in an odd shape. The car is done in three colors excluding the decals. The tires and black shadow below are all one large shape in the back with a gradation blend to light. The text was all dimensionally thought-out and placed on top of the black. The letters for the decals were rendered straight, then skewed and scaled individually until they fit correctly. To do this, I con-

verted a font and then put it in outline form (converted to paths). I then copied the fonts and kept a separate version in the background so they could be easily changed. The front windshield is a series of blends in about six layers. The entire car from start to finish took only six to eight hours and occupies only 750K in color EPS format, rendered in Adobe *Illustrator*.

"On the *Texas Crab* logo, I took the name and came up with the text idea first. I started with the crab's outline and drew directly on the computer while referring to some clip art. The word 'Texas' was rendered in *Type-styler*. The lasso was drawn one braid section at a time, duplicating, rotating, skewing and scaling each one to fit. Two circles were made into a compound so that the negative area between the star and the circle would reveal the background color.

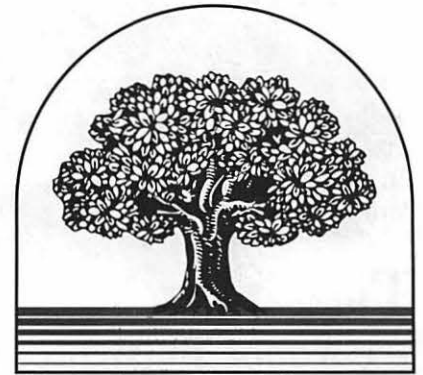




"For the *Stalcup* logo, I drew the tree large by hand in pen, scanned it in and used the re-draw feature in *Illustrator*. Then I put the lines into approximate mountains and land. The

lines were used in place of screens for better silkscreen reproduction when it came to doing T-Shirts.

"The *It's on a Roll* logo was drawn entirely on the computer. I put the bun in the background and then added lettuce, tomatoes, etc. Everything was drawn with the pen tool except the word which were a font converted



STALCUP
FARM • HOME • GARDEN

to outline form."

One of C.J.'s goals is to keep his work as efficient as possible when he's working in *Illustrator*. He always tries to minimize the file size when he constructs his pieces. Too many blends and patterns won't print fast enough if at all. He uses his own custom colors instead of process colors because they're more easily edited. He also uses his fax/modem when working with clients and sends them proofs straight from his screen.

To submit art by mail, send a copy on disk and a hard copy to:

Ann Aiken
9212 Cedarcrest Drive
Bethesda, MD 20814

To submit art by modem to the TCS, dial (301) 986-8085. At the Main Menu select (F) for File Transfer Area. Then choose area 24 for Journal Submissions, and upload.



**IT'S
ON A
ROLL**

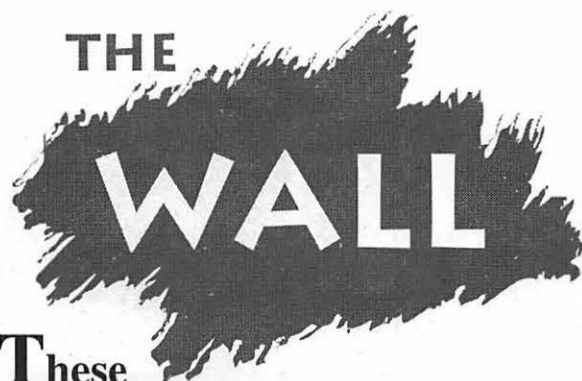
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GRAPHIC

by Carol O'Connor

TIPS

THE



These are Adobe Illustrator graphics with no placed images.

Begin in Photoshop to make images with odd edges, *without using Streamline!* An added bonus is speed and ease.

To get the hang of it, make simple forms and go through the steps several times. Check the tips (*).

*

To make a custom brush in Photoshop, drag a selection box over the area you wish to make a custom brush. Then choose Brush Pattern in the Edit menu. The brush may be up to 64 by 64 pixels. The new brush will appear at the Define Brush window in the Edit Menu.

**

If a long path won't print, see if you have checked the box, *Split Long Paths on Save/Print* in the Preferences dialog box.

To make a ragged edged line like the spiral:

Draw your design in Photoshop with a large brush. Run the Crystalize and/or the Diffuse Filter several times. Experiment. Then proceed to steps 2-4 above.

To make the bear:

Scan the flag of the State of California and trim it in Photoshop. Proceed with steps 2-4 above. However, color the interior shapes of the bear white or gray and bring them to the front.

1

Open Photoshop. Choose a fat brush or make a custom brush*.

Scribble, until you get a shape that suits your needs. Practice with something similar to the example.

2

Select the Magic Wand Tool.

Click on a large black area. That area will be highlighted with marching ants.

Go to the Select menu and drag down to Similar. This will cause all the other black areas to be highlighted also.

3

In the same menu, go down to the Make Path line. You will get a new menu bar.

In the new menu called Pen, select Save Path. You will be asked to name your path but you can use the default name.

Exit out of Pen menu.

Command-D to release the marching ants.

4

In the File menu, select Export to Illustrator. Your document will be renamed with a new suffix. Close out of Photoshop and open the new Illustrator file.

Select All, and fill with black and no outline.

Type a white word on top.

Print.**



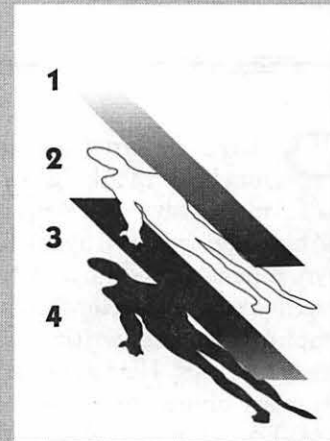
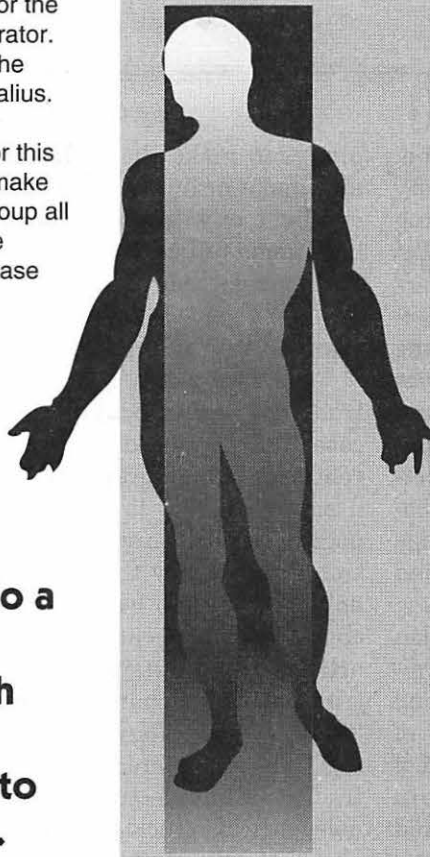


Use this method to make fast silhouettes for the purpose of additional manipulation in Illustrator. The figure of the man in this case is from the Sixteenth Century anatomist Andreas Vesalius.

Your snapshots make excellent sources for this same kind of silhouetting. Photoshop will make some tasks very easy because you can group all the elements of one color together with the Similar command. It is also helpful to increase the contrast to clarify an edge.



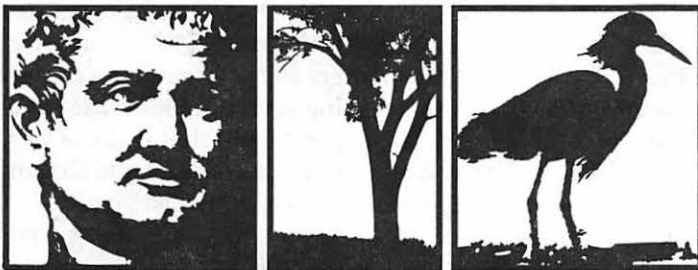
Remember:
any selection
in Photoshop
can be
turned into a
path; any
saved path
can be
exported to
Illustrator.



- 1 Light to dark blend
- 2 No fill, no stroke mask
- 3 Dark to light blend
- 4 Black Silhouette

Group

Very Fast Start for a brochure or flyer...



These three images are very quick and UNRETOUCHED Illustrator renderings of photographs scanned into Photoshop. The Levels control was used on each image to produce black and white images. Then Steps 2, 3 and 4 (on the previous page) were followed. Once in Illustrator the paths were filled 100% black. Interior areas were recolored with a white fill and brought to the front.

The images were created in minutes. Depending on how they are going to be used, images like these may continue to be edited or enhanced in Illustrator.



Fontographer 3.5 Review

by C. R. Clowery

Picture an ancient scribe, maybe a monk in a drafty monastery cell, squinting over his drawing board by the light of dawn. A pen in his cold, inky fingers scratches graceful letter forms. Calligraphy ("beautiful writing"), is the voice of his heart. His hands and eyes give every character its shape and space. Earthy materials: wolf's tail and bamboo, goose quill and soot-black ink, rhythm and touch on parchment, vellum and paper. Each page was a unique creation of his life and his craft.

Come the technological revolution in sixth century China and the Empress ordered a wood-block printing of the *Diamond Sutra*. Hundreds of duplicates were inked from one set of blocks. Overnight the monk scribe in his cell was history. One thousand years later in Europe, Gutenberg's mechanical press printed Bibles with hot lead type. Five hundred years later we have experienced yet another revolution, and this time it may take only a decade to reduce the lead-type printer's trade to an art form.

Just as wood-block printing changed the nature of scribes' handwork, computers have replaced lead type with the same revolutionary energy, but with an ironic twist: digital typography editors—with Altsys' *Fontographer* leading the way—have put the tools of the calligrapher in the hands of the writer. *Fontographer* has empowered the calligrapher/type designer within us. Our hand and eye moving and touching the me-

dium can make the alphabet sing, and make ordinary words graceful and light, or weighty and proud. We have come full circle. And this time you don't get your fingers inky.

Don't Know a Serif From a Hint?

Typography has been a skilled trade, and even today it's still the case that you need to learn some centuries-old calligraphers' terms to design type. Now to do desk-top typography, you also need to learn electronic vocabulary that was minted only recently. To learn the jargon, check the sources at the end of the article. Or, call Altsys. They are distributing free of charge a glossary of "*Type Terminology On the Desktop*" a handy reference that defines traditional and electronic type terminology. It also includes a bibliography that will start you into letter form and typography research. (Call (214) 680-2060, ext. 687).

Description:

Altsys calls *Fontographer* a graphics editor, designed to simplify the creation of high-quality fonts, typefaces, foreign character sets, logos, and other intricate PostScript language and TrueType artwork on the Macintosh. You can run the program on a Mac Plus, a Classic, and on up. It requires a minimum of two megabytes of RAM and a hard drive or external floppy drive, and if you want to see the results of your labors, a Postscript laser printer is nice. Beginners need not be timid:

Fontographer rewards novices as much as it challenges professional typographers. Owners of 9" screen Macs will be able to use the software without straining because most of the action takes place in the individual character edit windows.

Version 3.5 is the latest upgrade, (a Windows version has just been released for the PC), and includes a freehand calligraphic pen-tool, for Western-style calligraphy, with thicks and thins like a straight-edge broad-pen. This device toggles with a variable weights pen for a soft-bristle effect. It gives the illusion of a pressure-sensitive Chinese ink-brush. I don't own a Wacom (or other) drawing tablet, so I couldn't exercise the variable weights pen at its best. In its place, *Fontographer* asks us to quick-click on the left and right arrows in coordination with movements of the mouse to simulate the thicks and thins; however, technique does *not* provide precise control). The variable weights pen above switches with a dialog box into a calligraphic pen tool, which is a neat idea, but requires, like any calligraphy pen, a disciplined eye and long practice to make the results look any better than your own sloppy handwriting.

The graphics-tool pallet includes eleven specialized gizmos for altering existing typefaces and logos, or creating your own graphics. The Special Menu lets you perform standard type-manipulation techniques. You can flip, mirror, rotate, and skew characters, as well as remove overlaps, expand strokes, compose/decompose composites, and change weights. Auto-tracing was a major innovation of the last upgrade. But some designers say this feature is capable of giving you an unaesthetic set of Bézier points and that it takes less time to trace curves by hand than it does to rescue a glitched glyph.

The Expert Choices sub-menu gives you Font Interpolation, and



Hint Editing. Hints improve the jaggies at the top edges of the roman (not the italics) glyphs and fit the 72-pixel monitor bit-maps glove-tight to the curves of outline characters. And there is Multiple Master Fonts, a new technology from Adobe that requires a learning curve before you grasp this gadget.

Multiple Masters? Hold My Hand, Please!

Even the writers of the software are impressed with the complexity of Multiple Masters. Peter A. Mason, Font Products Manager of Altsys Corporation warns the casual user and provides him with psychological preparation for disappointment in what must be an award-winner for sympathy and candor in ReadMe documents. He likens *Fontographer 3.5* to a Ferrari that will carry us to work just fine but also contains the power to lay a solid layer of rubber down on the street at 150 mph every time we go to the grocery store. Mason says,

"Fontographer is like the sports car. You simply do not need to use everything in the entire program in order to do what needs to be done. You only need to be concerned about these features if you plan on using them, and keep in mind that some of them are not for the faint of heart. There is high-end professional stuff which is difficult, for the most part, and the interface for these features is designed not for the novice, but so the experts (who need this capability) can work with the greatest efficiency."

Testing

I have a Japanese *kana* font I use for my Japanese-class homework. But it lacks four of the basic signs, which proves frustrating. My brother suggested I test *Fontographer 3.5* by designing the four graphs. I opened

the font character window and found the interface approachable and attractive. To draw the missing symbols I first chose the free-form brush, but settled for the standard line pen. *Fontographer* supplies a clear, readable ABC Tutorial that guides users through saving, naming, kerning and generating the font. The Tutorial, an Addendum, and the detailed User's Guide step you through the exacting and detailed process of turning your drawn, scanned, or imported creations into a font. Since I was only patching an existing font, finding the right slots in the font grid was easy. The bit-map sizes of my Japanese font read at 12 and 24 point, and I left them there, well-pleased with the results of my creations.

Next we found a complete set of beautiful brush-drawn Japanese *kana* characters we liked, and decided to create a new font. We scanned them in one by one, and saved them as individual EPS files, each with its own name. After mapping out the position beforehand on the keyboard with the standard Mac Key Caps CDev, we popped each symbol, upper case for *katakana* and lower case for *hiragana*, into its proper slot. We pinched the *nigori* macrons with the size tool in order to bring them up tight to the symbols they accent, and assigned each one a key stroke. We generated the lot as a TrueType font, Et voila! A clean and sharp Japanese alphabet set, scalable from 9-point to infinity, that does the job and looks great. It takes time and patience, but *Fontographer* produces an impressive, usable font.

More Tests

After we scanned in the Japanese characters, we welded macrons and diacritics over the top of fourteen existing Palatino letters to create a romanized Palatino Sanskrit font,

(for home use, of course). With Apple's World Script multi-language capabilities on System 7.1 now a reality, vendors will soon be releasing fonts and software to take advantage of World Script's two-byte character potential. Students and professionals who need Arabic, Chinese, Cyrillic, Japanese, Sanskrit, Korean, or other ideographic writing schema will want to do their own customizing with *Fontographer*. It can be done, and it adds communication punch to the page.

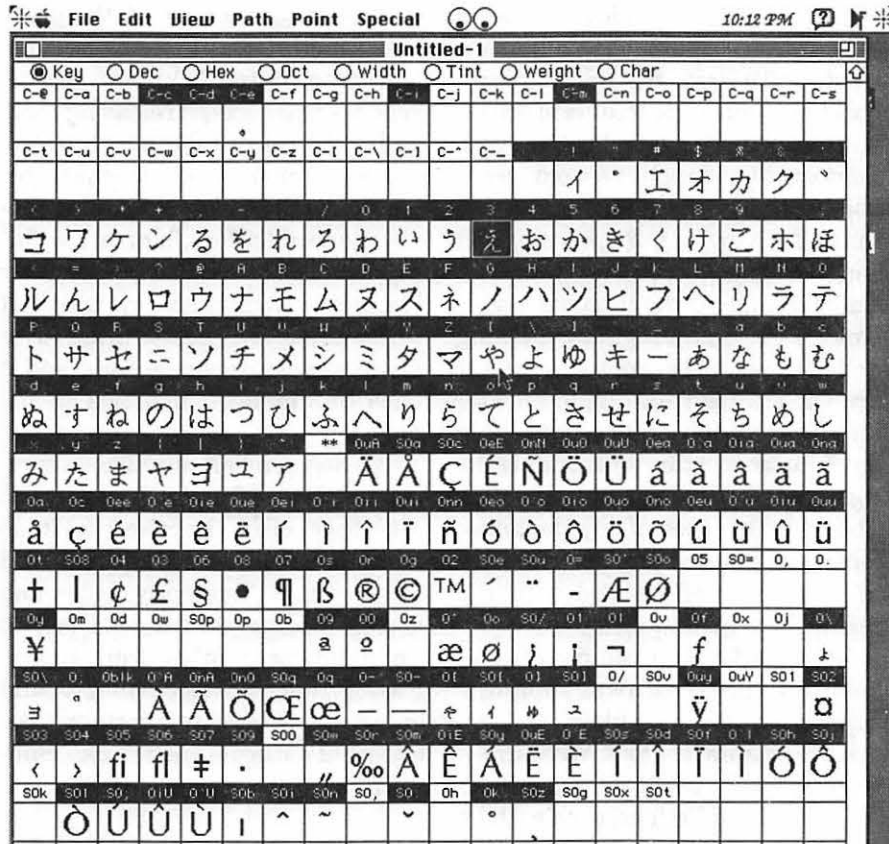
We began a font of religious symbols gathered from many sources. We discovered the need to keep scanned images for logos, fonts, and icons simple! Too many nodes and vectors block up the results. Open up an existing symbol font inside *Fontographer's* view-window and enlarge any icon, to check out the essential nature of each stroke. Simplicity!

Slanted Cursive Roman? Not Since Style Merger!

The Style Merger utility puts italic, bold, bold italic, and medium into one type family in a suitcase, which saves inches of space on your pull-down font menu and makes the traditional format options obsolete. One font family does it all, and the italic is a true calligraphic model, not just a slanted, cursive roman.

We were unable to get *Fontographer* to read PC TrueType fonts when they ported over to the Mac. We tried both the Apple File Exchange and Mac Link Plus Translators. Adobe Type 1 worked fine when it came from the PC. *Fontographer* easily generates or reads PC TrueType fonts when these fonts are created by *Fontographer* itself, but it was no dice when I tried to import any original PC TrueType symbol or alphabet fonts. We called

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Ugly Computer Fonts: Gone For Good? Here to Stay?

Ugly fonts helped keep me computer illiterate for years. I had studied calligraphy and recognized good letter forms, such as Roman Caps, Carolingian, Bookhand, Chancery, etc. and was repelled by the cold, technoid look of the first electronic alphabets. I mistakenly assumed that early ugly typefaces typified the entire experience of word-processing. Remember the illegible "Univac Key-punch OCR typeface"? It survives on the bottom of checks. My first CPM Digilog computer offered plain vanilla "resident bitmap" built right into the chip. Life was simpler, and computer users of that generation were not supposed to ask elegance of their machines. I wondered when the software writers and the artists would get together to give us something more than the utilitarian "computer fonts" that blipped across my monitor and printer.

Fontographer's technical support in Richardson, Texas. They had no solution to this problem. ATM PostScript fonts worked well when brought in from either the Mac or PC. Upgrade 3.5.1 promises to fix this situation.

Font creation is meticulous artwork because each letter must not only harmonize with itself, it also must match its own alphabet family. The uppercase must resemble its lowercase kin; each letter must fit in a kerning pair with its regular neighbors. The design experience requires much nudging and tweaking. Fontographer allows eight levels of un-do, removes overlaps, and expands strokes in proportion to reach the perfect character and the ideal alphabet. It allows Auto-hinting (let the software do this task,) and Auto-tracing, although experienced typographers find this feature both slow

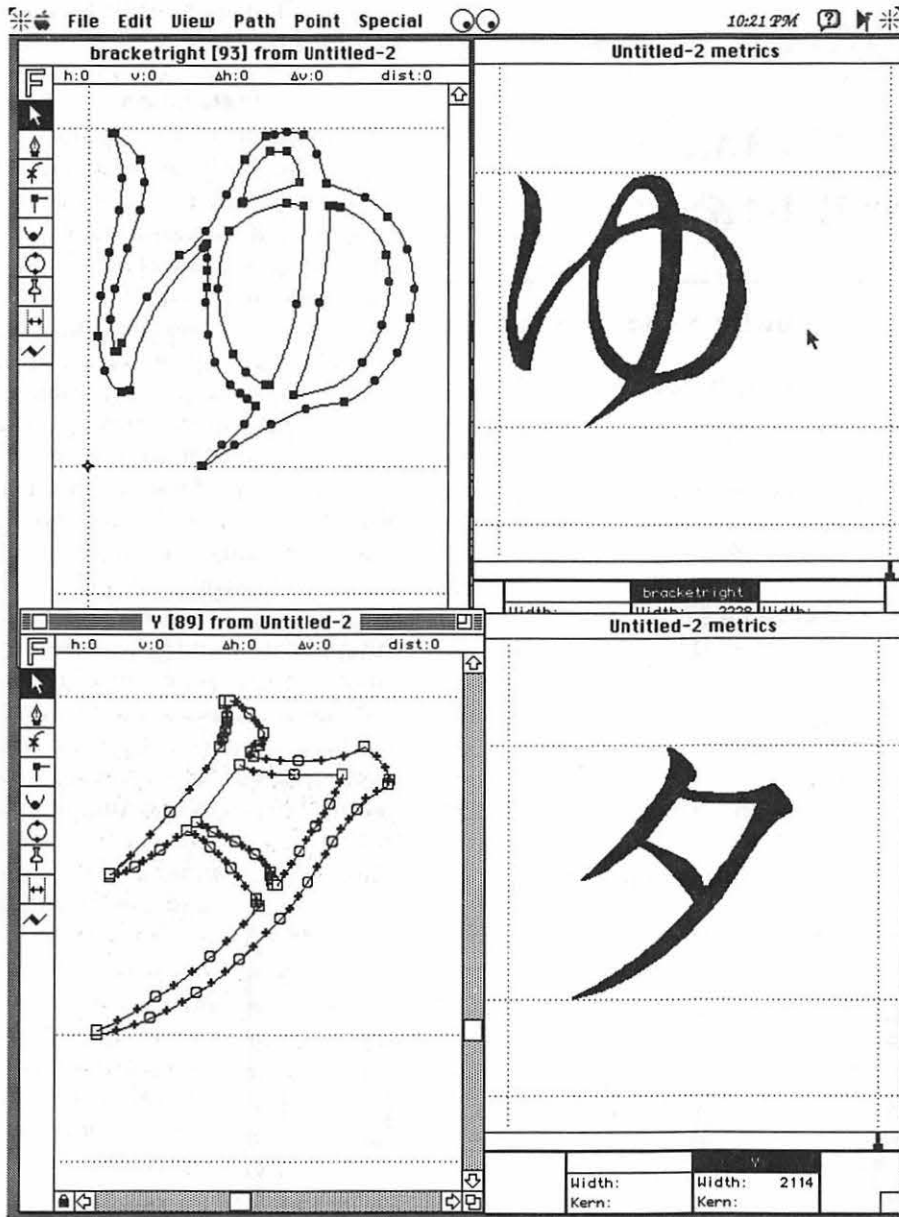
and risky.

Competition in digital typography is advancing rapidly: Ares' FontMonger, LetraSet's FontStudio, and ATF Type Designer I and Ikarus-M all allow creation and manipulation of the 26 letters and graphic designs. Fontographer was the first, and since 1986 it has been through numerous upgrades and simplifications. FontMonger shows a picture keyboard setup that you can toggle over to the character chart. Fontographer shows only the character chart and not the keyboard, which makes it easier to goof up in assigning keys to a non-alphabetized set.

A new upgrade, 3.5.1, which should be available at WAP, offers new features and twelve bug fixes. We have used Fontographer to generate fonts for both the Mac and PC, and it is a solid and powerful tool.

Has Something Been Lost?

But times change; it is 1993. The scribe within me has been empowered to style type to the last hint and serif. Fontographer has put the tools of the type foundry and the vision of the scribe on my Mac. Has something vital and human been lost? Something gained? In desktop digital typography, it's true, the machine's binary algorithms replicate the calligrapher's eye and hand. But as a new, powerful tool for calligraphers and typographers, Fontographer 3.5 expands the horizon of letter forms' design the way no pen or lead type could. The staff and founders of many type designing outfits such as Adobe, Casady & Greene, Emigre, and the Electronic Typographer offer fonts that were created with Fontographer. These professionals in many cases began their study of type by learning the



For Further Reading

See bibliography in *Type Terminology On the Desktop* from Altsys

MACUSER Oct. '91; Dec. '91; May '92; Oct. '92 has a four part series on Typography on the Mac

MACWORLD "Type In Transition" Four issues: July-October 1991

Michael L. Kleper, *The Illustrated Handbook of Desktop Publishing and Typesetting*; Windcrest; TAB Books, Summit, PA

(C. R. Clowery, a Buddhist Monk, has been drawing Chinese characters with a writing brush since 1968, and the alphabet with a broad pen since 1982. His goal is to print English translations of Buddhist sutras in Edward Johnston's *Foundational Hand on the Macintosh.*)

Title: Fontographer 3.5

Publisher: Altsys Corporation

Address: 269 Renner Road
Richardson, TX 75080

Telephone: (214) 680-2060

FAX: (214) 424-9033

MCI Mail: ALTSYS (271-8914)

CompuServe: 76004,2071

AppleLink: D0590

Retail Price: \$495.00

Discount Price: \$258.00

Necessary Hardware: Mac Plus or above, with 2 megabytes of RAM. A PostScript printer lets you view your creations,

historical rules of calligraphic writing, then included the freedom and convenience of the computer in their tool kit. Fine type still requires profound study and a creative gift, but *Fontographer* turns your monitor into a typographer's classroom/studio.

Some claim that the font folders of the world will be filled with brand new ugly typefaces. Perhaps in the computer age, we are electronically

realizing the promise of Graily Hewitt, a British calligrapher who called fine handwriting "Every man's art." If you get hooked on the joys of type design, you might keep a real calligraphy pen and ink-bottle around and practice a few strokes, using the principles you learned from working with *Fontographer*. What goes around, comes around. Try mechanics' hand cleaner on your inky fingers.



Review of Aldus Gallery Effects, Volume I



by Beth and David Oliver

What is *Gallery Effects*?

Aldus *Gallery Effects (GE)*, Volume I, is a graphics software package that lets the user apply sophisticated, artistic effects to bit mapped graphics created by him or from a scanned image. While *GE* is said to work on most scanned and bit mapped images, Aldus claims that the best results will be achieved on scanned photos.

Volume I contains 16 master effects: Chalk & Charcoal, Charcoal, Chrome, Craquelure, Dark Strokes, Dry Brush, Emboss, Film Grain, Fresco, Graphic Pen, Mosaic, Poster

Edges, Ripple, Smudge Stick, Spatter and Watercolor. These filters can be accessed within *SuperPaint 3.0*, *Adobe Photoshop*, *Digital Darkroom*, *SuperCard*, and *HyperCard 2.0* through XCMD's, as well as any other application that supports these applications. If you do not have access to these programs you can still use *Gallery Effects* by using the Desk Accessory or as a stand-alone application. The DA and the application let you open standard Macintosh graphics such as TIFF and PICT. Included in this program is the ability to apply *Gallery Ef-*

fects to all or part of PICS Animation files.

Installation

Installation is straight-forward. *Gallery Effects* is installed using an installer program. The installer brings up four windows, one of which lists the files as they load. This is a nice touch, especially for new Mac users. You can load the *Gallery Effects* DA, application, "plug-in" filters that work in programs such as *Photoshop*, *Digital Darkroom* and *SuperPaint 3.0* or the *Gallery Effects* Animator. We selected the application for installation on our machine because we don't have any of the compatible software packages for the "plug-ins" (although the application and DA use the same filters as the *SuperPaint* 'plug-ins').

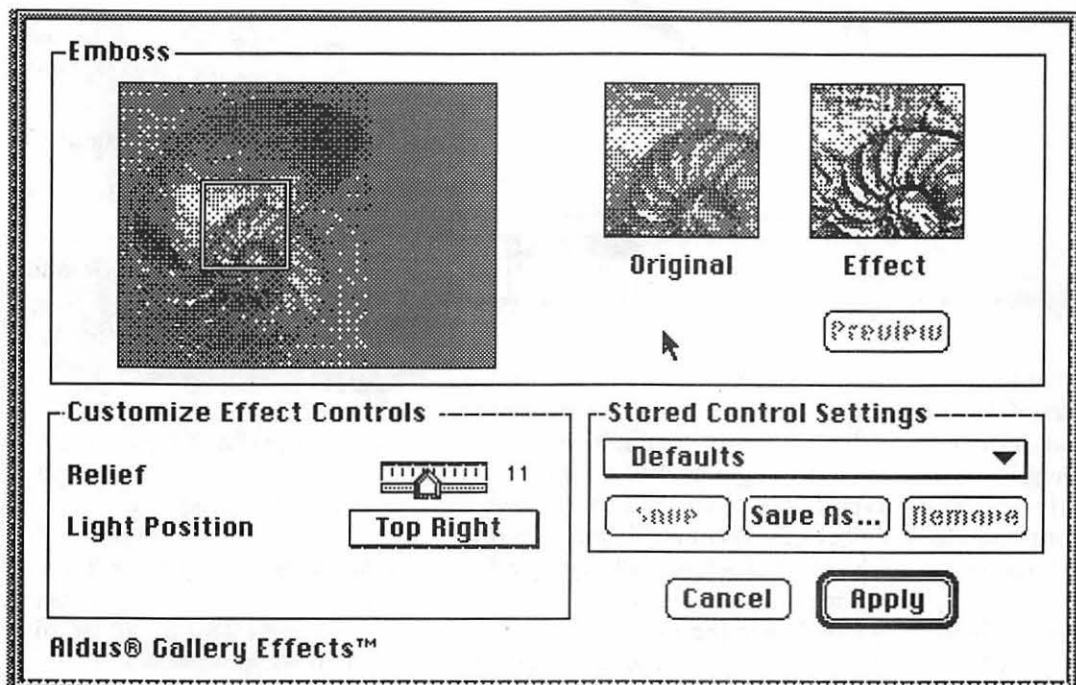
As far as manuals go, this one is a breeze to follow. The half-inch-thick manual contains approximately 106 pages of actual instruction and an abundance of example images. The manual is easy to read

and its examples are easy to follow. Because *Gallery Effects* is such an easy to use program, experienced users will probably use the manual only as a reference.

Effective Changes

Now for the fun part, using *GE* on images. Because we do not own a scanner, we relied on the image supplied with *GE* (see Figure 1).

We were rather fascinated by the number and quality of effects that we were able to produce with *Gallery Effects*.





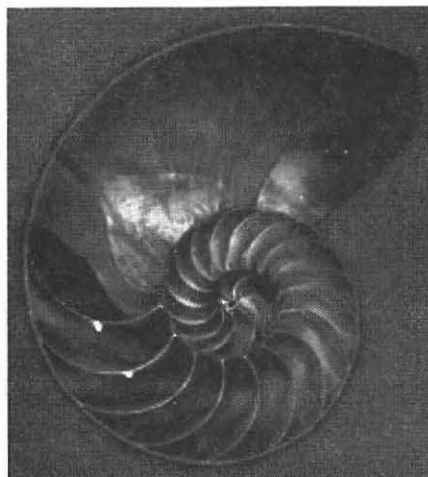
Its window and dialog box layouts are so basic that one can effectively use the program right out of the box yet powerful enough to produce some appealing effects. *Gallery Effects* enables the non-artist to create images that simulate traditional artistic mediums while enabling the traditional artist to broaden his artistic pallet.

There are both positive and negative features in *Gallery Effects*. One useful feature was the ability to preview an effect on a portion of the original image before applying it to the entire image. The combination of this preview feature and access to the customization effect controls makes image manipulations quick and easy (see Figure 2). An inconvenient feature of this software is the time it takes to apply the effects to an image. Our Mac IIcx did a decent job of processing most image changes on our 72 dpi image. Image processing ranged from 12 seconds to one minute and 12 seconds. Processing on 300 and especially 600 dpi images will take all the CPU power you can afford. If you need to meet deadlines or are not blessed with a lot of patience and you plan on processing many images, you'll be best served with a Quadra class machine. A more economical solution to speed up processing is to rescan your image at a lower resolution, apply effects until you find a pleasing combination and then apply those settings to your high resolution image.

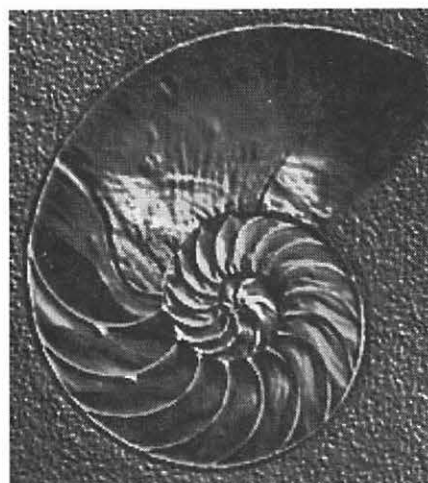
Review of Effects

Chalk and Charcoal—draws the image onto a solid, mid-gray background with chalky texture strokes. The image will be monochromatic whether the original was color or black and white.

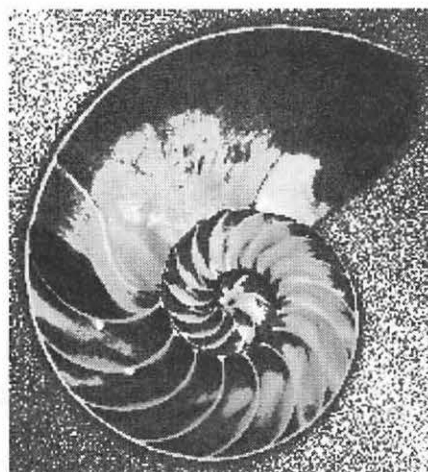
Charcoal—draws the image as though it were drawn on a textured sheet of paper. The



Original nautilus shell.



Emboss effect.



Film effect.

image is monochromatic whether the original was full color or black and white.

Chrome—turns the image into what appears to be something from Terminator II. The image color is replaced by monochromatic shimmering hills and recessed valleys creating a somewhat three dimensional effect. In some respects the image looks like a sonogram.

Craquelure—creates the illusion that the image was painted on a plaster-like surface. This was our least favorite effect. It created a rather kitschy effect when applied to the overall image. The texture created reminded us of vinyl.

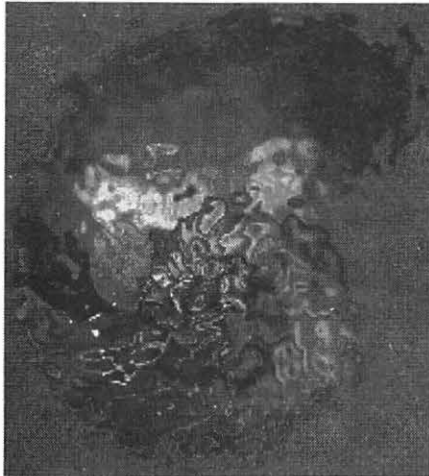
Dark Strokes—paints your image using black and white strokes. The dark values intensify due to the short, tight strokes. The lighter values become whiter and are created by long strokes that can be seen in non solid-white areas.

Dry Brush—simplifies the image by use of a painting technique in which the brush consists of minimal wetness. We found that it looked more like color charcoal.

Emboss—gives the image a raised effect. This effect is subtle and works very nicely. For striking results, we recommended using this filter with another filter (see Figure 3).

Film Grain—evenly distributes the darks and mid-tones with heavier saturation in the lighter areas. This filter is also used in photography. It looks very nice when used in photography and it works well in this program too (see Figure 4).

Fresco—paints the image in short, coarse, round stokes in a



Ripple effect.



Watercolor effect.

haphazard manner. It creates an image with an impressionistic look to it.

Graphic Pen—is another monochromatic effect and was one of our favorites. This filter does not hold tight detail, instead it creates a texture of strong ink strokes that are drawn in a specific direction. It creates artwork in itself.

Mosaic—is made up of irregular shaped tiles and grouting that is layered over the image. This effect is similar to Craquelure.

Poster Edges—adds dark edges around the image edges.

Ripple—makes your image look as though it is under water and the water has a slight ripple movement. This created a very nice effect.

Smudge Stick—blurs the image slightly by smearing the dark areas into the light and the light into the dark.

Spatter—changes the image into little dots like pointillist art. An example of this type of art is the art work by Saurat.

Watercolor—paints the image in a fairly loose manner. It works very nicely in both color and black and white. This is a beautiful effect (see Figure 5).

These filters create interesting and exciting images. By combining two or more filters, one can create even more impressive images. The number of different creations is only limited by one's imagination and the number of images you can digitize.

Requirements

Gallery Effects was a lot of fun to review. We anticipate using it quite a bit for creating newsletters and cards. While we remain impressed, we recommend that you take a few

things into consideration before you consider purchasing a copy for yourself. First, you must have plenty of patience. Anticipate long waits even on early 68030 machines (such as an SE/30 or a Mac IIcx). Even if your short on patience, the quality of the created images might just be worth the wait. And remember, you can create some interesting effects without having ever taken art classes! You'll need to weigh the more important factor when making your decision. Good luck!

Title: Gallery Effects

Publisher: Aldus

Hardware Requirements: Mac II family or SE/30 with color card. Hard drive, 32-bit QuickDraw 1.2 or later or System 7 with virtual memory

System Requirements: Finder 6.1 or later, System software 6.05 or later,

SRP: \$199.00

Discount Price: \$129.00



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Morph Review

by © 1992 Madge Bruce Van Ness

M*orph* by Gryphon Software is a great program: it's fun, it's fairly easy to learn, it does really remarkable things, and it brings a bit of magic to your own desktop. *QuickTime*™ has made possible video on the desktop; this program uses *QuickTime* to bring you magic on the desktop.

OK, so I'm exaggerating a little. But only a little. But the magic comes at a price in time and effort and equipment; you have to have at least five megabytes of "available" RAM, ten megabytes of hard disk space, and a Mac Classic II or above, preferably with a color monitor. They recommend 8 MB of RAM and 40 MB of hard disk space, if possible. That is not unreasonable. A five second *QuickTime*™ metamorphosis at eight frames per second takes 40 frames. I used two pictures 150 x 150 pixels in "thousands of colors" (22,500 pixels/frame x 40 frames x 3 bytes/pixel = nearly 3 MB, just in the finished frames, plus processing room), and pictures can be much larger (2l x 2w = 4 lw, remember?).

The package turns out to be very attractive, with examples on the cover. Open it up and you get a finished high-quality user's manual with reasonably complete instructions, registration card, a more or less standard licensing agreement and two diskettes—one, an application disk, the other, a sample disk. It includes *QuickTime*™, ReadMe, and a nice collection of samples to practice with,

as well as a sample movie.

Warning! For fastest results, read the manual. I fumbled around for nearly half an hour without figuring out more than a couple of items, and it took fifteen minutes to get started once I opened the manual. It's not that it's hard to learn; it's just that unless you have a background in similar type programs (nobody I know!), you don't know what you're trying to do. For the most part, it's fairly clear and complete. (I'll tell you about my frustrating attempt at a fresh morph later.)

When you open the program, it brings up the storyboard, a double window. You double click in the left window, and it brings up the dialog box to select the graphic you wish to start with. Once the selection is made, you double click in the other window, and the dialog box reappears with only the graphics that match the one you have already chosen. Choose the one you want. At the top and bottom of the storyboard window are timing boards. Click on the bottom one to set your duration, from hundredths of a second up. This must be done, or nothing will happen. (What happens in zero duration? Nothing!)

At that point, you might want to Save. You can do a simple cross-dissolve at that point, but if you want a true metamorphosis, go to the Windows menu, and choose both Start Image and End Image. That puts them both on the desktop. On the left side of the screen is a Tools palette.

Choose the little square, and start clicking the targeting circle over equivalent key points, then use the line tool to link the points. This allows the movie to go smoothly, without "tearing" the surface or having ghostly shadows floating around in the background. There are "undo" tools as well, and a magnifying glass for tightly placed points. (But you have to go to the Views menu to return to normal size.) This is what takes the longest amount of time, as the more points you place, the better the morph works.

Next, go to the File menu and choose Compressions. This allows you to choose the save format and the quality and type of movie you'll be doing, as well as the amount and quality of color. The smaller the image, the better the speed and quality you can produce within your memory limitations. Then morph and Save Movie. Voila! Green Parrot turns to Red Parrot!

Morph is a complete program by itself, but if you want to use your own material, you have to digitize it. Thus a color scanner and *Photoshop* or equivalent are essential to make a composite of your two children. *Morph* requires that the graphics be exactly the same size. Check to be sure that they are. "Image Size" in *Photoshop* will do the trick nicely. (Be sure to choose "pixel" as the unit of measurement.) Also, *Morph* will only work on 72 dpi PICT material, so don't bother scanning it in at a higher resolution, and save it as a PICT. You can output to your VCR, but that requires more special hardware.

I mentioned "Green Parrot to Red Parrot" above. Apparently I managed to save them in non-equivalent form. (I thought I had them equivalent; I used the same crop window in *Photoshop* to take out the two parrot heads from a Kodak Photocolor CD Sampler, saved 'em in PICT and both showed up on the first dialog box, but



whichever one was chosen, the other one did not show up on the second dialog box.) After rooting around in the Manual to verify that I had done everything as instructed, I found the address/phone number for Gryphon Software (back of the first page of the Manual) and called information because they had changed phone numbers in October or so. I got a voice mail system that offered technical support as a "push number" option. So I did and got a pleasant person who went through the process with me, helped me check the pictures in *Photoshop*, still had no success, checked with his *Photoshop* expert, and finally we resaved the graphics under a different name. ("Parrots Greenhead" to "Green Parrot," etc.). Lo and behold, they now behaved properly. He asked that I provide him with the files to see if this was a bug in the software. (My theory is that the two names were exactly the same in the first eight letters, being read as the same in an IBM naming system someone had not caught in the Mac transition, but that theory is awaiting proof.) The cost of technical support proved to be only a phone call.

As a toy for the average computerist, even though the package itself is reasonably priced, the hardware and software necessary to make effective use of it puts it out of easy reaching distance. A non-intuitive interface is the major drawback, although for an unfamiliar process, I'm not sure there is an easy way to make an intuitive interface for the average user.

For someone who already has the scanner (or easy access to one) and *Photoshop*, I recommend it highly. A lot of your time may actually be spent in pre-working your images in *Photoshop* to improve your results in *Morph* (and to give Gryphon software credit, they recommend neutralizing the background and editing out distracting details.). For people

who are using *Premiere* or another *QuickTime*™ movie maker, *Morph* can add some interesting things, like mild, meek Joe Schmo metamorphosing into SuperSalesman!, or last year's model evolving into this year's new improved! Or the environmentalist with pictures of a deteriorating habitat can dramatize its decay. For the person who is seriously working with desktop video, I would have to call *Morph* essential, especially if you use special effects.

Would I buy it? Now that I've played

with it, yes! But I still don't know what to use it for in my computing life.

Title: Morph

Publisher: Gryphon Software

SRP: \$149.00

Discount Price: \$95.00

Updates/Press Notes

Apple Computer, Inc., is offering the System 7.1 Upgrade Kit to users group members at a 20% (\$7.00) discount—plus \$3.00 shipping/handling and an additional sum for state sales tax—off of the original \$35.00 price. If you are using an older Mac and must have the upgrade on 800K disks, please be advised that there will be a delay in the arrival of the upgrade because Apple has been swamped with orders from users of older Macs. At this printing, Apple has not decided when to discontinue the offer. For further information or to place an order, please call Apple Computer at 1-800-769-2775.

Trade Associates, Inc., established in 1954 by Frank Masters, specializes in marketing and managing trade shows for associations and corporations. TAI conducts over twenty shows annually in the US and Canada for professionals in: Engineering, Telecommunications, Building Service Contracting, Environmental Issues, Cable Television, Frozen Foods, Broadcasting, and others. Shows range from 25 booths to 1200 booths with over 15,000 attendees, TAI handles: marketing, on-site management, and financial reporting of Expositions. For more information, call Russell F. McKinnon at 301-468-3210.

Ventana Press, publishers of many fine Macintosh and other computer-related books, is offering MacArcade to user group members at the special price of \$20.00. Until March 1, 1993, user group members can purchase single copies of MacArcade at 30% off of the retail price. To take advantage of this special offer, please call the WAP office (301) 654-8060 and ask how you can receive a copy of the coupon from Ventana Press.



Little Books, Quick Reads

by © 1993 Lawrence I. Charters

Working With Displays: VDT's and Radiation Safety

Working With Displays: VDT's and Vision
Working With Displays: A User's Guide to Better Keyboarding

Working With Displays: A Practical Guide for VDT Users, \$1.00 each

For some time now (another way of saying "I don't know when they started this") Apple has been including a booklet in all new Macintosh computers with advice on how to set up and use a computer. What makes the booklet interesting is that this publication is concerned with the user's comfort and health, not that of the computer. Most of the information comes from the Center for Office Technology.

Founded in 1985, the Center's mission is to explore and promote the proper use of "office technology," but this often means "personal computers." It publishes a bimonthly newsletter, videotape training packages on proper VDT (video data terminal, or personal computer) use, and a constantly growing series of studies on everything from the effects of ultra low frequency radiation to avoiding carpal tunnel syndrome.

At 16 pages each, with lots of illustrations, none of the booklets pretends to be a definitive study, but they cover most of the high points in an easily digestible form. They point out, for example, that most vision problems and physical pains routinely blamed on "the computer" are due to three main causes: bad furniture (or improper placement and use of the furniture), bad or inappropriate lighting, and lack of exercise.

The center is sponsored by Apple

and IBM (and a whole bunch of insurance and computer companies), so conspiracy theorists shouldn't have any trouble dismissing these as products of a corporate plot. For the rest of us, the booklets have definite value: if you are a manager, they will help you design and prepare a safe and healthy working environment for your employees. If you are an employee, they might help convince the boss you need a different kind of chair, desk, or lighting. If you are a spouse, they can help you force the home computer off the kitchen table and on to some more appropriate surface.

Center for Office Technology
1800 North Kent Street, Suite 1160
Rosslyn, VA 22209
(703) 276-1174

o o o

Title *QuarkXPress 3.1 Quick Reference*

Author: Assadi, Barbara

Publisher: Que Corporation, 1992,

Length: 150 pp

SRP: \$9.95

ISBN: 0-88022-769-9

Once upon a time, QuarkXPress had a reputation as being exceptionally powerful, exceptionally expensive, and exceptionally difficult to use. While it is still the most powerful Mac page layout program, the price is about the same as comparable packages, and the latest version, XPress

3.1, is quite easy to use.

But not necessarily easy to remember. There must be at least a dozen different ways to do anything, and the program is so feature rich that even experienced users routinely discover by accident features they should have been using all along.

This slim book helps overcome the feature profusion by presenting all major commands and options in a nicely organized, quick-reading outline form, with step by step instructions on how to perform almost any imaginable action. A good table of contents and decent index help guide you to just the right section.

Until Robin Williams decides to make a QuarkXPress version of her superb *PageMaker 4: An Easy Desk Reference*, you may find this book the best ready-reference on XPress. And it's cheap, too.

o o o

Title: *Que's Computer User's Dictionary.*

Author: Pfaffenberger, Bryan

Publisher: Que Corporation, 1991

Length: 1549 pp

SRP: \$10.95

ISBN: 0-88022-697-8

Apple users are notorious for knowing nothing of the technical details of their computer. Many seem to think those who know the difference between memory and storage, for example, have fallen victim to "the dark side of the force," and will probably do something stupid like buy an MS-DOS clone.

But a computer is, more than anything else, a communications tool, and you can't communicate without sharing a common language. This slim but comprehensive dictionary covers the entire vocabulary of computing, from mainframes to micros. You won't find mention of *QuickTime* or pen-based computing (these terms



are quite new), but you will find accurate, succinct definitions of the usual acronyms (RAM, ROM, SCSI) as well as such terms as histogram, gateway, YMCK and x-axis. While there is an obvious profusion of MS-DOS terms (and all the illustrations are from MS-DOS or Windows screens), there are literally hundreds of Apple-specific terms as well.

This is not, obviously, a book you want to study in detail, but it makes a great reference. If you decide not to get this particular computer dictionary, you should, at the least, get *somebody's* dictionary. It is hard to explain why a Mac is better than someone's clone machine with SVGA graphics—when you don't know what "SVGA" means.

o o o

Title: An Introduction to Digital Color Prepress. [Volume I]

Title: Digital Color Prepress, Vol. Two

Publisher: Agfa Corp., Prepress Educational Resources

Address: P.O. Box 7917
Mt. Prospect, IL 60056-7917

Telephone: 800-395-7007

SRP: \$10 each

Any Macintosh with at least a megabyte of memory and a hard drive can be, with the addition of just a little software, a professional typesetter. Anything you type can appear with unerring precision on a printed page, and the page can be printed on anything from a bit-mapped ImageWriter dot matrix printer to a multi-million dollar press, just like those used by Time Magazine, National Geographic and other glossy magazines. The Macintosh makes this so easy that it requires only a few minutes to turn anyone into an expert on the subject. (Good taste might take a bit longer.)

But what about pictures? Pictures are another story entirely. What looks good on an ImageWriter won't look good on a LaserWriter; and what looks good on a LaserWriter won't look good on a Linotype. The intricacies of getting pictures to look good are compounded greatly if you fantasize trying to produce color pictures. Even a simple discussion of color separation soon degenerates into a bewildering cloud of concepts and terms that seem beyond the interests and capabilities of all but the most perverse. Unless you, too, have read the Agfa guides to digital color prepress.

These two slim, richly illustrated booklets cover the major concepts involved in just enough depth to either whet your appetite and desire to actually try this or convince you to flee for your life. Everything from anti-aliasing to undercover removal is explained, often with multiple copies of the same image, each prepared slightly differently, to illustrate some concept or technique. Both volumes also have excellent glossaries, with definitions, to help you understand the vocabulary.

If \$10 for a 32 page booklet seems steep, there are alternatives: sign up for a class in color prepress, or better yet, just create a color separation and have it printed. Both these options are far more expensive, and but at least you'll then appreciate that these two booklets really are bargains.

o o o

Title: *Art of Darkness: The After Dark Companion*

Author: Fenton, Erfert

Publisher: Peachpit Press
Berkeley, CA: 1992

Length: 115 pp., Includes disk

SRP: \$19.95

ISBN: 1-56609-012-1

In the introduction to this book, Fenton answers the inevitable question of why does the world need a book on a screen saver: "Well, why not? After all, *After Dark* probably shows up on your screen more often than any program you own." I'm willing to go further: I suspect more computer power has been devoted to generating *After Dark* displays on Mac computers than has been spent on the entire U.S. space program. I know, from personal observation, that users spend more time customizing and playing with the *After Dark* modules than they spend learning how to use *Excel* and *Word*. In fact, if *After Dark* could generate business letters or spreadsheets, U.S. productivity would probably double within a year.

Should you get this book? Answer this question: Has anyone ever called you on the phone and asked "What is making that sound?" when Flying Toasters were flying by? Have you ever called someone and heard the gurgle of bubbles from Fish! playing on their computer? Are you using more hard drive space for *After Dark*, *More After Dark*, and ShareWare *After Dark* modules than you are for your professional work?

If the answer is "Yes!" then you need this book. Not only will it delight you with some outrageous history, real and imagined, and some great tips on customizing *After Dark*, but it also comes with nine new *After Dark* modules. These range from the brilliant, and seriously deranged, Blackboard, to the obnoxious Boggilins, to the exquisite Strange Attractors. Those with an interest in history can also view ProtoToasters, the very first *After Dark* module, never before released in public.

Sad to say, there is some genuinely useful information in *Art of Darkness*. But don't let that spoil things; read it for fun. Most of the other computer books don't even mention the word "fun."



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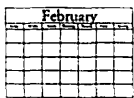
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February 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 PI SIG	2 TeleComm SIG	3 Mac Program- mers SIG DTP SIG	4 Columbia Slice Game SIG	5	6 III SIG
7	8 Intro to the Mac, Pt 1	9 Art SIG Intro to Word 5.X	10 DB SIG WAP BoD Mtg	11 Stock SIG	12	13 Annapolice Slice Frederick Slice Intro to the TCS
14	15 Intro to the Mac, Pt 2	16 Advanced MS Word 5.X Writers' Deadline 	17 Excel SIG UltraMacros SIG	18 Intro to MS Excel, 3.X, Pt 1	19	20
21	22 IIGS SIG Intro to the Mac, Pt 3	23 Using FileMaker Pro, Pt 1	24  Editors' Deadline	25 Ed SIG	26	27 General Meeting AW SIG
28						

Meeting Notices

Unless otherwise noted, call the SIG chairs or Slice officers for meeting information. A list of the SIG and Slice chairs is on page 4 of every Journal.

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

Apple IIGS SIG—Monday after the WAP General Meeting; 7:00 PM; McLean Govt. Center, 1437 Balls Hill Rd., McLean, VA (even months) and NIH (Bldg 31, C Wing, 6th Floor, Conference Rm 9), Bethesda, MD (odd months).

AppleWorks SIG—8:15 AM on WAP General Meeting Saturday, at the meeting site.

Art SIG—2nd Tuesday of every month. Call SIG Chair for details.

Columbia Slice—1st Thursday; 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 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

March 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	PI SIG 1	2 TeleComm SIG	3 Mac Program- mers SIG DTP SIG	4 Columbia Slice Game SIG	5	6
7	8	9 Art SIG	10 DB SIG WAP BoD Mtg	11 Stock SIG	12	13 III SIG Annapolice Slice Frederick Slice
14	15 Writers' Deadline 	16	17 Excel SIG HyperTalk SIG	18	19	20
21	22	23 Editors' Deadline 	24	25 Ed SIG	26	27 General Meeting AW SIG
28	29 IIGS SIG	30	31			

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.

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— 1st Tuesday; 7:30 PM; WAP office.

Three SIG—Meets quarterly, 2nd Saturday. Next meeting is Saturday, February 6 at 10 AM, WAP office.

UltraMacros SIG—(Newly formed SIG) meets every 3rd Wednesday of even months at the South Fairlington Community

Center, Rm. #1; 33rd and Stafford Streets, Arlington, VA from 7:30-9:45.

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, or Beth Medlin at the WAP office (301) 654-8060.



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by Joseph F. Morey, Jr.

Fractal Design's *Painter* and *Sketcher* are designed to give a Macintosh artist simulations of natural media; *Painter* in full color and *Sketcher* in greyscale. Anything said below applies to both programs unless specified. The simulation of natural media involves both the surface textures and the behavior of tools. When the user makes a mark, the interaction between the tool and surface are computed using fractals, resulting in a very natural appearance.

Each program has a library of textures with external libraries which can be accessed as a whole, or textures may be moved between libraries. With *Sketcher* comes two libraries, *Painter* has four, and more may be purchased. Selecting a texture affects the strokes subsequently made and may be changed at any time so that an image may have many textures; or a texture may be applied to a selection or an entire image.

The Brushes palette in *Painter* (Art Supplies in *Sketcher*) provides basic tools which simulate real tools in the way they interact with the paper; the shape, density, and character of the strokes (e.g., edges of strokes may be Flat (aliased), Soft (anti-aliased) or Hard (semi-anti-aliased)). In *Painter*, almost every

characteristic of a pre-defined tool can be adjusted, each by means of its own pop-up menu within the tool. In *Sketcher* only penetration (the degree to which a tool penetrates the grain of a paper) and concentration (the density of the strokes) can be adjusted, but this is more than adequate for its intended purpose. The following list categorizes some of the more detailed examples: 1) pencils create thin, hard-edged lines that interact with paper grain depending upon the pressure and which become darker when overlaid; 2) while pens make strokes that are at full density and cover the grain, the only pressure effect being thin and thick line which is the same as drawing with a flexible tip art pen; 3) chinks behave very much like art pastels, which depend greatly on the paper grain and the pressure used to achieve the desired effects.

Wet media are less successfully simulated because, in reality, paints also react with gravity (running, dripping, splattering) to achieve their characteristic appearance. Watercolor brushes and felt markers have the darker edge seen in real life, but otherwise the programs simulate dry brush techniques. And, of course, all the marks are really pixels, so there is no incompatibility between me-

dia; oil and water, chalk and pencil can be mixed in the same work where they could not in reality. However, this creates an advantage because eventually the computer must allow for new possibilities, and it becomes a unique medium in its own right, or there would be no reason to go from traditional media to computers; what these programs *do* allow in these close simulations is for artists to transfer their hard learned drawing and painting skills.

A pressure-sensitive tablet is needed to get the full benefit from the tools, but there are some mouse variants in each tool which use the drag speed of a mouse to achieve some of the same effects one would achieve by applying varying amounts of pressure.

These are not Image Processing programs; therefore, the editing features do not match programs such as *Photoshop*. For example, there are no paste controls. But some unique abilities are offered by continuing with the natural media metaphor. Editing tools include not only erasers, which remove marks back to the background color, but bleaches that go to white (good for adding highlights that are lighter than the original paper) as well. Because they are also pressure sensitive, marks may be removed



progressively, as with real erasers. Smudging and blurring strokes is done by adding plain water with a brush, with variants that preserve or cover the texture.

Selections and masks are implemented as friskets, the self-adhesive film used by airbrush artists. In addition to having all the behaviors of selections in other programs, friskets may be moved or rotated (as if it really were a transparent film), scaled proportionally, and saved. Both programs include a library of geometric friskets. Text that can be converted to or that is a graphic element is entirely absent from *Painter*; it is made available in *Sketcher* only by use of a text frisket tool.

Brightness/Contrast and other "digital darkroom" adjustments can be made, and all of the *Photoshop* plug in filters work in these programs as do those of *Aldus Gallery Effects*. There are the basic transformation effects such as rotation and flipping, but a troublesome omission from *Painter* is that there is no way to resize or resample an image; however, this ability was added to *Sketcher*, along with an information pop-up in the document window. Cropping is achieved in both programs only indirectly by copying a rectangular selection and then pasting it into a new picture.

Some functionality is provided to the non-artist. Surface textures may be applied to existing images, and the appearance of natural media can be added by cloning, or opening a duplicate in another window. While working in the Clone window with a cloner tool, instead of using a single shape or color, the tool refers to the original image (like a linked eyedropper) while strokes are made. The link may be broken by selecting a non-cloning tool, then reestablished by selecting a cloner again. There are pre-defined cloners, or any tool may become a cloner by marking a checkbox. The Clone window opens with a normal copy of the original,

but it may be faded or erased so that the new image is more visible. A special variation of cloning is Tracing Paper, in which a 50% greyed image is visible. Tracing Paper can be turned off and on to reveal the traced lines, the same effect as flipping up a piece of carbon paper to see the traced image beneath it. There is also Auto-Cloning; strokes are made by the computer in a progressive manner, and turned off by a mouse-click. This is a more controlled version of the transformations made possible with filters.

Technical Notes: The native file format is a proprietary RIFF which has the advantage of including a thumbnail which appears not only in the open file dialog box, but an entire folder of images may be browsed. Unfortunately, this format is not compatible with many other programs, so files may also be saved as *Photoshop*, TIFF, EPS and PICT, plus DOS formats PCX, BMP and Targa. All of these formats can also be opened by *Sketcher* with the exception of EPS. Import and Export into other formats (JPEG, etc.) as well as into the scanning modules which are supported through the *PhotoShop* or *Aldus Gallery Effects* plug-ins. Although solely a 24-bit RGB program, *Painter* does not include color separation, *Photoshop* or *ColorStudio* (the latter is now a Fractal Design product) are needed for high-end output. Rather than relying upon System 7's virtual memory, these programs maintain a scratch file on any hard disk volume assigned under user preferences.

Although the programs accomplish their main objectives of simulating natural media almost perfectly, there are some problems. In most Macintosh graphics programs, there is a vertical tool palette on the left of the screen through which most functions can be accessed by selecting or double clicking icons. In *Painter* and *Sketcher* there is a small horizontal toolbox that provides access to only some of

the auxiliary palettes, most of which do not contain icons, but large pictures of the items being manipulated or selected. This may be initially helpful to a fine artist with no previous computer experience but confusing to the experienced Mac user, and, eventually, a hindrance to all: these palettes take up too much of the screen to remain open on a 14" monitor which doesn't allow for a reasonably sized document window in which to work (see "*Painter Screen*").

Sketcher, the newer program, adds some features that should be added to future versions of *Painter*. In *Sketcher* image processing functions are grouped under an Effects menu, rather than in a crowded Edit menu, and they are immediately available; in *Painter*, edit options are greyed out unless a selection is made, adding a step (Select All) if one wishes to apply an effect to an entire image. The niftiest feature of *Sketcher's* Art Supply Palette is that the contents may be removed on their own tear-off palettes, even several versions of the same tool with different adjustments made, and they are not put away when the application is closed so that work can be resumed at exactly the same place. A handy feature.

The artistic metaphor is carried through in the packaging (*Painter's* famous can, *Sketcher's* cigar-type pencil box) and in the manuals, which are like sketch pads. Unfortunately, they are also sketchy in their documentation of the programs, outlining everything but giving no tutorials and few examples.

Speed is also an issue. My Mac IIcx is barely adequate for using *Sketcher* for real sketching, I often outrun the cursor. In *Painter*, the path of some brushes is shown as a dotted line, the actual stroke being drawn only after the mouse button is released or stylus lifted. This is not unexpected given the fractal calculations that must be done to repre-



sent the interactions between tool, surface and pressure. As with most graphics programs, anyone with the minimal required system should not be surprised by slow performance. You should have at least a IIci with more than 8 MB of RAM. When working on larger files, virtual memory also affects speed. But considering the effects made possible by these programs and the fact that they allow me to use many of the hard-learned skills that I had acquired from years of drawing, just made me wish (again) for a faster CPU, accelerated video, more RAM....

Summary

Paint programs that actually deserve the name, *Painter* and *Sketcher* simulate natural media amazingly well, but the user interface needs

work and documentation is minimal.

Joe Morey has been doing photography and drawing in graphite, char-

coal & pastels for over twenty years, and using Photoshop and other graphics programs on his Mac for two years.

Title: *Painter, v1.2*

System Requirements: Mac II or LC, 8-Bit Display, 32-bit QuickDraw, Get Info suggested RAM size 5120K, Hard Disk with 2.6 MB available for the application and auxiliary files, plus room for virtual memory temp file about 2-3x the size of the file being created.

List Price: \$349

Discount Price: \$235

Title: *Sketcher, v1.0*

System Requirements: Classic II, SE/

30, Mac II or LC, 32-bit Quickdraw, Get Info suggested RAM size 2160K, hard disk with 2.3 MB available for the application and auxiliary files, plus room for virtual memory temp file

List Price: \$149

Discount Price: \$95; owners of LetraSet *ImageStudio* may "upgrade" to *Sketcher* for \$49

Publisher: Fractal Design Corp.
335 Spreckels Drive, Suite F
Aptos, CA 95003
408-688-8800



Curmudgeons & Dragons

by © 1993 Lawrence I. Charters

Kawasaki, who once described himself as a “legend in his own mind,” has written a new book.* In it, he continues to show a fondness for lists, for “exercises,” for puns and inside jokes, and an aversion to traditional narrative. Most of the book, in fact, is made up of definitions, in the manner of Ambrose Bierce’s *The Devil’s Dictionary*, that are both less accurate and more revealing than those in common use. Most sections are also “padded” with reprints of his columns from *MacUser* (and occasionally other sources). So, inspired by the book, we’ll give it a Kawasaki-style review.

Choose one answer to each question:

1. Reprinting magazine columns and excerpts from previous books in *The Computer Curmudgeon* is:
 - A blatant example of padding. Either that, or he thinks the stuff is so good it bears repetition.
 - An inspired method of preserving ephemeral wisdom in a more permanent form.
2. His relentless use of the first person shows:
 - He really does believe he is a legend in his own mind.
 - A sensitivity to readers grown weary of the Imperial Third Person.
3. His fondness for tongue-in-cheek “exercises” reveals:
 - The lingering effects of overdosing on management and sensitivity

workshops.

- The lingering effects of overdosing on Apple Evangelism.

4. His penchant for lists is a direct result of:

- An inability to sustain a thought for more than a few paragraphs. Narrative prose requires discipline, a word foreign to his vocabulary.
- His insight into the reading public of the 1990’s which, despite complaints to the contrary, really does prefer information dispensed in 30-second sound bites.

5. His definitions are:

- Often cute, but shallow. Some examples:

SINC. Single Income, No Clones.

Perot. To unexpectedly quit an application.

bozo. Someone who sees Windows and thinks it’s a Macintosh.

StuffIt. What Steve Jobs would like to tell John Sculley.

warranty. The time period during which your Macintosh does not break.

MacWorld Expo. 40,000 people trying to get an invitation to the Ingram/Micro D party.

- Inspired. Some examples:

After Dark. Proof that Macintosh owners have too much money.

footprint. The amount of space an IBM PC wastes on your desk.

server. Software that enables other

people to crash your computer.

printing. What pen-based computer companies think everyone wants to do on a computer.

superstore. A store that doesn’t provide service and support but doesn’t charge for them.

6. Would this book make a good gift for someone, including yourself?

- If you like MS-DOS machines and dislike sex, avoid the book.
- If you like your Mac and are somewhat unsure of Apple, get the book.
- If you know nothing of sex or Macs, buy Madonna’s book.

If you chose the second answer more than three times, you should get a copy for yourself, or for someone who will let you borrow it. The definitions, in particular, are quoteworthy, which is an asset in an age that values the outwardly erudite but not enough to go to the trouble and expense of actually being educated. Consider:

Apple. Proof that as long as your customers are still complaining, they’re still willing to do business with you.

Now, ask yourself: Isn’t that more readable, and memorable, than the last computer manual you looked at?

** Actually, Kawasaki may have said this more than once, but I personally heard it only once. And if Kawasaki could footnote his title on the title page, I can have a footnote in my review.*

Author: Kawasaki, Guy

Title: *The Computer Curmudgeon*

Publisher: Carmel, IN: Hayden, 1992

Length: Approx. 250 pp.

SRP: \$16.95

ISBN: 1-56830-013-1



New Files on the TCS

by Lawrence I. Charters

The following are some of the files uploaded to the Macintosh File Transfer areas of the TeleCom-munications System (TCS) from mid-November to mid-December. 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."

File Area 13: Macintosh Fonts

LITTLEGIDDING: a PostScript Type 1 dingbat font of religious symbols.

FINDERFONT.2.0: replacement font for the Finder in System 7. It looks much like Geneva, but is narrower, so you can get more information on the screen.

File Area 14: Macintosh Games

LEMMINGS.CODES: level codes for the game 'Lemmings.'

CLASSIC.TENNIS: great tennis game. Good sounds. Works in color and B&W.

ENGEL.S.ENIGMA: kind of a Rubik's Cube game, only done with cylinders.

Really irritating.

STRATEGO.0.95: classic board game in which you arrange your pieces so they will capture your opponent's flag, while the opponent is doing the same.

RISK.SCENARIOS: sample scenarios for Risk. Redo the Cold War, World War I or II, etc.

ZORK.SIT: Zork is the mother of all text-based adventure games. Based on the UNIX original (which inspired a commercial variation with the same name).

MORSE: Morse Code Builder 3.0 — a Morse Code tutorial program.

MAELSTROM01.CPT: game by Andrew Welch. Maelstrom is an arcade type game - and only runs on color capable Macs. A must have!

BOLO.SIT: nicely done color or B&W tank game. Networkable only. You can set your computer up as a file server and explore the landscape.

MINESWEEP.CPT: another version of the popular "find the hidden mines" game. This one has several nice features, such as hints, "uncover a safe square"

(a limited number of times), and a low (\$5) ShareWare fee.

GNUCHESS.CPT: chess game. The program has some interesting features, such as the optional display of what moves it's considering and what it thinks the "score" is. And by the way, none of that e2-e4 nonsense: you just grab your piece with the mouse, and move.

CRYPTSOLV.CPT: a tool, a game, a puzzle: for cryptogram fans! CryptoSolve lets you enter that cryptogram from the paper that's been driving you crazy and gives you as much help as you need to figure it out. It'll also take plaintext and create a cryptogram for you.

CARD.TABLE.SIT: yet another nice solitaire game, with three variations.

ICONQUEST.CPT: try to evolve the icon's by ramming them in to each other.

MAELFUNK.CPT: for the funk lovers in the crowd a variation on the Maelstrom theme. An apparent musician who frequents AOL has replaced the standard Maelstrom sounds with musical counterparts.

STAR.ROIDS.CPT: great Asteroids-type game, complete with two sizes of saucers. Also has "pods" which you can pick up for added abilities. Set your own keyboard controls. Highly recommended for black and white Mac's.

File Area 15: Macintosh Graphics

SOX.JPE: close-up of Sox, the President elect's cat. From the controversial photo taken by a group of photographers while stalking Clinton's house.

FUN.FAXES..2.SI: funny fax cover sheets, in MacPaint format. Not only are they funny, they're even tasteful.

MACVCR.SIT: tiny, tiny program for playing QuickTime movies.

FLIP.CPT: QT movie of two football players, both doing a backflip. Isynchronized the flips by recording two separate movies, and then doing a frame-by-frame step through, snapping the combined frames with Screensnap.

FLIP2.1: two college football players do simultaneous backflips. This is the "full sized" version of the earlier "FLIP.CPT." Requires Quicktime. Saved in 256 color (dithered) format, so should look good on 8-bit (or more) monitors.

LOGOSTOR.CPT: a standalone application that details the creation of the color WAP logo used in the Falcon startupscreen.

File Area 16: HyperCard

QTPLAY.STACK.SI: tiny HyperCard stack for playing one, or a number, of QuickTime movies. Well done!

RINALDI.SUMMER: excellent set of XCMDs and XFNCs for simplifying time consuming HyperCard tasks such as sorting, finding, aligning within a field (use Courier font to make it happen with this util), and a bunch more. This collection is updated by a vast margin over collection posted in last few months—every function is updated.

CALENDARMASER2: a HyperCard calendar maker.

SPOKELENGTH.CPT: this HyperCard stack computes bicycle spoke lengths. It has a data base of various rim and hub dimensions and an interface that makes it simple to use and its free.

HCQTIME.CPT: set of four HyperCard stacks for Quicktime development. These are beta versions of the stacks, but they give good documentation of the HyperTalk commands for scripting the QT XCMD's.

File Area 17: Technical Notes

WELL.PCD.11.23: an unedited discussion from the WELL (Whole Earth 'Electronic Link) of Sausalito, CA, concerning Photo CD. Postings are current up to 11/22/92.

PRIC1116.CPT: Apple hardware, software and services price lists as of November 16, 1992, in Microsoft Word format.

TIDBITS #153 to TidBits #156: for Nov. 23 to Dec. 14, 1992, the latest news, gossip and opinion from the very popular on-line weekly magazine.

MAC.FTP.SITES.T: a list of anonymous ftp sites with Mac files as of the end of 1991.

EFF.3.08: presentation by Bill Clinton to Electronic Frontier Foundation on building a national data network and other data processing, computer and telecommunications issues.

TNGDNKNGGM.SIT: combine three of life's greater pleasures: Friends, alcohol and Star Trek: The Next Generation. Cute drinking game guaranteed to kill off millions of brain cells.

DIGITAL.SIT: partly a promotion of Supermac's Digital Video 'system', but is really more a good primer on video technology, in general. It covers most aspects (and terminology) associated with recording, editing, and mixing video, and the equipment used to do it.

HAYES.SIT: Hayes Modem Technical Reference. *Superb* reference about modems and modem communications.

File Area 18: Macintosh Utilities

STUFFIT.DELUXE: this file converts Stuffit Deluxe 3.02 to 3.03.

SAVEABNDL1.3: System 7 only FreeWare program to fix an icon's bundle bit information so it will properly display the files icon and color.

THP.4.0.2.UPDAT: Think Pascal update 4.0.x to 4.0.2. Numerous bug fixes with debuggers, Quadra stuff, MacApp. Some fixes for standalone code resources.

CLARIS.A.SIT: Claris Techinfo Database 3.5, part A. This is a FileMaker Pro 2.0 (note: 2.0 only) database containing tips, tricks, warnings, insights, etc. to Claris CAD, MacPlot, MacProject, Smart Form and Claris Translators.

CLARIS.C.SIT: Claris Techinfo Database 3.5, part C. This is a FileMaker Pro 2.0 database containing tips, tricks, warnings, insights, etc. to MacDraw, MacPaint and MacWrite.

CLARIS.H.SIT: Claris Techinfo Database 3.5, Part H. This is a FileMaker Pro 2.0 database devoted



entirely to HyperCard tips, tricks, warnings, insights, and even scripts.

CLARIS.M.SIT: Claris Techinfo Database 3.5, part M. This is a FileMaker Pro 2.0 database containing tips, tricks, warnings, insights, etc. to ClarisWorks and FileMaker.

DICTIONHELP.SIT: dictionary helper. Text document that contains words and names not usually included with spell checking dictionaries.

ALLAS.REPAIR: small utility to "repair" the links between orphan aliases and their applications or documents.

ANY.CALLS.1: small utility to log time of all the calls your answering machine didn't register while you were out.

DESKWRITERGREY: patch to improve gray-scale printing on a DeskWriter.

DISKDUPL.V2.14: outstanding disk duplicating and copying utility. This can duplicate one or many copies of 400K, 800K, or 1.4M diskettes, from either original disks or from diskette files, and can even copy 800K masters to a 1.4M disk. Written by Roger Bates, author of SilverLining.

RESCOMP.2.5B2: beta version of a utility for comparing resource forks in files.

RAMADILLO.SIT: great name (and great icon) for a utility for examining how RAM is being used by open applications.

SOUNDISK.1.2.SI: application for recording sound directly to disk.

STRIP.SIT: small utility for de-Macifying text files, replacing copyright symbols, trademark symbols, curly quotes, etc., with mundane, boring equivalents.

MAGIC.MENU: revised, corrected Magic Menu 3.0.3 updater. Recommended, required, etc., if you use Stuffit Deluxe 3.0.

STARDATE.SIT: ridiculously useless utility that will give you the current stardate.

SVAT152: save-A-Tree v1.52, saves paper by condensing files (TEXT only) for printing.

ALPHA.505.SIT: programmer's editor. ShareWare and a real gem. Extremely configurable and programmable (macros, commands, etc.).

REVISIONIST13.S: keep track of document revisions.

ADDSTRIP302.SIT: utility to deal with cross-platform file machinations. Converts 'special' characters, CR/LF combos, etc.

DESIDRAW441.SIT: quick-n-dirty app for making flowcharts and organizational charts.

DBASE.SIT: Apple File Exchange module for turning dBASE (XBASE) databases into Mac friendly comma separated values (CSV).

MACLIBRARIAN.1: top rated disk cataloging utility in a recent issue of MacUser.

MACATOMS.3.1.0: an educational tool allowing you to play with atoms graphically, spinning them around and looking at them in different ways.

APPDISK16: version 1.6 of the AppDisk, System 7.0 dependent RAM disk program that allows you to make a RAM disk at any time by simply launching the application.

NU4.0.1P.SIT: updates NOW's SuperBoomerang and

NOW toolbox to 2.01p. Bug fixes and some feature changes.

File Area 20: Macintosh DA/INIT/CDEV

SPACESAVER1.0.2: this contains updater installers to update SpaceSaver from 1.0.1->1.0.2, MagicMenu from 3.0.2->3.0.3 and the Stuffit Engine.

ATT.SIT: Sound Mover format sound file, from the popular telephone commercial.

TYPEIT4ME.CPT: Mac utility that shortcuts the entry of frequently used text words and phrases.

UHOH.CPT: Tim Allen "Uh-oh" beep sound.

WHITEHOUSE.SIT: some interesting System 7 beep sounds from the movie Casablanca.

AFTER.DARK.2.0V: updates After Dark to 2.0v. Must be used before updating to version 2.0w.

AFTER.DARK.2.0W: updates After Dark from version 2.0v to 2.0w. You *must* update to version 2.0v *before* using this file. Version 2.0w is necessary for System 7.1 compatibility.

BAR.PATTERN.1.0: Menu Bar Pattern, a Control Panel device that allows you to have colored, patterned menu bars.

BUGS.BUNNY.SIT: Bugs Bunny clock in desk accessory.

MENUCHOICE15.SI: control panel device which enables hierarchical menus under the Apple menu.

ADRRRRING..SIT: After Dark module. Dedicated to anyone who ever answered phones for a living.

DIALOG.VIEW.1.0: control panel that lets you change the font and size used in directory dialog file lists, and display the real icons of files in such lists.

APPWIN.SIT: extension by the author of Super Boomerang to add a window list to the application menu under System 7.

DOUBLESCROLL.1: ShareWare init/cdev combination which adds double-headed arrows to scrollbars in all but the smallest open windows on desktop.

OKEY.DOKEY.SIT: handy CDEV that automatically "presses" the default button in any modal dialog after a user specified amount of time.

FLASHWRITE21.1: an Andrew Welch re-write. Replacement for the Notepad DA.

DITHERING.IDIOT: control panel that provides some additional dithering patterns for color images on clipboard or elsewhere.

SFFOG.CPT: nifty (and unique) beep sound — the foghorn from the San Francisco Bay.

FINDERBAR.SIT: adds a Word-style toolbar to the Finder with frequent functions on it.

KILROY.SIT: cute little guy pops up holding your windows.

SERIOUS.BEEP: nice System 7 beep sound.

DRAG.IN.1.5.SIT: extension repairs a major flaw in System 7: instead of just dragging around the outline of a window, you can drag the *actual window!*

OHHNOO.SIT: AfterDark module designed to terrorize the unsuspecting: gives a black screen,

'Sad Mac' and error tones.

SCROLL.V2.1.11: great control panel which allows you to customize the scroll bars on your computer.

XMASSOUNDS1.CPT: Nat King Cole and Patti Austin welcome the season and wish you a merry one in two separate System 7 beep sounds.

CHESTNUTSROASTI: 2 more sounds for the holidays: Chestnuts Roasting on an Open Fire & Frosty the Snowman help the season come alive on your Mac.

TWEETY.SIT: extension that, once loaded, will randomly play sounds in the background while you use your computer.

CLIPBOARDMAGICI: newest version of Clipboard Magician DA v0.71, the user-extensible desk accessory that allows conversion of data types to/from the clipboard. This will convert PICT to bitmap; rotate bitmap; file munging; GREP; XCMDs; XFCNs; grab DATA directly from memory; screen capture; hex dump of any file; change hex to TEXT; etc.

File Area 27: Music and MIDI

DCXMAS.LZH, FROSTY.LZH, JINGLEBL.LZH, LETITSNOW.LZH, HAPYNWYR.LZH, GRENSLV1.LZH, GRENSLV2.LZH: holiday season MOD files. MOD files are digitized music files, often containing voices and other surprises, usually created on Amiga computers, playable on the Macintosh through Sound-Trecker. Most of these files are LZH and LHA archives, so they can be decompressed by both Macs (using MacLHA) and Apple IIgs users.

File Area 28: GIF Images

DALI.GIF: very, very nice, large color photo of a Dali painting featuring two vivid, and unusual, tigers and a nude woman.

MAKEITSO.GIF: humorous drawing with the Captain and Mr. Data.

SOX.GIF: the President-elect's cat, being held by a photographer from the incident at his home in Little Rock.

BLUBEACH.GIF: just what the name suggests: a computer drawing of a blue beach.

SKY.OIL.GIF: nicely done computer painting of sky and water, with an oil color feel to it.

SW.GULL.GIF: color photo of a seagull.

WINE1.GIF: drawing of table and a dinner set. Done in Stratavision.

File Area 29: TCS Essentials

STUFFITLITEINST: Stuffit Lite 3.0.3 by Aladdin. This utility compresses files to save space when archiving or transferring files via modem. It expands archives made with other common archiving utilities as well as its own archives. ShareWare \$25

SITEXP30.SEA: version 3.0 of the Stuffit Expander utility. Many new features in this release including full background operation. Will extract SIT, SIX, CPT and PKG files effortlessly. Recommended for all TCS extractions.



Bytes 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.

A Pointless/Express/Harmonie Question

SevenHills Software was responding to a *Pointless* (TrueType font processor), *Express* (GS Print Spooler), and *Harmonie* (HP printer driver) question over on GENie:

Q: Would *Pointless* take longer to image high quality prints than the standard ImageWriter driver?

A: *Pointless* is not a printer driver so you can't compare *Pointless* to the standard ImageWriter driver (you always use the ImageWriter driver; you may or may not use *Pointless*). Therefore, printing with the ImageWriter driver is faster without *Pointless*, and printing with the ImageWriter driver *with Pointless* is slower, but you get better quality.

From the thread here on GENie it has become obvious that *Express* is not useful with the *Harmonie* printer drivers. This is due to the way

Harmonie works (images a little then sends data out the port in little chunks). *Express* is most beneficial for printer drivers like the standard ImageWriter driver and the Independence printer drivers for the DeskJet and LaserJet. All of these drivers image larger chunks of data and pump more data out of the port in a single shot. For these drivers, *Express* **does reduce** the time waiting to regain computer control.

We apologize for making the assumption that if it saved time with our Independence printer drivers and if it saved time with the ImageWriter printer driver, that it would save time with the *Harmonie* drivers. (Live and learn the hard way...)

Independence, at 300 dpi, does save time with *Express*, but the amount of time saved is less than the amount of time saved when printing at 75 or 150 dpi. Independence images then sends larger chunks of data to the printer, so without *Express* it is often waiting for the printer's buffer to clear up. So you save some time with *Express* when using Independence.

If you are using *Harmonie*'s DeskJet/LaserJet driver and find *Express* isn't useful, you can return it to us (if you bought direct from us). For those who do find *Express* useful, please don't return the software just to get it free...it took two years and lots of money to develop. *Express* is a great product; unfortunately it just doesn't benefit *Harmonie* users. [thanks...Dave (of Seven Hills)]

More On This Issue

Speaking on the same topic, Dennis, from A2-Central added, "I'm go-

ing to kibitz a second because I think maybe a few people aren't thinking this through and are expecting unreasonable things (and reading what they *want* to believe as opposed to what's *reasonable* to believe).

"First reality check: If you print in high-quality mode, you are sending much more data to the printer. Compare multiplying 144x144 dots per square inch (ImageWriter resolution) to 360x360 dots per square inch (StyleWriter resolution), and you'll see the second number is much bigger.

"You can't send *more* data to a printer (or the driver) at the *same* rate (using the same techniques) in *less* time.

"Corollary: you can't compare results when changing *two* parameters at once (speed and quality in this case).

"Second reality check: A spooler (or even a buffer) doesn't speed up printing from the *printer's* point of view (in terms of grabbing the finished document out of the printer). That's because a spooled (or even buffered) document is transferred *twice*; once from the application to the spooler, then from the spooler to the printer.

"Either should speed up printing from the *application's* point of view because you can send data into RAM (buffer) or to disk (spooler) faster than to the average printer. One limitation on the IIGS is how much time is spent creating the image to send to the printer; if that time is terribly long, then you may not notice an incredible increase in speed because the time actually spent sending data to the printer is much less than the time spent imaging it. (If there's enough redundancy in the imaging you may even see a *decrease* in speed; this may indicate a poorly written application.) Imaging is sped up by making the computer (processor) faster or by using better imaging algorithms to compute things faster (there's a limit to how far this can be taken, though, and it may depend on



how much of a resource the driver can find in your computer, like extra memory).

"A spooler or software buffer has to steal time from the processor to print your document, so it will also not be able to send the document to the printer as quickly as it would if you weren't allowed to do anything else with the computer while printing. Many people need the computer to be available more than the printer (that is, it doesn't matter if the printer takes longer to finish as long as the computer is available for work), and they aren't as concerned with the computer being slightly slower as long as it is *available*. These are the reasons for using a spooler, not to get a document ejected from the printer faster.

"From there it's a matter of perspective. If you're printing a document that takes four hours to print and want to continue revising it while the previous draft finishes printing, adding a spooler makes sense even if it still takes 2.5 hours to print the document to disk and another 4 hours to print. (You get the computer for 1.5 hours that you would otherwise have had to spend twiddling your thumbs.) The same rationale applies if you are printing the final copy of a document and need to continue working. In this sense, using a spooler or buffer lets you get work done *faster*.

"If the computer doesn't seem to be printing fast enough (that is, you need use of the program back even faster) then you need to speed up the computer. From the IIGS desktop imaging, the document is usually the biggest bottleneck. Changing printer drivers and adding memory *may* help; a faster accelerator certainly will. If getting the document to the printer is the bottleneck, then adding a buffer or spooler should also speed things up in terms of freeing the application for more work.

"If the computer seems to be creating the document quickly enough but it's taking too long for the hard copy to finish printing or you can't get enough

pages printed in a day, then the printer is too slow. You can either send the printer less data (don't use programs that print in graphics modes like desktop programs for the IIGS, Mac, MS-DOS Windows, etc., or use a PostScript printer that does some of the page processing from high-level data) or get a faster printer (above 400 characters per second is going to be hard and expensive to locate).

"Instant gratification' in terms of ultimate quality and speed is not going to be cheap or maybe even possible. We've sent single sheet page layout documents to a LaserWriter from a Mac IIsi that have taken the better part of an hour for the printer to image. (We also have a setup with one computer driving four printers because the computer outruns all the printers combined.) There is a limit to what can be done with even the best technology, and that limit usually isn't worth the difference in cost for most people. (It may even be more economical to get a second computer to use just for printing.)

"Spoolers allow you to choose the balance of the trade-off between utility and quality; a choice you don't have if you're locked into immediate printing only. As Heinlein said: 'There ain't no such thing as a free lunch.'"

Seven Hills With Additional Comments

Dave was back again with, "Thanks for providing such a detailed and good comment! Something interesting: A few messages back I made a statement that we saved time with *Express* with Independence and Apple's printer drivers and that we assumed the same would be true of *Harmonie's* drivers. But apparently (from the reports of a couple people) that assumption was not correct. Here's the interesting part: It may be correct after all, at least with certain combinations of hardware. I ran some tests with *Harmonie* on a standard ROM 03 IIGS (no accelerator) and 2 MB of memory, and *every* test I did at

300 dpi resolution saved time! In one case, print time went from 11:56 down to just 2:42 ! Other times it was less dramatic, but still less.

"After thinking some more about *why* this might be, I realized something very basic to *Express*: You will *always* get control of your computer back sooner with *Express* than without, *unless* your hard drive saves data slower than your printer card/port can deliver data to the printer. I don't know what the throughput rate of a typical hard drive is, but I can't imagine it being anywhere near as slow as a parallel card outputting data to a printer. With this in mind, I'd have to agree with Dennis that some other variable was changing. For example, the timing without *Express* was done by restarting the computer with the Shift key down under System 6, so no INIT's loaded. If *Pointless* wasn't loaded, then that alone would cut many minutes off of the print time. Then if you restart with *Express* and *Pointless* and time, sure the time will be much longer!

"So, please forget what I said earlier! I'm going back to the original claim that you will always get control of your computer back sooner with *Express* than without. And that will hold, unless someone can tell me how a parallel printer card is faster than a hard drive.

Later he added, "Some good news and bad news... Apparently the common thing is parallel cards...they seem to be able to deliver data to the printer faster than the hard drive can save it to disk. The good news is we might be able to fix that. Right now *Express* is just using a file buffer which isn't that large, which means only small chunks are written to disk. We can get better disk times by using a larger buffer to write to, which should make *Express* always save data faster than any port (including parallel cards) can output it!

"The bad news (and not related to the current discussion) is that there is a major error on and in the manual: *Express* does not support the



StyleWriter printer! Apple's printer driver (surprise) breaks the rules and does not output data to a true port driver. Instead it writes directly to the serial chip in the IIGS (naughty, naughty). This shouldn't cause problems for *Express...Express* should simply "ignore" any printouts you do with the StyleWriter.

"Oh, a bit of more good news: We're investigating ways to make the output (printing) speed faster."

Cardboard to the Rescue

Bill Hark was returning some comments to Dale Smith concerning his CV Tech memory board. Here is what he had to say, "Dale, you may remember my being concerned about whether a piggyback board would fit into the GS along with the RAMFast and the CV Tech memory board. (I also had trouble getting the board, but that's a different story.) I got the 4 MB CV board and installed it in my GS along with the fully populated Apple memory card. (I realize I should do something like that one step at a time but I was anxious.) It fit but tight. With the cover off, it worked fine. When I put the cover on, however, the finder came up, then hung up with a full thermometer and a peculiar color line at the top. (The instructions only mentioned a possible squeal or the finder not coming up.) Cover off—everything's OK again.

"I had already put the piece of cardboard between the case and the Apple board. I couldn't see anything touching but went ahead and put another, thicker piece of cardboard between the case and the board along with the cardboard that came with the CV memory board. I had trouble squeezing the case back shut but did and the machine now works fine with my 5 MB of memory.

"Now I've got to figure out what to do with all that memory!"

He's a CAD

Ben Bornstein, writing on the Pro-line system, was inquiring about a CAD-like (Computer Assisted Dis-

play) program stating, "A friend of mine has an Apple IIGS and a need for a CAD-like program. His budget is rather low on what he can spend for this program. Anyone know of a cheap (or even ShareWare) CAD-like program for the IIGS. One other thing I should point out: He has no Hard Drive :(" [← that's a "no-smile character"—GH].

Russell Gibson answered with, "There are actually several out there, but I wouldn't recommend trying a GS-specific one without a hard drive. There are a couple of non-GS specifics: AppleCAD, and one from Kitchen Sink Software—uh—darn, I can't think of its name. Somebody will. If the friend wants to know the name—I'll get it out of storage.

"As far as GS specific—I don't really know. There is a ShareWare one called HCad GS—but I haven't used it more than just to look at it."

John Wolverton added some more specifics with, "Yes, Kitchen Sink has such a CAD program. (This is not a paid announcement, just information from a satisfied customer hence no prices...just information).

"Kitchen Sink Software 903 Knebworth Ct. Westerville, OH 43081, 614/891-2111.

"*AccuDraw Floor Plan—AccuDraw Floor Plan* will allow you to create detailed floor plans and print them on a dot matrix printer. *AccuDraw* is the only program for the Apple II that will create accurate scale drawings. Your plan can be as big as 6 feet by 8 feet in the finest resolution or up to 18 feet by 24 feet in the coarsest resolution. A class of students could lay out a whole town!

"*AccuDraw Electronics—AccuDraw Electronics* is *AccuDraw* with the electronics module built in. The Electronics Module includes electronic, electrical, and PC board artwork symbols. It also has a complete set of plans for building I/O slot and gameport interfaces. You can also add the Floor Plan Module to this version.

"Floor Plan Module (Add On)—This

module can be added to AccuDraw Electronics to allow you to do both PC board artwork and floor plans. The floor plan module includes symbols for floor plan, furniture, landscape, plumbing, and electrical symbols. The electrical symbols are floor plan electrical symbols, not the printed circuit board symbols.

"Electronics Module (Add On)—You can add this module to AccuDraw Floor Plan and be able to do both floor plan drawings and electronics circuit board work. This module includes symbols for electronic, electrical, and PC board artwork. It also has a complete set of plans for building I/O slot and gameport interfaces."

IIE/IIGS Conversion

"I was going through A+ today," writes Walter Forlini, "and saw the ad from Shreve Systems with the Iie to IIGS logic board upgrade for \$149. I didn't know such a thing existed and the idea fascinates me. From this board, I've learned that there can be problems with the Iie power supply being too weak. From the tone of other messages, it seems that many of you have successfully done the conversion. For those who have done the conversion, I'd like to ask a few questions. I have an enhanced Iie with 80 column card, 128k, 5.25 DuoDisk and controller, 3.5 UniDisk and controller, SuperSerial card and ImageWriter II, and a 10 MB Sider and controller that caused a rift in the family budget for months when it was purchased last decade.

"How difficult is it to do this conversion (I'm pretty handy and brave, but certainly not an expert in electronics)? Will the peripherals I already have work on a GS or will I be investing a lot of \$ and time to get a GS that almost works and still looks like a Iie? From what little knowledge I have of the GS, most of the peripheral connections are directly on the mother board, so I wouldn't need some of the controllers, right?"

"I guess what I really want to know is whether or not this conversion is



practical or I should just stick with a IIe that has been pretty much just a games machine lately? The idea of System 6 intrigues me (since I already use another GUI based machine.) What is needed to connect the GS to an AppleTalk network? Thanks in advance for your help."

Kim Brennan responded with, "The conversion is relatively easy...however, depending on the age of your IIe, there may be problems doing the conversion. The *oldest* IIe's had a slightly different case design that makes doing the conversion a real pain. The conversion will give you a new motherboard and bottom plate and back plane to your IIe (that is, the metal bottom of your case will get unscrewed and replaced in the upgrade as will the back metal portion of the case where the various holes are for the I/O ports.

"This is necessary because the GS will give you a whole new set of I/O ports (the built in ones) plus the openings for any card I/O ports. Since you didn't indicate that you have an accelerator on your IIe, the conversion is *quite* reasonable, as the stock GS runs faster than stock IIe. Depending on which motherboard comes on the conversion kit

(I'm guessing the ROM 01 motherboard), you'd get the same amount of usable memory that you already have. If a ROM 03 motherboard comes with the kit, you end up with 1 MB of memory which will make the transition to GS specific stuff pretty easy.

"All of the cards you have should work fine on the GS...however, you might not need them, but be prepared to get some new cables. The UniDisk will work fine on the GS disk drive port (smartport). The DuoDisk, might need a minor fix to use it, on the other hand you can always continue to use it as you do right now. The SuperSerial card can be superseded by the built in serial ports of the GS (which can also operate faster than the SSC). The cable you currently use from the SSC to the

IWII can be turned around and used from the GS to a modem (you'd have to get a new cable from the GS to the IWII). The Sider will work fine...if you continue to use it primarily in the IIe mode For serious GS application work, you'd find it simply too slow and too small.

"And one other tidbit. The GS has a built in clock, so all your files will now be time/date stamped. A little feature that is not paid much attention to until you don't have it."

Novapple User Group President, Dave Harvey jumped in with his experiences stating that, "I ordered the conversion kit from Shreve Systems and it's now installed. Not without lots of problems, some of them caused by them and some by myself. They first sent me the wrong board! It was a GS board minus the power connectors and the connector for the IIe keyboard.

"As coincidence would have it, about this time my IIe power supply went out for some reason. That added to the confusion. I've also heard about the IIe power supply being inadequate and so I ordered a reconditioned one from Alltech Electronics for \$69. When it arrived, I found the cable going from the GS power supply to the motherboard was too short by 1 inch. I'm going to have to splice some cable in to make it longer. The conversion is working fine using a IIe power supply with a 2 MB card, one Sider controller card and one RAMFast rev. C controller card. You have to pay them \$249 plus shipping and then when you send back your IIe motherboard, they will give you credit for \$100. I used a credit card and had no billing problems with them. You can get rid of your SuperSerial card because one is built in."

Icon Stuff

And from GENieLamp (*), our friend, "Lunatic" presents some valuable icon information.

Icon Info—There is no specific limit to the number of icons you can put in

a file. There *are* several things to keep in mind, though:

- 1) The icon editors may have a limit. Going beyond this limit may result in an error, a crash, an inability to save the file, or worst of all, a corrupted file.
- 2) Earlier versions of Finder had problems loading in very large icon files. Finder 6.0 is much better with this, but I personally don't want to try pushing it.
- 3) Finder must allocate a single large block of memory for every icon file it loads. If it can't allocate a large enough block of memory, it won't load in the file.

I don't even want to guess what happens if it tries to load in a file larger than one bank (64K) of memory.

On the other hand, the fewer icon files you have, the faster Finder starts up, and the less *fragmented* memory becomes. My personal advice is that if you keep to around 50 icons per file, you should have absolutely no problems whatsoever. I have pushed a file up to near 80 icons, but all the icons in that file were very small, keeping the size of the file itself relatively small.

The way I, personally, organize my icons is in about five files:

- 1 System.Icons (anything as shipped on a system disk, including replacements for Finder's icons),
- 2 Document.Icons (graphics files, sound files, word processing files, etc.),
- 3 Applic.Icons (icons for the applications themselves),
- 4 Develop.Icons (icons for source code, utilities, etc.),
- 5 And a file I call Last.in.Folder, used to remind myself where it should go (the most generic custom icons, like text files, binary files, disks and drives, the trash can, folders, etc.).

This way also keeps almost all



icons for a specific type in a single file (except for Last.in.Folder) so that they can all go in any order within my icons folder (again, except for Last.in.Folder).

Update Your Zip GS

More from Lunatic and GEnieLamp (*).

"Someone recently asked me in E-mail how many chips were required to update the cache on a Zip GS. Because I thought other people might be interested in the information as well, I decided to post it here.

"To upgrade the cache on a Zip GS to 32K, you need two SRAM chips, one for the TAG side and one for the DATA side. To upgrade the cache to 64K, you need four SRAM chips total, two for each side. Because these chips are 32K each, you might wonder why you need two of the them for 32K or four for 64K. The reason each side of the cache needs to be upgraded to the full memory size. Because there's two sides to the cache, you need twice the chips."

The Shadow Doesn't Know?

"Decisions, Decisions—Speaking of which," writes Scott Alfter in an article in GEnieLamp (*), "I've heard great things about the Shadow. But, is it really so great that I should spend the extra \$\$\$ to get a Shadow instead of the TMS Pro External? My desktop has enough space to accommodate a HD....

"I'd avoid the 3.5-sized drives (such as the Shadow), if I were you. They take their power from your computer's power supply. Hard drives demand a great deal of power while starting up...probably more than you should be pulling from a stock Apple IIe or IIGS power supply. When you buy a drive in the larger (usually Mac-sized) case, the drive gets its own power supply.

"According to the Apple IIe tech reference, the +12 line on the power supply is capable of supplying 1500 mA continuously. It can handle surges up to 2500 mA for up to 20 minutes if

followed by at least 10 minutes at no more than 1500 mA. According to the tech manual for my hard drive (a Conner CP-340), the drive draws 1000 mA for startup and 300 mA in normal operation. That's 40% of absolute maximum for startup and 20% of operating maximum at full speed—and you still have floppy drives, peripheral cards, and the motherboard to share those 1500 mA with. With a 3.5" floppy drive, a 5.25" floppy drive, and a hard drive spinning all at once, you might overload the power supply...and when that happens, your computer will cycle power. Cycling power like that to a hard drive is a Bad Thing (TM).

"If you have an Apple SCSI card, the problem is even worse. Recently, one of the members of the local user group bought a drive and an Apple DMA SCSI card from LRO. Apple's card only gives you up to a three-second delay before it starts looking for a device to boot. The average hard drive takes about ten seconds to spin up and go active. If your hard drive has its own power supply, you can turn it on first and turn the computer on a few seconds later. If the hard drive takes its power from the computer, though, you're stuck with a Catch-22—the computer won't boot from the hard drive until it's spun up completely, but the hard drive won't spin up until you turn the computer on. Open-Apple-Control-Reset doesn't fix the problem, either...if Apple's SCSI card doesn't find a drive, you'll have to cycle power...and you're back to Square One.

"Save yourself a lot of potential grief. Insist on a hard drive that has its own power supply—preferably an internal power supply instead of an external 'brick.'"

The "utter Gary," Gary Utter added, "There is an external power supply available for the Shadow, just a little power cube that plugs into the wall. TMS recommends the purchase of this thing for any Shadow that is to be used on a II, and so do I. I think the thing is like \$15-\$20, but I could be

way off on that (either way :)."

The King Solomon Technique of Splitting Memory

Frank Harris, our local HyperStudio Guru responded to James Mack's question on memory. Frank advised, "Yes there is a way to test for a bad memory chips. I don't know about language cards. The memory tests include the Applied Engineering, Applied Ingenuity, and other Public Domain memory test programs. Some are ProDOS 16 and some are in BASIC and Machine code. I've archived mine. There are some available on line, I'm sure.

"Another answer is the half split method. Here is how it works:

"Find the manual on your memory card and re-configure it [the memory] to 1/2 its present size take out the chips for the 'last' half of memory. Be careful about static! If you don't have any other protection, at least use an anti-static sheet from the dryer to wipe down the table top and touch the power supply case inside the computer, it's grounded, every 30 seconds or so. A ground strap and conducting foam protect better.

"Once you have removed 1/2 of the memory, restart the computer. If it works your problem is in the chips that you removed. If it still shows the same symptoms, then either the bad chip is still in the machine or the problem is being caused by something else.

"If the computer works, the chips in the computer are good. Remove 1/2 of the remaining chips in the memory card and set them aside. Replace with 1/2 of the still suspect chips. *Make sure they are in right side up and no pins are bent under!!* I've seen people bring me machines with both problems. Turn the computer on again. If it works, those chips are good. If not, the 1/4 of the total memory you just replaced has the bad chip.

"If you follow the logic of this, you will see that you can soon narrow it down to one bad chip. If not, then just replace the chips 1 at a time. You will



soon come to the bad chip, if there is one.

"About two months ago my Apple IIGS quit after a power surge. I was not sure what the problem was, but I tried the 1/2 split method and it showed me right away that the problem was a memory chip. It took about 20 minutes to find the bad chip, out of 4 MB of memory. The replacement only costs less than five dollars.

"This sound a lot worse than it is. Still, maybe you want to check the ShareWare for a memory test first. they will lead you right to the bad chip if your machine will boot at all. A memory test program would not have helped me because my IIGS would not even boot when the bad chip was in it. I did get a system error message on the screen which indicated a memory error, but some bad chips are so bad, they freeze the system completely."

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1-800-638-8369. Upon connection type HHH. Wait for the U#= prompt. Type: GTX99368, GENIE and hit RETURN. The system will then prompt you for your information.

(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 McLean, Virginia 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.)

Apple II: Still the Way to Go!

by Lorin Evans

Apple stopped making the IIGS? So what! There is an enormous vested base in Apple computers, software, technical support, and spare parts to keep our machines running for years to come. Are you mad at Apple for not doing "it" to keep the machine a commercially viable product? Suit yourself - but I can think of something more useful to do!

You want to know who is responsible for the outyear viability of the Apple II? We are - not Apple, Inc., not software developers and not the stars. None of that addresses the real question. The real question is whether your Apple computer continues to serve you as your skills improve and whether there is software available to keep pace with your growing needs. There are software developers out there today writing for our machine. Apple has stated that it will continue to support the II series with software upgrades, and new peripherals; to date, it has done so.

Today, we have available a far more sophisticated array of hardware and software options than was ever offered in the heyday of either the IIe or the IIGS. The educational market continues to produce a wonderful selection of creative software. The major classes of applications: word-processing, desktop publishing, data management, telecommunications, painting and hypermedia have available affordable and mature programs that are superior to what was

sold only a few years ago. The peripheral hardware is more desirable and affordable: accelerators, hard drives, high speed modems, scanners, laser and inkjet printers and adaptive firmware to name a few. The operative question is whether your applications can deliver when you call upon them. All the rest is commentary. I am willing to wager that most of your software contains features you have yet to master.

Let's start with some basics. If you operate a IIe, it should be enhanced and have at least 128k of memory. Apple just released an updated ProDOS System Disk that includes several improved utility programs. Check with our librarian to obtain a copy of Version 4.0.1. You can now print to laser or inkjet printers from several of your favorite programs. The Hewlett-Packard DeskJet or Cannon's BubbleJet coupled with AppleWorks and SuperFonts by Beagle Brothers brings high quality printing at an affordable price to the IIc and IIe. Watch for our upcoming tutorial on this.

If you have a IIGS and have not explored using System 6, do so. The availability of inexpensive memory expansion for the IIGS makes operating your computer with expanded memory very affordable. System 6 brings a whole world of wonderful features to you. John Ruffatto is completing our collection of the latest shareware utilities and Finder Extensions to grant you an even greater



operating flexibility.

The world of printing on a GS offers you wonderful new options with the introduction of System 6 and third party drivers. At 360dpi, the StyleWriter printer offers the IIGS owner significantly increased resolution at considerable savings over laser printing. Install a third party driver and the dream of Hewlett-Packard's DeskJet, color inkjet and laser printers becomes a reality. Add Pointless 2.01 to your 16-bit word processing program and some TrueType fonts from our shareware library, and a new level of print quality is yours. Even the ImageWriter II output takes on a whole new look!

The 1.44meg SuperDrive is available for the IIGS (and IIE). You will need one if you want to read MS/DOS disks on your IIGS. This spring we expect to see an Ethernet card from Apple for the II series computers. Later, watch for Apple to release a GS system software upgrade that they are now working on. You should be pleasantly surprised at the enhancements that will appear.

Sophisticated applications abound. Look at this partial list of programs: Seven Hills (GraphicWriter, Kangaroo, Independence, etc),

Roger Wagner (HyperStudio, GFE), Quality Computers (Beagle Bros, etc) DreamWorld (DreamGrafix, KidsGrafix (I hope)) Westcode (Pointless, InWords), Lunar Productions (Out of this World), Broderbund (Where In series, PrintShop), Procyon (GNO), DigiSoft Innovations (Twilight II), Timeworks (Publish.It!) and re-issues of great games by Big Red Computer Club.

You can see the breadth and depth of applications software and equipment that are available by sending for one of the free catalogs being offered by Quality Computer (800/443-6697), Learning Services (800/877-9378) or Educational Resources (800/624-2926). Look at what is avail-

able for document scanning, interactive video or hypermedia. If you are curious about any of these applications or which version of a program is best for your needs, talk to Ken DeVito (Apple II VP) or Gary Hayman (IIGS SIG chairman) and ask that one of their monthly meetings be devoted to a survey of a particular class of applications. Avail yourself of the full potential of your computer investment.

Shareware authors are prolific, producing a great range of games and utilities. We featured Ken Mock (Columns 2.0, VIAD, LetterSlide and Boggle) and Bill Tudor (System 6 utilities set) at Apple Expo East. But, there are many others represented in our library: Evan Trent, Karl Bunker, Dale Martinson, Robert Claney, and Brian Clair to name a few. When you look for games, utilities, or fonts, our IIGS shareware library is easily one of the finest. Order a copy of our disk catalog and see for yourself.

There are other sources of Apple software and knowledge that should not be overlooked. SOFTDISK produces a monthly disk of utilities, games and programs (that's about 70 a year): SOFTDISK for the IIE/c and SOFTDISK G-S for the GS. [BTW: tell your Mac friends about SOFTDISK for Macintosh.] You can call them for information at 800/831-2694. Resource Central produces a monthly Apple II newsletter called A2-Central. The Pi has a subscription: come in and read it or call 913/469-6502 for details. A new Apple II quarterly magazine called II ALIVE is about to be launched by Quality Computer. Call 800/777-3642 and subscribe. If you are a GS operator, GS+ Magazine is dedicated specifically for your machine. The office has a subscription if you would like to preview a copy, or just subscribe by calling 800/662-3634. And finally, in the freebee department, Apple is about to release a new edition of its Apple II software newsletter.

Don't have a modem? You are cutoff from a significant body of information that flows on the nation's electronic networks. Don't understand them? We run tutorials on telecommunicating all the time. The new TCS will easily have more than twice the download area for II things than exists today. The volume of information that is out there should rebuild Evelyn Wood's business.

There is an obligation that is incumbent upon all of us who use commercial software. We must support those who are supporting us. Software developers who invest money to bring us great applications must be compensated for their efforts. Seven Hills had a wonderful forgiveness program last year and many people nationwide took advantage of it to 'come clean.' The same is true for shareware programs. It is very unfair for any of us to use a shareware product and not pay the modest fee requested. We cannot have both the benefits of their intellectual endeavors and not compensate them for that time and effort - and expect them to produce still more programs! We need to provide the financial incentive to those who support us. Remember, most of the new companies developing applications are small. They know when you purchase a product and feel the loss from your use of a copy of their work. Look at your disk collection before you say anything.

Want the II line dead? Collectively, our ambivalence can help it happen. Is the II dead? Not even close! Use your computer and buy your software; I challenge you to outgrow it. As a member of the Pi, you are in the largest Apple II group around and certainly the most active. Membership in the Pi assures you of access to the best technical and applications assistance available anywhere.



Test Driving Tulin's New Floptical Disk Drive on My Apple IIGS

by John B. Wilson

Last summer I started thinking that I was missing out on computing in the 90's by staying with my 1979 Apple II+. So, when a member of the local Apple user group said that he was selling his Apple IIGS, I decided it was time to move. After all, his machine had all the trimmings—a 20 megabyte Applied Engineering (AE) Vulcan hard drive, an AE 8 MHz TransWarp accelerator card, an AE 2400 Datalink internal modem, a 1.75 MB AE GS-RAM card, and an AEPCTransporter card. What more could I possibly need?

Well, I've had the new system for six months and I now know what I desperately need—*more storage*. Twenty megabytes of storage seemed like a lot when compared with an Apple II+ with a 20 MB Sider that was only 60 percent full. I knew that GS/OS programs were big but I did not truly appreciate that big data files go with big programs.

In the two operating system environment, MS-DOS and GS/OS-ProDOS, in which I operate I quickly filled up the Vulcan and faced the decision of how to add additional storage. My choices included a 105 MB SCSI hard drive, an Apple 1.4 MB Super Drive, or a 21 MB floptical drive. All three options required another interface card and I was running out of slots—only 4 and 5 were still available.

And, the winner is—the 21 MB

floptical drive from Tulin connected to a RAMFast SCSI card. The Tulin won over the Applied Engineering floptical (which uses the same internal mechanism) because, for about the same price, Tulin included two 21 MB disks formatted with System 6.0, a \$25 value.

One of the factors that led me to chose the Tulin floptical was the drive's ability to read and write 1.4 MB disks, giving me more disk storage options. Backing up my 20 MB Vulcan could be done with 14 (1.4 MB) disks rather than 25 (.8 MB) disks. Of course, I could use just one 21 MB floptical disk. The other factor was the forecast that in early 1993 Apple would be releasing a new version of GS/OS System 6 (V6.01) which would include a File Structure Translator (FST) that would enable ProDOS to read (and maybe write, but that's another rumor) MS-DOS disks. However, only the Apple SuperDrive would be able to use the new FST, unless one considers the floptical.

Since the floptical uses the same disk format as MS-DOS drives, all that was needed to read a MS-DOS disk was the new GS/OS FST. With the FST and the floptical, I could bring home a 1.4 MB MS-DOS disk from work, insert it into the floptical, and, using AE's PC Transfer program, I could move the data to the MS-DOS partition on my Vulcan. Actually, I can do that with my current 800k disk drive but I am

restricted to the 720K MS-DOS disks. Being able to do all of this remains to be proved after the new MS-DOS FST is released. Maybe that will be material for another story.

When my new drive arrived I immediately pulled out the manuals for the drive and the RAMFast SCSI card and read them cover-to-cover (that's what everyone does first, isn't it?) before installing the card. The installation was smooth and uneventful once I had decided to use slot 4. (As a side comment, setting slot 4 to "YOUR CARD" in the Control Panel meant that I would not be able to use the mouse in any ProDOS 8 programs or with the PC Transporter. GS/OS programs, however, can see the mouse regardless of the setting of the Control Panel.)

The RAMFast card comes with its own installation program built into the card's firmware and will install the SCSI driver and RAMFast.System file on to the drive that you select. All went as advertised until I tried to startup the system. Then, everything came to a screeching halt. After a long-distance call to Tulin (they do not have an 800 number) and a long discussion with Francis, it was finally decided that I needed to turn DMA (direct memory access) off because my AE-GS RAM was not DMA compatible. Once the proper setup was established, I was off and running with another 21 MB of storage. Now that I have broken the ice by getting a SCSI interface card, the possibilities for chaining a CD-ROM drive or replacing my Vulcan (freeing up slot 4) becomes an option.

For the RAMFast and the floptical to work together properly requires ROM V3.00k on the card. If you have already upgraded your RAMFast to ROM V3.00 but do not have a "k" then I understand that



CV Technology will provide the necessary upgrade without charge. Otherwise, a full upgrade from rev C boards to rev D V3.00k is available by returning your card to CV Tech along with a check for \$79.00.

Most of my experiences to date have been positive. I have divided one floptical disk into a 10 MB volume for ProDOS and a 10 MB volume for the PC Transporter. ProDOS recognizes the drive on the Finder as a removable hard drive allowing the disk to be ejected by dragging it to the Trash Can. Changing disk from within a program, however, requires a "straightened" paper clip inserted into the tiny hole below the disk window, like the original 128K Mac's because the Tulin drive does not have an eject button. From the pictures in the magazine ads, it appears that the AE floptical does have an eject button.

The PC Transporter is not as flexible. It sees the drive as a fixed hard drive (/:D, in my case) and goes ballistic if the disk is removed. One of these days, I am going to format a 1.4 MB disk as a small MS-DOS (/:D) drive with the same PCT volume name as the floptical and see if I can make the switch.

I thought that two disks (42 MB) would be plenty; but disks make an easy way to sort programs and data. And, if one has a lot of data, like sound files for *HyperStudio* from Roger Wagner Publishing, the flopticals can put a large quantity of storage on line without committing large sections of your hard drive. In fact, depending on the level of sampling (5 to 10 K per second), one floptical disk could provide 25 to 35 minutes of digital sound.

I had one problem with one of the floptical disks. It somehow lost its configuration block so the Finder would not recognize it and ask if I

wanted to initialize it. If, however, I ran RAMFast.System and reset the partitions, it would work until I removed or rebooted the machine. To solve the problem, I backed up the two partitions (ProDOS and MS-DOS) using the Finder Archiver and re-partitioned the disk using RAMFast.System. After I restored the two volumes, everything was back to normal.

As I mentioned, Tulin sells additional disks for \$25 but I have been able to find the same brand, InSite Peripherals, locally at CompUSA, which sells a SCSI floptical for the MS-DOS world. Their price was \$29.95.

In closing, let me relate my experience at the new Computer City Super Store when I asked them about floptical disks. When I told the salesperson that I had put a floptical disk drive on my Apple IIGS, he asked, "Why would you want to put such new technology on such an old machine?" My answer was, "Because I can!"—which to me says it all. The Apple IIGS (properly equipped with a hard drive, System 6.0, and an accelerator) is a powerful machine. As long as it can do the things I want a computer to do, it will remain the computer of choice.

Product: 21 MB Floptical Drive

Price: \$489

SCSI Card: Extra

Manufacturer: Tulin Technology

**Address: 2156H O'Toole Ave.
San Jose, California 95131**

Telephone: 408-432-9057

[Thanks are owed to Steve Weyhrich for suggesting the idea for this article and to Tulin Technology for their steadfast support of the Apple II.]

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A free booklet about GENie is available on request by calling (by voice): 1-800-638-9636.

Are you a student at one of the Northern Virginia Community Colleges?

If so, then David Mudd would like to discuss the advantages of forming a SIG (Special Interest Group) or a Slice on your campus. For details, please contact David at (703) 683-1746.



DB Pix: AppleWorks Enhancement

by Professor Peter Stark
Cambridge, England

DB Pix is a new product from JEM Software which modifies the *AppleWorks* 3.0 database so that you can view double hires, single hires, or *PrintShop* graphics without leaving the database. It is compatible with *TimeOut's UltraMacros*, other *TimeOut* applications, *TotalControl 2.0*, and *DoubleData 2.0* (but not with earlier versions of *DoubleData*). If you have a color monitor, single hires graphics are shown in color, but double hires or *PrintShop* graphics appear in black and white.

DB Pix is supplied on a non-protected 5.25" disk, which also contains the necessary instructions (in an *AppleWorks* word processor file, DB.PIX.DOCS) as well as a small database file provided for tutorial purposes. In addition, the disk includes a demonstration version of JEM Software's *TotalControl*.

Installation

Installation of *DB Pix* is admirably simple, and clear instructions are given in the DB.PIX.DOCS file. The process creates a special new file (SEG.DP) as well as an 'INIT' (I.DB.PIX), the latter being placed in a sub-directory named AW.INITS. (The *DB Pix* installation program can also be used to install version 3.x of the 'init manager,' if necessary). In case you have not come across *AppleWorks* INIT's before, I should explain that these are programs which are brought into action while *AppleWorks 3.0* is being booted. Some

of them change certain *AppleWorks* commands, whereas others perform special startup functions. For example, the I.DB.PIX INIT causes *DB Pix* to be pre-loaded when *AppleWorks* is set to pre-load the database. In the *AppleWorks* field, INIT's are a relatively new development, but it is clear that they'll be of increasing importance and variety.

Operation

DB Pix is very simple to use. With a database record displayed, you just place the cursor on a category containing the name of a graphic (double hires, single hires, or *PrintShop*) and press Open Apple-B to view the graphic. The graphic may either be in the same directory as the current database file, or else it may be in another on-line volume. In the latter case, the category must contain the full pathname of the graphic. If the graphic is double hires or single hires, it appears as a full screen picture when Open Apple-B is pressed. However, if it is a *PrintShop* graphic, it is shown on screen in the bottom right-hand corner of an image of the current record, i.e., both the *PrintShop* graphic and the relevant database data are seen simultaneously. In either case, the image can be inverted by pressing the space bar (or if "i" is added to the end of the filename as shown in the category). The advantage of using complete pathnames is that you can access graphics from disks other than the one from which the database file was loaded.

Other Points

As the DB.PIX.DOCS file explains, *PrintShop GS* graphics files are only supported by *DB Pix* if they are five blocks long (and *New PrintShop* graphics only if three blocks long). If you wish to use normal *PrintShop* graphics files, you must first convert them into ProDOS format because the *AppleWorks/DB Pix* combination will not recognize files on the original DOS 3.3 disks.

DB Pix also supports the graphics clipboard used by *TimeOutPaint* and *Graph*. The DB.PIX.DOCS file explains how to view this clipboard, using *DB Pix*, as well as how to copy the current double hires screen image to it so that the picture can be modified (with *Paint*) and/or printed (via *Graph* or *SuperFonts*).

Overall Comments

I found *DB Pix* very simple to use; it works well, and I have had no difficulties with it. The new facilities which *DB Pix* provides are a significant addition to the wide variety of useful possibilities that exist with suitably enhanced *AppleWorks 3.0*. With imagination, many uses can be visualized, particularly now that scanners are available which make it easy to create suitable graphics files from printed pictures.

Title: *DB Pix*

Publisher: JEM Software
7578 Lamar Ct.
Arvada, CO 80003

or

Kingwood Micro Software
2018 Oak Dew Drive
San Antonio, Texas 78232

Price: Approx. \$25 + S/H.
Contact JEM or Kingwood
Micro Software.

Value for Money:

Performance:

Documentation:



On the Trail of the Apple III: January and February

by David Ottalini
Apple III SIG Co-Chairman

Happy New Year!

1993 looks like an exciting one, SARAsaurs. With your help, we will be able to continue getting the most out of our wonderful 8-bit computers. The Apple III can be so much more than the doorstops (literally) some have made of her. But as always, we must work together. Make one of your 1993 resolutions a promise to buy at least one commercial Apple III product, write an article for the WAP Journal, buy disks from our PD library, come to a meeting or buy a modem and join us on the TCS. We need you all to make our SIG a real success.

Speaking Of Success

Hats off to Dave and Joan Jernigan whose hard work and lobbying successfully brought us a new product for our III's. Dave, normally very low-key, excitedly made the announcement on the TCS November 22:

I got hold of Bob Consorti on the 21st and the Driver for the 1.4 Meg Apple SuperDrive is ON THE WAY!!! He says it is faster than the Unidisk and can be used as a recording device for telecommunications.

A few days later, Bob announced the driver on CompuServe:

I've just finished the Apple III driver for the 1.4 megabyte SuperDrive. If you want 2880 blocks of fast backup or primary storage, just get the Apple II 3.5 interface card and an Apple or third party 1.4MB floppy disk drive. The Apple III driver

and documentation for the SuperDrive is available today.

Cost for the driver is \$100.00. Send your check to: Joe Consorti, 1174 Hickory Ave., Tehachapi, CA. 95361. Quality Computers (1-800-777-3642) is one possible source for the Apple II SuperDrive and interface card. The drive is \$349.95 and the controller is an additional \$149.95. As Bob mentioned above, the driver will also work with Applied Engineering's SuperDrive clone. Quality is asking \$229.95 (but you'll also need the interface card). Preferred Computing (1-800-327-7234) offers the AE drive for \$189.00. Be sure to check for availability.

Although the price may make you take a second look here, remember that this is a piece of hardware that is directly transferable to either a GS or a Mac. The SuperDrive on the Mac is a direct plug in—you don't need the interface card.

As a sidenote—Bob did this with little to no help from Apple Computer—which was less than forthcoming with information on his request for the software interface.

I'd also like to thank our own WAP President Lorin Evans, who was able to arrange for Bob to get a SuperDrive at a reduced cost. And thanks to those who contributed funds up front to help convince Bob that the project was worthwhile. Your SIG also contributed \$100 and is now the proud owner of a SuperDrive driver.

Futures

This is a great place to start talking about other possible projects for our SIG in the future. I've mentioned in previous columns that there are folks out there willing to work with us on some projects that will enhance our III's. Bob Consorti of On Three is one of those who is willing—and most importantly—has the knowledge, ability and trackrecord—to see some of our projects through to completion.

But at this point, he now wants his money up front to start any new project. In effect, we will have to contract with him to provide us with the software we are looking for. In a way, that's fine, because it forces us to think seriously about just what it is we want. And just how much we're willing to pay for it.

I'm happy to announce that our good friends in California, the Apple Three users of Northern California (ATUNC) have agreed to work with us on this—and have appropriated \$500 to the cause. We will be asking the WAP Board for a similar appropriation to give us enough to at least get one or two projects underway.

What kinds of software projects are we talking about? Let me give you a few ideas that I came up with. There are others, I'm sure. But remember these must be products that you would want to buy for your machine. There's no use wasting money on something you all think is nice, but refuse to buy.

Here are some of my ideas:

- 1) program that would allow us to use the Quickie Hand Scanner. (Cost for this is already set—\$1000.00);
- 2) program to work with the SuperDrive to let the III access MSDOS and Mac files or convert Apple III files to MS Word, etc.;
- 3) Remote Access Program so we can use our III's at work or



home from another location;

- 4) upgrade On Three's *Communication Manager* to include Y- and ZModem protocols, scripting, VT200 emulation, FAX capabilities and (tho difficult) 14,400 baud modems;
- 5) CD ROM driver through the available SCSI card;
- 6) IIe Emulation in Software only;
- 7) *Strip .D1...* from SOS.Kernel and replace with a GS-like control panel so we can boot from any disk;
- 8) Laser/StyleWriter Printer Drivers;
- 9) remote access to the III from another computer;
- 10) Apple III compiler/assembler;
- 11) upgrade MacroManager to include scripting capabilities; and
- 12) *Shrinkit*-like File Compression program.

I'll admit that the likelihood of getting all these accomplished are slim. But I think we may well be able to get two or three. Maybe more *if* you care enough to lend your support. If you have any other ideas for possible projects, please let me know as soon as possible. We've already been discussing this on the TCS but remain very open to everyone's thoughts as we decide what direction to take.

We will have talked about this more during the Garage Sale in December—hopefully I'll be able to have a complete report on what direction we'll be taking next month.

February Meeting

Our quarterly meeting will be held the second Saturday of February—the 13th—at 10am in the WAP Office.—[this date has been changed to February 6, same time and place—Ed.] We'll be demonstrating some of

the neat utility programs I've come across recently, talk about telecommunications on the III, and anything else you might want to discuss. Please mark this date on your calendar. As always, disks will be available for purchase and we may even have a few freebies to hand out!

Sun Remarketing

Bob Cook at Sun has long been a friend to the III community. He showed it again of late by agreeing to help repair donated III's for the cost of the parts. We're taking him up on the offer and again remind you that Sun is a good source for Apple III hardware and some software. Call to get on their mailing list at 1-800-821-3221.

News From Detroit

As always, Paul Campbell continues to confound any and all who even think of using something other than an Apple III:

My boss asked me to do a demonstration of a database that I put together to help eliminate the ton of paperwork that our repair techs go through each month. I always say that the three most important things in computing are: results, results, and results. After doing the demo, I explained how long it took his PS/2 to sort a similar database and did a sort on the Apple. He missed it and I had to do it again so that he could see that it actually performed the sort function. He then asked for screen dumps and a copy of all the reports to take to our corporate CEO, then he put his socks back on and asked how much it would cost them to buy the Apple..... Ahhhh.. the winds of irony (grin).

Slots Of Solutions:

Paul has been "Slotting" in his time of late to suggest:

I think I may have a solution to my slot shortage. For the longest time I've wanted to have the Titan cards

on my system, but with the Sider, 3.5 drive, trackball, modem, and three parallel printers (now two), there was no way around having the slots full... until today. I just got a Microfazer buffer which has parallel I/O and serial I/O, which will allow me to run both printers from the serial port.

The system will probably be hooked up in the following way: serial port to switchbox with switchbox port "A" going to the modem and "B" going to the Microfazer serial input (I never use the modem and the printer at the same time). From the Microfazer will be a serial output to the laser printer and a parallel output to the Panasonic printer (the Microfazer converts either way with a front panel switch). Then I can dump the trackball and RAMDisk, leave the Sider in slot 4, the 3.5 in slot 1 (yes, I know the 3.5 will be gone in emulation), and that will leave me with slots 2 & 3 open with both printers accessible through the serial port.

Then Again—

Well, things don't *always* work out the way they should. A few days later, Paul reported that:

The MicroFazer turned belly-up, so I don't know how well it would have worked. I found a much neater approach by running a straight DB25 cable from SARA's serial port to a DB25 four-way (ABCD) data transfer switch (\$24.99 at Comp USA). From there it can go straight to the Modem or through a Null Modem Adaptor (\$4.95 at Radio Shack) to the serial port of the Laser printer. The output for the Panasonic printer comes from the switchbox into a "serial to parallel" converter (\$27.99 at Comp USA), then to the Panasonic's parallel port. I use the standard serial printer driver set to 9600 bps, 8 bits, and no parity; this works with no modifications to the printers.

And In Columbus

Rich Gast has reappeared to offer



some interesting information. He's found a way to extract the Apple III graphic from the DOS 3.3 Apple III Confidence Program! Unfortunately, it's not easy:

I booted the Confidence Program on the Apple III, got the picture on the screen and popped into the monitor. Next I listed the picture in hexadecimal code, then booted a sector editor on my Apple IIe, which allows sectors to be written to memory any place I wish, as I read them from disk. I located the general placement of the file by looking at the code on the disk. Hires pictures tend to look like a lot of "@s" when converted to text, and there are other patterns I have come to know from capturing text in the past.

Now I looked for an exact match to the code I saw on my Apple III screen. Once found, I wrote the sector to \$2000 in memory, then moved through the listing on the Apple III \$100 ahead, and proceeded to look on the Apple III for another match. Upon doing this 32 times, I exited the editor some four hours later, and turned on the Hires screen with a series of pokes. There it was! I wasted no time writing the file to disk.

I've uploaded Paul's handiwork to the III SIG File Download area on the TCS for all to enjoy.

Finally, Paul offered a suggestion about finding "On Lamp" replacements:

If you visit any electronic parts supply house, you will find that number 7328 lamps will do the job. These are a lot more common than the original lamp, and are an excellent replacement.

And Further North

Our good friend C.M. Davidson continues to offer some excellent programs for all to use. One of the best I've seen of late is a wonderful clock program that I uploaded to the TCS and which will be on an upcoming PD

disk. Mr. Davidson has kindly offered to let us mine his hard disk—which contains a number of other interesting and potentially useful programs. Stay tuned!

III+ Troubles

My much-loved III+ had a major hiccup in November. I finally tracked down the problem to the 512K upgrade. On Three's 512K RAMDisk check program was the only one that would even load—and it booted just enough to tell me that there was a bad Zeropage and a few other problems. What that means is that I have some bad RAM chips—luckily not a difficult problem to fix because it's a matter of replacement. Now, if I could just figure out *which* RAM chips are bad...

Finally

Koji Annoura, the Editor of Annie's Letter send us four 800K disks recently full of his recent newsletters, including *HyperCard* stacks, games, etc. Unfortunately, it's all in Japanese *except* for those telltale words that include Apple III, GS, Lisa and Mac. I'll turn the disks over to our Mac Librarian to see if he can do anything with them. Is there a Japanese to English translation program for the Mac yet?

February Trail

Software Development Fund

1993 promises to be an exciting year for the III SIG—a year in which you will have the ability to make a direct impact in a number of areas of concern to the III Community. At the top of our list is the new Software Development Fund, which we've set up to help provide seed money to developers interested in producing products for the III but who don't have the financial wherewithall to do it.

To be blunt, the Fund will be funded

primarily with your donations. ATUNC and the WAP Board of Directors have already contributed some funds to help us get started, but (like with the TCS fund) the BOD has asked that anyone interested in supporting the III help through a financial contribution. If you are interested in this, please send a check made out to WAP with a notation that it's for the Apple III Software Development Fund to the WAP office.

You *don't* have to be a IIIer to contribute. In fact, our first member donation came from Grace Gallager, a long-time Apple II user. Thank You!

If you read the January column above, you know the kinds of projects we're looking at. The plan at this point is to make some final decisions during the next SIG meeting, February 6th at 10 AM in the WAP Office. By this time, you should have received a letter from me as well, laying out those projects again and asking for your input on exactly what you would like to see us pursue.

Remember again that the criteria for any project has to be 1) a project or projects that can, in fact, be done, and 2) a product that you would be willing to pay for. There's also one other factor that has now entered into our planning because we have been hoping to work with On Three's Bob Consorti on the first project. Bob recently told me on CompuServe that he is planning to go to graduate school this Fall, which means our window of opportunity with him will be limited to the next six months or so.

I would invite you all to come to our SIG meeting February 6th so that we can discuss this fully and work out the final details. I'd like to have a maximum of three possible projects to present to Bob so that we can get his thoughts and determine which ones are, in fact, doable. We also need to discuss other possible sources of



developers, how best to use the funds.

Paul Campbell

Is a new Daddy!! He announced the new addition on December 18th:

He's here! Jonathan Michael Campbell was born this morning at 5:21 am. He was 7 lb, 10 oz, and 20 inches long. Ah yes, another future Apple user!

All the III SIG join me in wishing Paul and Aneita well with their third child!

Help Line

Of late Paul also has been helping our SARAs by answering questions about hooking up peripherals to the III:

"A SCSI drive is no problem, you can probably order the driver from On Three over the phone, but Bob might be busy for a little while. On Three also has a very good SCSI card for the III. The LaserWriter should work fine with the standard serial driver or the UPIC driver, I've been enjoying my Laser printer for several thousand pages now. The Epson Action Laser II is inexpensive, pretty quick, and reliable. If you need the driver, I have both serial and parallel drivers for Epson Laser printers, and serial drivers for Hewlet Packard LaserJets.

"A general rule of thumb for printers on the Apple III is: if it has a serial or parallel port, SARA can run it. The ONLY printer that gave my SARA fits was from Radio Shack. To date I have run Texas Instruments, Commodore, Okidata, Hewlet Packard, Epson (of course!), IBM, NEC, Panaonic, Seikosha, and other printers."

Paul also has his own solution to dealing with a burnt-out "On" Lamp in the III:

"The easiest way I have found to do this is to remove the two left screws holding the keyboard to the chassis, loosen the right two screws, work the

keyboard out and remove the ribbon cable. This will let you hold the keyboard and watch exactly where the pin sockets are. It may sound like extra work, but I'd rather go the extra step and get it done, instead of fumbling around for 30 minutes."

A Lomartire Gem

Our good friend John Lomartire recently offered this little "gem" recently and we're happy to pass it along:

1. Have your printer connected to the RS232 port (DB25) on the back of the III.
2. Boot up "The Communications Manager" or "Access III" (or probably any other III telecommunications software, but I am not sure.)
3. Use Open-Apple S to set configuration to half-duplex and baud rate to the same baud rate that the printer is set at.
4. Return to terminal mode.

Now when you type at the keyboard, you not only see the text on the screen but it is also printed by the printer!! Don't know of what value this would be, but it was kind of fun to see it happen. Maybe it would be handy for dashing off a short note without leaving the communications package. Note: There are no provisions for correcting typing errors so it has to be right the first time.

The Dave Jernigan Work-Out

Dave loves his III+ so much that he is constantly pushing SARA to her limits. But sometimes she pushes back (as he recently related on the TCS:)

"I suddenly had problems booting the III+. I thought I had a backup Selector III boot disk and updated standard utilities type disks. *Wrong!!!* After *much* fussng around, it dawned on me that we had a recent back-up

(courtesy *Go Back III*) as well as the disk directory/file fixer from our good friend Bob Consorti of On III. DD/FF revealed gobs of errors including 11 files sharing a block with another file. (I guess that explains why things looked goofy when I tried to boot). There were also 50+ other errors that DD/FF corrected. I deleted the files sharing blocks very painlessly with the repair function of DD/FF and then selectively restored the files I deleted. Peace and tranquility reign once again in our household."

I recently went through my own problems, but they related to my attempts at moving programs and data from my 5MB Profile to a 10MB Profile. I started by using one three and putting two Profile controller cards in slots 3 and 4. I set up the boot disk to include the correct drivers and renamed one of the profiles .Pro2 so that I could transfer the files.

That part was easy. When I tried to use the 10MB, I got all kinds of weird things. On the Selector menu, little "Open Apples" would appear halfway on the screen—in time to the clock. If I tried to boot *GoBack*, I would get the opening menu, but any selection threw me into 40 column mode and a system crash. Hmmm.

So (being the smart guy that I am), I used DD/FF3 to double check the disk (there were only some access problems noted—and then fixed) and then went ahead and did a disk wipe to be sure. Then, having done a backup of the 5 MB Profile using *GoBack III*, I recovered the files and reloaded the 10MB Profile with all my programs. Voilà. Not a single problem since then.

There have been other happy campers with Bob Consorti's newest programs, including a new III SIG Member, Gary Miller, who took advantage of the SIG's offer to get five PD disks for purchasing either of On Three's new programs. He calls them both "Terrific" adding:



"I'm just trying to make Sara last until 2000. Some of the new hardware on the market tempts me to move on, but why spend money on something because it plays better games—I can do everything else on this machine that I need to at home."

Steve Truax's "Small Milestone"

Steve is a long-time IIIer who recently got one of those 1200 baud modems on sale through the Pi: "I finally got the 1200 bps modem that I got at our last meeting hooked up, got my computer/printer/Corvus moved near a phone outlet, got *AccessIII* and *Autodial* hooked up, and am finally talking to WAP with my III rather than Cheryl's Tandy!"

John Lomartire's Apple III System

John answered my call for information on how folks use their IIIs, and here's how he has his system set up: "I have set up two Apple III systems in the same room in order to simulate a multi-tasking environment. If you have ever:

- written a BASIC program on a word processer and then EXEC'ed it into BASIC, you will appreciate that having one computer set up with WP and the other with BASIC makes this task very easy. Write the program, move the disk to BASIC to test it, and move it back to WP to correct faults, etc.
- needed to set up spreadsheet tables while you are in the midst of writing text on a WP, the second computer comes in handy and the file can be transferred immediately into the proper section of the text;
- needed to work spreadsheet information into Business Graphics this is the easiest way to do it. It is a way to add

graphing capabilities to Apple III spreadsheet programs;

These are just three of the many situations that I have found where having the two units active was a godsend.

What makes this concept feasible? **Price!!** With Apple III units available at such low costs, a second unit is practically a gift. Adding a second IBM unit, or Mac would certainly require greater economic justification."

Three's Company

Continues to be available to any IIIer free of charge (save the phone call). Ed Gooding reminded me recently that:

III's Company has 2,500 files, 15 megs of Apple III specific files containing programs and information available 24 hours a day, 365 days a year. The number is: 804-747-8752, 300-1200-2400 baud, 7, O, 1. There is so much Apple III data here that Bob Consorti had to make special modifications to *Go Back III* to allow me to back it all up!

On that last thought, Bob Consorti added: "Yep, I figured nobody would have more than 2048 files but III's Company managed to overfill even my wildest expectations...so *Go Back* can handle up to 3072 files now!

By the way, we have three "Best of" III's Company disks in our PD if you're interested: 3INF-07;08 and 21. 3INF21 is a "tour" of the BBS to give you an idea of what you'll see and what's available when you're logged on.

And Finally

Thanks to John Lomartire, who just recently finished copying some 400+ disks just for our III SIG Library. Thank you for buying our disks—and thanks to John for keeping the WAP supplied!

February Disks: WAP III SIG PD Library

Our latest offering is "TICKTOCK", Disk 3REP-10:- "TICKTOCK" is a small DOS 3.3 - based utility that will help you to properly set your Apple III clock. If you have a clock chip installed, it will simply tell you whether it is going too fast or too slow. If you have a problem, you can easily fix it yourself.

What you'll see—to use TICKTOCK, simply insert the disk and reboot your system. The program is DOS-based and includes the software on disk to turn on the Apple II emulation mode.

[Once booted, at the top of the screen, you'll see:] Apple III Clock Calibration Test

[Just below it will be:] 1 Second Test (a number)

You'll hear a "clock" ticking in the background throughout. Actually that's it. The "1 Second Test" will give you a number that is either + or -; presumably your clock is either too fast or too slow, based on that number; adjust it accordingly.

How To Adjust Your Clock

The clock adjustment "pot" is located on the motherboard just next to the clock chip. You can get at it by taking off the cover of your keyboard and unscrewing the four screws holding the keyboard to the chassis. Lift it up and away from you, resting against the Apple III case (still connected to the motherboard with the ribbon cable.) The pot is approximately under the "L" key and can be adjusted with a small (thin) flat-head screwdriver.

I tried this on my III+ and started with a 1 Second Test of +75. Adjusting the pot, I was able to get it down to +21. I would have to say the best you can do is get it as close to "0" as you can.



The Alternative Way Is To: Use Business Basic to run this program:

```
10 VPOS=20:HPOS=10:Print TIMES;:GOTO 10
```

This will give you a continuous time print-out on screen, allowing you to adjust the clock potentiometer against a time source of your choosing. (Again—you'll have to have a clock chip installed and use System Utilities, Desktop Manager, Powerkeys or a Basic or Pascal program to set the proper time to start with.) In Washington, DC you can call the Naval Observatory for the atomic clock. That number is (202)-653-1800.

The short program above is on this disk side for your convenience and can be run from Menu.Maker (you'll have to hit <CONTROL>+ "C" to end and then at the ")" prompt type "Run Menu.Maker" to return to MM.

Ending

To stop the program, press the <RESET> and <ESCAPE> keys at the same time. You'll be returned to the familiar "INSERT DISK AND REBOOT" message.

More Clock Information:

We've included a Three EZ Pieces database on this disk listing all our PD disks with Apple III clock-related files (CLOCK.PD). Another database (CLOCK.ARTICLES) lists articles you might be interested in from past years.

Finally

Let the III SIG know if you have any success with TICKTOCK and if you have any suggestions for using it. A *Three Works Database* search turned up no articles or even mention of this program. Nor was there a mention even in the Apple III Technical Reference Manual. TICKTOCK was found in the PD library of our old friend Joe Dobrowolski of Apple Users Group International fame.

Undocumented Word Juggler Merge Utility

by Tom Glover
(ATUCofCO)

There is a very neat and powerful feature contained in your Apple III Word Juggler that is not documented in any of the Instruction Manuals! Specifically, the feature allows you to selectively take information out of any ASCII file and print reports, sorted mail labels, insert data into a WJ documents, etc.

Some of the limitations of WJ's standard "Print Form" (Solid-Apple Period) utility that are overcome by the undocumented feature include the following:

1. Lack of data sorting capability when using either PFS or WJ data files (this feature is very important for sorting by zip code with bulk mailings).
2. WJ data files are restricted to only 300 or 400 name/address entries (1534 maximum lines allowed).
3. PFS can not import data from other programs, and it is painfully slow when retrieving fields other than the first field on a form.

The undocumented feature allows WJ to import ASCII data from any source, selectively eliminate or alter the imported data and then use it to generate form letters, mail labels or other documents. The following steps outline the basic procedure:

Step 1. Create an ASCII file of

name/address or other data using *PFS:File*, III Easy Pieces, or any other data base program.

Step 2. Create a WJ "Merge Document" file.

Step 3. Create the WJ "Main Document" that you want to print, such as labels, letters or reports.

Step 4. Print the WJ "Main Document" using the "Merge Document."

In order to simplify a description of the entire procedure, the following example is used to illustrate removal of data from an ASCII file and subsequent insertion of that data into a WJ document.

Step 1: Create an ASCII file of client name/address data using either *PFS:File* or *3EZP*. With either program, create a form of five data fields labeled NAME:, ADDRESS:, CITYSTATE:, ZIP:, and STATUS:. Enter client information into ten records so that you have a sample database to work with. In the STATUS field, insert the letter "A" for half of the records and the letter "B" for the other half of the records (more on this later). Next, write a report to a floppy disk selecting all 10 records and sort on the ZIP field.

A. If you are using *3EZP*, use the



following procedure:

1. Place the cursor on the ZIP field, press "Open-Apple A", and arrange by "0 to 9"
2. Press "Open-Apple P" (to go into "Print a Report" mode); Select "Create a new Table Format"; leave all fields and options at their default settings.
3. Press "Open-Apple P" once more and select "4. A text (ASCII) file on disk" as the destination of the report; place a blank formatted floppy disk in drive .d2; at the "Pathname?" prompt, type in "d.2/ASCII.DUMMY."
4. At this point, an ASCII report containing the necessary information will be written to the disk. When completed, Escape out of the program as you normally would and quit *3EZP*.

B. If you are using *PFS:File*, use the following procedure:

1. At the "Print Options" screen, set up a report so that each field would be printed on a separate line (use the "+" option) and place an "S" in the ZIP field so that a report will be written that is sorted by Zip Code.
3. An ASCII report containing the necessary information will now be written to the floppy disk in .d2. Quit *PFS:File*.

Step 2: Create the Word Juggler "Merge Document" file. This step is the heart of the undocumented WJ feature and occupies a point midway between the ASCII file and the WJ "Main Document" you want to print. Start by booting WJ and enter the Text Entry Mode by

pressing Return. Type in the following lines (where special WJ commands are used, the actual WJ command is listed in parentheses at the end of the line):

```
*5
NAME
ADDRESS
CITYSTATE
ZIP
STATUS
INSERT DOCUMENT (WJ command
Escape then Shift %)
*.d2/ASCII.DUMMY
```

Save this short document as a WJ file (Item 4 on the Main WJ menu) and name it .d2/Merge. You can save the file on the same disk that contains your ASCII.DUMMY file in drive 2. The "*5" above indicates that there are five data fields to be retrieved each time the ASCII.DUMMY file is read.

Step 3: Create the WJ document that you want to print (whether it is a label, a letter, or a report) and in which you want to insert the ASCII.DUMMY file data.

In this example we will assume that we have two different letters that we want to send to our fictitious clients. We want clients with an "A" in the STATUS field to get one letter and clients with a "B" in the STATUS field to get the other letters. On the main WJ menu, select Item 1 to erase from memory (not disk) the Mergedocument that you saved a few minutes ago.

At this point you will automatically be placed in the Text Entry Mode. Type in the following document (once again, where special WJ commands are used, the actual WJ command is listed in parentheses at the end of the line. Also, the < and > characters used below are the WJ commands "OPEN APPLE Shift <" and "OPEN APPLE Shift >", see your WJ documentation for more information.):

```
IF
(WJ command Escape then +)
="A"
<NAME>
<ADDRESS>
<CITYSTATE> <ZIP>
```

Dear <NAME>:

Please find enclosed the Standard Rat Trap Model <STATUS> that you ordered in June.

Sincerely,

Alan Smith

```
NEW PAGE
(WJ command Escape then Shift ^)
END IF
(WJ command Escape then Shift +)
IF
(WJ command Escape then =)
<STATUS>="B"
<NAME>
<ADDRESS>
<CITYSTATE> <ZIP>
```

Dear <NAME>:

Please find enclosed the Standard Rat Trap Model <STATUS> that you ordered in June.

Sincerely,

Alan Smith

```
NEW PAGE
(WJ command Escape then Shift ^)
END IF
(WJ command Escape then Shift +)
IF
(WJ command Escape then =)
<STATUS>="B"
<NAME>
<ADDRESS>
<CITYSTATE> <ZIP>
```

Dear <NAME>:

Please find enclosed the Standard Rat Trap Model <STATUS> that you ordered in June.

Sincerely,

Alan Smith



NEW PAGE

(WJ command Escape then Shift ^)
END IF
(WJ command Escape then Shift +)

Step 4: Print the WJ "Main Document" using the "Merge Document."

Once you have completed the above document, press "Close Apple ."—that is the "Closed Apple Period" from the keypad only). This will take you to WJ's "Print Form" menu. Turn your printer on and select "1. WJ Mail List." At the "Pathname?" prompt, type in ".d2/Merge" and press Return. At this point, WJ will use the "Merge" file to capture information from the "ASCII.DUMMY" file and then insert that data into one of the client letters, depending on the value of STATUS.

The number of client name/address records can be well over 1500 with 3E2P (much more if you have the 512K memory upgrade) and 32,000 records with PFS:File if you have a hard disk.

Additional power can be gained with the "Merge" feature by nesting the IF and END IF statements and by also using WJ's ELSE and LET commands. All of these commands can be used in both the "Merge" and "Main Document" files. See WJ's documentation for additional examples and further explanation of these commands.

Because there is no documentation on this feature, experimentation is the only way you will be able to develop new applications. Let your imagination work on it for a while and have fun with your new tool!!

Footnotes with Three Easy Pieces

by Joe Dobrowolski
Apple Users Group Int'l

I love 3E2P because it is just that, easy! In using this great integrated program, however, we choose to give up the power/options available in single purpose software programs, i.e., *AppleWriter*, *Advanced VisiCalc*, etc. One of these powerful tools is the ease of footnoting as seen in these and other word processing programs. So, what is an easy method of footnoting with 3E2P? Here's what I do.

- 1) Setup the Printer Options (OA-O) that you need for the first page of your text.
- 2) Begin typing your paper until you come to a place in the text where you must footnote an item.
- 3) Hit your Return.
- 4) Type your footnote in accordance with your formatting style, i.e., 15 underlines, CR, footnote number with reference, etc.
- 5) Hit your Return.
- 6) Continue typing your paper. At your paper's completion, begin to "print" your paper:
 - A) Hit OA-P.
 - B) Hit Return (print from beginning).
 - C) Hit Return (your printer). It may give you count-up of your total number of pages.
 - D) Hit Escape.
- 7) Hit OA-1 to bring you to the top of your work.
- 8) Hit OA-Down Arrow until you see the dotted line showing the end of page one.
- 9) Hit your Return several times to separate page one from page two.
- 10) If you have footnotes contained in page one, mark and move the first footnote from its textual position to the bottom of page one.
 - A) Move the cursor to the first character (probably the underline).

- B) Hit OA-M.
- C) Hit Return (within document).
- D) Move the cursor over the last character of the footnote.
- E) Hit the Return.
- F) Move the cursor behind the final carriage return (reverse slash—this may be seen if using the OA-Z function).
- G) Hit Return. 6.

- 11) If you have additional footnotes contained in page one mark and move them in the same manner (repeat 10A through 10G). Note: be sure to remove any additional underlines)
- 12) If you have removed three or more underlines, you may need to mark and move additional text from page two to page one. If you do not, skip to #13 if you continue.
 - A) Perform steps 6A through 6D.
 - B) Noting the "new" end of page one, mark and move that portion between the final "bottom of the page" footnote and the dotted line marking the end of page one above the footnotes.
 - C) Perform steps 6A through 6D again.
 - D) If the footnotes are *not* cut off by the dotted line marking the end of page one, continue at 13; if they *are* cut off, continue to adjust text until the dotted line falls below the footnotes *without* additional text.
- 13) Add a *new page* marker (OA-O, NP, Escape).
- 14) Setup the Printer Options (OA-O) you need for the remaining pages (assuming they differ from page one and remain the same for page two through to the end of your text).
- 15) Repeat steps 6A through 13 for each page.

As I first said, you *give up* the ease of footnoting by using 3E2P, but it is possible and this is the easiest way that I know to do it.



Apple III Macro Power Tips

by Paul Campbell

In our previous macro article, we discussed the *Macro Manager* from On Three and some of its functions and features.

This article will explore special macro techniques and their relationship to various programs. Since *Three Easy Pieces (EZZP)* is the most popular application for the Apple III, we will use this software package as a general starting point.

One of the keys to successful macros in *EZZP* is a consistent starting point for commonly used macros. If you can guarantee that your macro will yield the same results when started from different places within your program, it will make the macro much easier to live with.

For example, a macro that creates a specially formatted spreadsheet in the blink of an eye may look impressive. However, the same macro would only be an embarrassment if it attempted to change a spreadsheet cell format while still in a word processor document.

There is an easy way to avoid situations like this. Beginning your macro with Open Apple 'Q' followed by an Escape will always take you back to the main menu of *EZZP*. Starting your macros with these two commands lets you change directories, load files, change printer configurations, create specially formatted blank documents, and other standard tasks no matter what you were doing when the macro was activated.

This method has been effectively proven in an office I know which uses an Apple III for all of their document production. Regardless of where the user is within *EZZP*, a blank document formatted for laser printing is available in an instant.

The way to get formatting into a new document before the user has to choose a name is to let the macro create a temporary document name. When the macro finishes the temporary name, it can perform the document formatting, then issue an Open Apple-N followed by Open Apple-Y. This command clears the temporary name and allows you to enter your name of choice for the already-formatted document.

File Loading

Using a macro to load files within *EZZP* is quick and easy, but the macro may grab the wrong files. This is not a problem caused by the *Macro Manager*, rather by the way *EZZP* handles file loading. Every time *EZZP* loads a previously saved file to the desktop, it only allows menu selection of the files.

This works fine if you never make changes or add files to your data directory. This does not work fine if you are normal. The reason that this problem exists is that when you add a file to your directory, every file listed alphabetically below the new file will be in a different place. After this happens, your macro may automatically load your address book instead of your accounting spreadsheet!

One solution, is to have the macro stop just short of actually selecting the file. From this point, you just move the cursor to the correct file, then press Return, and the file will be loaded without having to navigate through the *EZZP* menus. An alternate solution that works especially well with multiple files is a separate subdirectory for the special files. Your macro can go to this subdirectory and

grab the needed files while you sit back and smile.

This method is inconvenient in some situations, but is beneficial in others such as the following: My local church uses a special form to track the tape numbers of recorded services. These tapes are broadcast from both AM and FM radio stations and also distributed worldwide. Until our SARA (code name for the Apple III) stepped in, there was a constant problem with these tape numbers being out of sequence or just being the wrong number. The *Macro Manager* makes the complicated procedure for generating these forms almost fun. There are four files used in this procedure, they are kept in their own subdirectory and are loaded by macro.

The sequence numbers for the form are created automatically in a spreadsheet, then pasted into a database resembling the final printed form. The database records are then copied into another database for archival purposes, and the same records are printed to the word processing document for the final printing. Although this sounds like a lot of work, 90% of the task is performed by just four macros.

Knowing the Limits

You must also be aware of macro limitations and how they are affected by the operation of your program. When you activate a macro, the commands contained in that macro are dumped into the Apple III's type-ahead buffer. This buffer acts as a 'holding tank' for keyboard input. While printing, *EZZP* accepts commands from the type-ahead buffer. This causes a problem for the *Macro Manager* because when *EZZP* does this, it empties the macro commands waiting in the buffer and ignores everything but the Escape and spacebar commands.

A way around this is to split your macros which involve printing commands; a macro which leads up to and performs a print function, and another macro which continues after the printing. Remember that after you print a file, the printer choice remains a default selection until you change it. The last



printer destination used will be highlighted the next time you print. Because of this, your macro should include the *number* of your print destination. This assures that your output will always go to the correct place.

Macro Messages

A problem that I have with long macros is that I forget what function they perform. Fortunately, there are a few methods you can use which allow the *Macro Manager* to give you instructions.... during the macro! The very fact that you own the *Macro Manager* (you do own yours, right?) means you will also have access to other basic Desk Accessories. These DA's include the *Note Pad* and the *Appointment Calendar*.

The *Appointment Calendar* is fairly flexible for the purpose of macro messages. The main use of a macro message is to give the user instructions regarding the next step of a procedure.

Here is an example macro using the *Calendar* for a message; Solid Apple-Escape, Open Apple-T, Down Arrow, Return, Open Apple-A, Return, Return, Return, enter message.

A typical message would be something like "Press Solid Apple-N if you want file sorted by name, Solid Apple-Z if you want file sorted by zip code," or "Batch printing has been completed at the time of this appointment, press Solid Apple-R for a reprint of documents in the Print Queue." An advantage of using the *Calendar* for these notes is that the current time is marked by the appointment itself. On the minus side, you cannot safely delete the appointment using the macro itself, and you cannot have two messages within 60 seconds of each other.

The *Note Pad* would probably be your best bet if time stamping for the macro execution is not needed. The macro commands for *Note Pad* messages are as follows; Solid Apple-Escape, Open Apple-T, Return, Open Apple-A, name, Return, enter message. Ending a macro with these commands will leave you with a fresh *Note Pad* containing your macro message. As the icing on the cake, you can start the next macro with the com-

mands that will delete the new *Note Pad* which will keep the size of your *Note Pad* module reasonable. You will probably never run into the 255 *Note Pad* limit unless you are really "pushing the envelope." The Apple III Desktop Manager *Note Pad* limit goes far beyond most Macintosh note pads I have used.

Macro Merge

Those of you who are active on the WAP Telecommunications system are aware of the new Apple III's that are in use by the Detroit Medical Center. These computers are being used for computer device tracking and service technician logsheets. This usage would be greatly hampered if it were not for the *Macro Manager*. A lot of the database entries are filled-in automatically at the touch of a single key. To sum up the impression, one service technician stated "I don't care too much for Apples, but I like this one."

It is quite a sight walking into the computer room where the Apple III sits. An IBM XT sits in a corner with it's monitor facing the wall, another XT sits atop an IBM AT which is also not being used. Across the room is a stack of three PS/2's, one of which was taken out of service to make room for the III... welcome to 1993! To ease the workout on the sole Apple, a second III was brought in for data entry.

Normally, performing data entry on separate PC's to maintain a single database is a nightmare which creates duplicate entries, lost data, and lots of confusion. How do you manage a complicated database merge by novices? In our next article we will discuss.... huh? You want to know now? Oh all right, if you insist!

A Close-up

The second Apple is setup with *EZP* with the default pathname set to .D1, and the boot disk contains a database called "Merge." This merge file has one record with some basic instructions and orders to not delete that one record which I refer to as a "Header." With this arrangement, we only have to be concerned with one floppy disk. The user turns the

computer on, launches *EZP*, then loads the merge file.

After data entry is complete, the file is saved and the floppy disk taken to the main Apple III and inserted. The user then activates the merge macro by pressing Solid Apple "+. The first command contained in the macro is Open Apple-Q Escape. This takes us to square one. The macro then loads the merge file from .D1, finds the header record and creates two copies of the header. The last step mentioned may seem odd, but is necessary for goof-proofing the macro. If a user accidentally tried to merge an empty file, the macro would be in trouble the minute that *EZP* tried to sort on one record.

With three copies of the header record, the macro can go on without any damage, and everybody remains a happy camper. When the sorting of the merge file is complete, the macro copies all the records from the merge file to the main database, deletes the three header records, removes the merge file from the desktop without saving the changes, then changes the *EZP* pathname back to the hard drive.

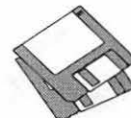
Are we done yet? Nope. We have to make sure that the next person that uses the merge file does not come up with all the records that the last user left behind.

The Finale

To complete the merge, and this article, the macro opens a desk accessory called the *Disk Manager*, and copies a fresh merge file from the hard drive onto the floppy. The natural side effect of this, is the deletion of the used merge file and a clean slate for the next user.

Everything described in this macro takes place in less than thirty seconds with a single key press. This macro in particular is fun to watch and at least five employees have been shocked by it's speed.

Ah yes, the joy of seeing a MS-DOS user drop his mouth open in disbelief. One final item to remember is that you should always test your macro for consistency, and keep in mind all the possible variables... including humans!



Macintosh Disketeria: Phase Three

by Dave Weikert

There are five disks this month including a Member Directory. See the individual headings for the list of revised and new disks. We also revised Mac Disk #00.01, the Mac Files Listing. Descriptions of the files on the new and revised disks are included below.

Fifth Generation Kudos

The Mac Disketeria uses a device called *JUKEBOX FIVE*, manufactured by Fifth Generation Systems, to duplicate 3 1/2 inch disks. *Jukebox* automatically feeds one of up to 15 stacked disks into a Mac internal floppy disk drive and then extracts the disk after backup, duplication or formatting. *Jukebox* has been invaluable to me in creating and maintaining our stock of Mac Disketeria disks. However, our *Jukebox* is almost two years old, has handed nearly 20,000 disks and is now becoming somewhat unreliable. Additionally, we only have one *Jukebox* and needed one for the Apple IIGS Disketeria as well because Apple IIGS disks can be duplicated on a Mac.

Fifth Generation Systems has just donated six *Jukebox* units to WAP for use in the Disketerias. These are units that were returned under warranty and refurbished and they are completely serviceable. We appreciate Fifth Generation's generosity and the Mac and Apple II Disketerias will put them to good use. Marty Milrod started negotiations with Fifth Generation over a year ago to effect this

contribution and we are very happy to reap the benefit of his persistence.

Although Fifth Generation did not request any recognition of their donation, I would feel remiss if I did not mention that Fifth Generation has a wealth of useful commercial products for the Macintosh and for DOS and Windows PCs. I use their *Auto Doubler*, *Disk Doubler*, *Suitcase* and *SuperLaserSpool* utilities and am very pleased with them. *Auto Doubler* and *Disk Doubler* compress files to increase the effective size of your hard disk. *SuitCase* is used to manage multiple fonts, desk accessories, sounds and FKeys and their suitcases. *SuperLaserSpool* and its companion *Laser Queue DA* perform background printing for PostScript and other printers such as *ImageWriters*, *StyleWriter* and *DeskWriters*. Other Mac software distributed by Fifth Generation includes a backup utility, *Fastback Plus*, a screen-saver, *Pyro*, a utilities collection, *Public Utilities* and security utility, *Disk Lock*. If you are in the market for utilities that perform any of these functions, please consider Fifth Generation products.

Member Directory

We now have a Member Directory on disk for the first time. The Directory includes all members who have given us permission to include their names and is current as of December 8, 1992. It is copyrighted by Washington Apple Pi, Ltd. and is for pur-

chase by and use of our members only. Please be considerate when using the directory; many of our members will not appreciate calls late at night or early in the morning. Remember, your idea of early or late may not match that of the person you are calling; please give your callee the benefit of the doubt.

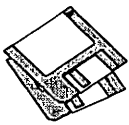
The Member Directory includes member name, telephone, city, state, zip and computer used. The data is contained in an ASCII text file with tab separated fields and return separated records. You can open or import the file into most database or word processing applications for ready reference. The list is initially ordered alphabetically by member name. Once in a database or word processor, you may manipulate the data any way you wish and may create your own sort order and formats.

Member Directory Disks are available in Apple II, Apple IIGS, Apple III and Macintosh formats. The data is contained in a single file (Apple IIGS and Mac) or two files (Apple II and III). The disks are priced at \$4 per disk, regardless of format. We anticipate periodic revisions to the Member Directory.

The Apple IIGS and Macintosh disks also include a PostScript file that may be downloaded to a laser printer. The PostScript file is a fully formatted Member Directory with introduction and two ordered lists; 1) members arranged alphabetically by name and 2) members listed in Zip Code order. Anyone with access to a PostScript printer may print their own directory; it is about 50 pages in length and requires that your PostScript printer have N Helvetica Narrow and Times fonts either resident or downloaded.

System Utilities

Disk series 16.XX now extends through Mac Disk #16.19D with the



addition of three disks this month. These three disks contain new and revised files as of December 1992. Descriptions of the new files are included below.

We used *Compact Pro* to compress most folders or applications that were 100 KBytes or larger. This permitted us to include many more on each disk than in the previous collection. These compressed files (archives) are denoted with a file name that includes a ".sea" postfix; for example, *Disk First Aid 7.1 f.sea*. The archives are self-extracting; just move the archive to your hard disk or to a blank floppy disk and double click the archive to extract it. When extracted, the contents of each archive will appear within a folder.

QuickTime 1.5

The two disk *QuickTime 1.0* set has been replaced with *QuickTime 1.5* on a single disk. *QuickTime 1.5* uses a higher frame rate and larger screen area for Macintosh movies and has a number of other improvements. *QuickTime 1.5* comes with a new version of the Macintosh Scrapbook and a folder with a Scrapbook file and some sample movies. The *QuickTime* folder file is a *Stuffit* ".sit" archive. To expand the *QuickTime* archive just move it and the *Stuffit* Expander application to your hard disk. Drag the archive and drop it on top of *Stuffit* Expander to expand it. When expanded, the contents of the archive will appear within a folder. The *QuickTime* disk is an Apple System Software disk which is \$3.

Looking Ahead

The Mac Disketeria reorganization is almost completed. I am working on the last of the functional series updates and expect to complete the final efforts this month. If all goes well, the remaining cleanup disks will be available next month. After that, I will start working on the

archive library.

I am currently examining alternatives to a printed Mac Disketeria Catalog. Our paper catalog creates a variety of logistics problems. We have to print enough copies to get a decent price break on the printing and yet not so many that the information becomes obsolete. There is a relatively long lead time from information availability until the catalog is available. We need space to store catalogs until they are sold. In the past, this has translated to printing and storing 1,500 to 2,000 catalogs which would last about one to one and a half years. Since we may issue 100 to 200 new and revised Mac disks a year, the printed catalog becomes obsolete very quickly.

I would like to move to a disk based catalog that can be updated more frequently and distributed more easily. I am examining a number of alternatives that would allow you to display the disk descriptions on screen and search for specific file titles or text strings. By next month, I expect to know if it is feasible to create and produce a disk based catalog. If so and if there is sufficient space on the disk, I will also create a PostScript file of a formatted catalog that you can download to a PostScript printer. Stay tuned for details as we try to move our Mac Disketeria forward.

About ShareWare Requests

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

DISK #00.01 — C 1 THE MAC FILE LIST

Files.txt, By Dave Weikert. A delimited text file of all of the files included in our Mac Disketeria. It includes File Name, File Size, File Type, File Creator, Creation Date, Revision Date, and

Folder and Disk Names. You should be able to import this list into your favorite database for sorting and selection and printing. You could also import the list into any word processor that accepts large text files.

DISK #00.03 — C 3 MEMBER DIRECTORY

ReadMeFirst: By Dave Weikert. The statement of copyright and conditions of use that apply to the Member Directory on this disk.

member.txt.A-Z: By Dave Weikert. An ASCII text file with tab separated fields and return separated records. The file includes member name, telephone, city, state, zip and computer used. You can import the file into almost any database or word processing application.

PostScript.Member.Dir: By Dave Weikert. A fully formatted Member Directory with introduction and two ordered lists; 1) members arranged alphabetically by name and 2) members listed in ZIP code order. You download this file to any PostScript printer to print their own directory. The PS printer needs Times and N Helvetica Narrow fonts either resident or downloaded to memory. The printed directory is about 50 pages in length.

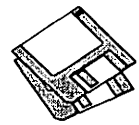
DISK #16.17D — SU 17 SYSTEM UTILITIES

Alias Director 3.2.1 f: By Laurence Harris. Use its drag and drop and keyboard shortcut capabilities to make creating and deleting aliases as easy as using them. With the proper selection, you can send an alias directly to the Apple Menu folder. *Alias Director ReadMe* is in TeachText format. For System 7 and later. *ShareWare* — \$10.

AliasBOSS 2.02 f.sea: By Scott A. Johnson. A flexible utility to manage aliases. Scan the disk for aliases and identify those that are invalid. Trash or link invalid aliases. *ReadMe!* (*AliasBOSS Notes*) is in TeachText format. For System 7 and later. *ShareWare* — \$20.

AppleMenuAdd 1.0 f: By Michael Babin and ITX Corp. An easy way to add aliases of files, folders, and disks to your Apple menu. Features drag and drop or standard selection dialog operation. For System 7 and later. *ReadMe* is in text format.

Application Killer 1.1 f: By Brent Burton. Allows you to kill any running application that supports the standard Apple Events. It can also start applications. Use it to kill the Finder and squeeze that extra bit of memory for an application. *ReadMe* is in text format. *Source* contains source code for the curious.



Auto Shutdown 1.1 f: By Tim Bitson. Use this application to automatically shutdown Mac II class machines at a specified time. ReadMeFirst! is in TeachText format; ReadMe! CD-ROM Press Release is in text format. Requires System 6.0 and later.

CatFinder 1.01 f.sea: By Keith Turner. A utility to catalog the contents of all kinds of disks including floppies, hard drives and removables including CDs. You can easily browse the catalog, search for specific files by name and/or creator and create informative catalog reports. CatFinder User's Guide is in Word format and ReadMe is in text format. Uses Apple Events under System 7 and later to select and launch files. Requires System 6.0.4 and later. *ShareWare* - \$25.

ColorAlias 1.0 f: By Mark Adams. Create an alias of an application that also sets the color or gray scale monitor color depth at launch. It will even set the monitor back to the original settings when you quit the application. ColorAlias ReadMe! is in text format. Requires System 7 and later. *ShareWare* - \$10.

DDExpand™ 3.8 f.sea: By Lloyd Chambers & Terry Morse, Salient Software, Inc. DiskDoubler is a commercial file compression program available for the Macintosh. DDExpand is an expand-only version of DiskDoubler which is provided free of charge to individuals. DDExpand ReadMe in text format.

Defaultem!: By Jim Moore. Change the default applications that open TEXT, PICT, MacWrite, MacPaint, StartUpScreen and FKey files.

DeSEA 1.4 f: By Ken Hancock. DeSEA removes the overhead self-extraction code from files created from self-extracting archives (SEAs). DeSEA first changes the type and creator of the file to the program's native format, renames the file from the self-extraction suffix to the native suffix, strip the resource fork of all the overhead code, and resets the finder flags. Can be run on a single file or on an entire folder of files. Configured for *Disk Doubler*, Compact Pro and *Stuffit Classic/Deluxe*. DeSEA 1.4 Release Notes is in text format.

Desktop Valet v2.1 f: By Michael Love. This utility moves, deletes, shreds or aliases files that are dropped on it. Desktop Valet doc is in text format.

Disk First Aid 7.1 f.sea: By Apple Computer, Inc. Test floppy and hard disks and repair many problems including the disappearing files and folders some have experienced with System 7.0. Instructions (MacWrite II) and Instructions (MS Word) are as indicated.

DiskDup+ 2.14 f: By Roger D. Bates. A disk duplication program written to automate as much as possible the sector-by-sector duplication of a floppy onto one or more duplicates. Performs sector duplication of either 400K, 720K, 800K or 1,440K floppies. Formats copies as single or double sided. ReadMe - DiskDup+ is in TeachText format. *ShareWare* - \$20.

File Commander 1.0 f: By Brian DeMarzo. You can use this to change the file name, creator code, and file type of any (visible) file. File Commander ReadMe!!! is in text format.

DISK #16.18D — SU 18 SYSTEM UTILITIES

File Sharing Toggle f: File Sharing OFF and File Sharing ON. By Adam Stein. An easy way to switch file sharing on and off. For System 7 and later. File Sharing Toggle ReadMe is in MacWrite format. **Blurbs f** and **Ordering f** contain promotional and ordering information respectively. *ShareWare* - \$10.

FinderFont 2.0 f: By Raymond DiBugnara. Install a font about 10 to 20 percent narrower than the standard Geneva font to make Finder file labels narrower. About FinderFont 2.0 is in text format. For System 7 and later.

Font Clerk 4.1 f.sea: By Robert Chancellor. Analyze and report on the type of fonts (PostScript Type 1, TrueType, screen font) installed in your system. Reports include printed font lists, font information and character sheets. Convert TrueType fonts from Macintosh to Windows format. ReadMe is in double clickable DOCMaker application format. *ShareWare* - \$10.

MacUpdate 2.1 f: By Richard E. Fiegle. Compares modification dates of files in a local folder with another mounted volume and updates the local folder files to the same date. MacUpdate Documentation is in text format. *ShareWare* - \$5.

MyBattery 1.21 f: By Jeremy Kezer. Provides Mac Portable, PowerBook and Duo users with battery voltage, current and estimated useful time and battery charger status. MyBattery 1.21 manual (Word 4) is as indicated; MyBattery registration form is in text format. For System 6.0.8 and later. *ShareWare* - \$10.

PB Numeric Keypad f: By David Kreindler. Drag the appropriate keyboard resource into your System file and then use the Keyboard control panel to activate the one you want. By holding down the option and ctrl keys, you will have a numeric keypad on your PowerBook. ReadMe is in text format.

PowerAlias 1.0 f: By Andrew Anker. Consolidates

up to five application aliases into a single icon. Use drag and drop along with a keyboard key to launch the specific one. ReadMe is in TeachText format. For System 7 and later. *ShareWare* - \$5.

PowerStrip f: By Michael Caputo. Counts the elapsed time of battery and AC-charging sessions for Portables, PowerBooks and Duos. It also displays available space on the internal hard drive, available RAM, and whether the modem is turned on or not. *ShareWare* - see the About item.

PrefsCleaner 1.0 f: By Lus Pauwels. At last! A solution for the first cousins of Word Temp files and closet coat hangers. Gets rid of 'orphaned' Prefs files in the Preferences folder. PrefsCleaner Docs is in TeachText format. *ShareWare* - \$15.

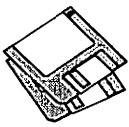
Ram Preserves 1.0 f: By Richard McLeod. Copies a desired hard disk file structure to a PowerBook RAM disk at startup. Future plans include copying modified files back to the hard disk at shutdown. Ram Preserves.doc is in Word format. For System 7 and later. *ShareWare* - \$5.

Sad Mac Error Codes 1.1: The diagnostic error codes for different versions of the Macintosh in Word format.

Save a BNDL 1.3 f: By Michael S. Engber. Gets the Finder to recognize changes in a file's BNDL resource without requiring rebuilding the desktop or rebooting. about Save a BNDL is in text format. Flip A BNDL 1.0 exchanges the icons of two applications until the desktop is again rebuilt. Requires System 7.0 or later.

System 7 Pack 3.2 f: By Adam Stein. Allows you to change, add, and delete command key combinations. Permits you to change the rename delay built into System 7. Allows you to set the default Application used to open text and PICT documents when the creator applications are not available. You can create new links between documents and applications; for example, MacWrite documents can be linked to open under MS-Word. Note From Adam Stein and Upgraders! Please Read are in text format; System 7 Pack! 3.0 ReadMe and others are in MacWrite format. For System 7 and later. *ShareWare* - \$29.95.

TattleTale Appl 1.5.4 f.sea: By John Mancino. Collects very complete information about your computer and its system related software. You may view information on screen by category, print it, write to a standard text file in standard or a special Bug Report format, or output it in database readable format. TattleTale App Docs.Text and TattleTale App Docs.MWII are in text and MacWrite II formats respectively.



Requires System 4.2 and higher.

TypeChanger 1.2 f: By HALESTORM, INC. Another ubiquitous utility to change the type and creator of files; this one is drag and drop. TypeChanger.doc is in text format. *ShareWare* - \$10.

**DISK #16.19D — SU 19
SYSTEM UTILITIES**

Stuffit Converter 3.0.2 f: By Leonard Rosenthol. Converts Compact Pro archives, AppleLink packages and older versions of *Stuffit* archives to *Stuffit* 3.0 archives. *Stuffit Converter* 3.0.2 ReadMe is in text format.

Stuffit Expander™ 3.0 f: *Stuffit Expander™*: By Leonard Rosenthol. Decompress any non-encrypted Macintosh archives compressed with *Stuffit*, Compact Pro or AppleLink packages. Also decodes files which have been encoded by BinHex 4.0 (or a compatible product). *Stuffit Expander* 3.0 Docs is in text format. Requires System 6.0.4 or later.

Stuffit Lite™ 3.0.3 Install.sea: By Raymond Lau and Aladdin Systems, Inc. The *Stuffit* series of programs create a type of file called an archive,

which is a collection of one or more files and folders that have been reduced in size through compression. *Stuffit Lite* includes some of the features of *Stuffit Deluxe*, Raymond's commercial program. Easy to install, just double click and follow the directions. *Stuffit Lite* User's Guide is in DOCMaker application format and *Stuffit Lite* ReadMe is in text format. *ShareWare* - \$25.

UnZip 2.0 f.sea: By Peter Maika. A utility for decompressing files archived by the popular PC utility PKZIP. It includes text conversion from DOS and UNIX to Mac formats and selected DOS extension to Mac Type and Creator mapping. *UnZip 2.0 Docs* is in DOCMaker application format.

ZoomSwitch 1.1 f: By Kristofer H. Cruz. Speed up your Mac's screen operation by turning off the zooming of windows as they are opened

and closed. *ZoomSwitch Docs* is in Word format. For System 7 and later.

**DISK #QT.15
QUICKTIME 1.5**

QuickTime 1.5.sit: By Apple Computer, Inc. *QuickTime™* is the System Extension. *QuickTimeReadMe* is a TeachText formatted document that explains how to install *QuickTime* extension and Scrapbook. **Replacement Scrapbook File** includes Scrapbook File ReadMe, Scrapbook File and sample movies. Scrapbook is a DA that replaces the earlier version of the same name. TeachText is used to read the documentation.

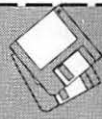
Stuffit Expander™ 1.0.1 f: By Leonard Rosenthol. Decompresses the *QuickTime.sit* file compressed with *Stuffit*. *Stuffit Expander* Docs is in TeachText format.

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	Name		
— 4 or less @	\$4.00=	_____	Box Number, Apartment, Suite, etc.		
— 5 or more @	\$3.50=	_____	Street Address		
— Sets (marked above) + postage \$1.00/disk, maximum \$5.00.	\$ (above)	_____	City		State
— Disk Catalogs + \$1.50 postage	\$4.50	_____	Day Telephone		Evening Telephone
TOTAL AMOUNT DUE			\$ _____		



Macintosh Library Order Form



Pi Library

- ___ 0.01 - C 01 Files
- ___ 0.02 - C 02 Sampler
- ___ 0.03 - C 03 Directory

- ___ 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

- ___ 12.21 - S 21
- ___ 12.22 - S 22
- ___ 12.23 - S 23
- ___ 12.24 - S 24
- ___ 12.25 - S 25
- ___ 12.26 - S 26
- ___ 12.27 - S 27
- ___ 12.28 - S 28
- ___ 12.29 - S 29
- ___ 12.30 - S 30
- ___ 12.31 - S 31

- ___ 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

- ___ 19.31 - SW 31
- ___ 19.32 - SW 32
- ___ 19.33 - SW 33
- ___ 19.34 - SW 34
- ___ 19.35 - SW 35 †
- ___ 19.36 - SW 36 †
- ___ 19.37 - SW 37
- ___ 19.38 - SW 38

Anti-Virus Utilities#

- ___ 1.01G - AV 1
- ___ 1.02G - AV 2
- ___ 1.03G - AV 3

INIT's & CDev's#

- ___ 17 disk set; \$51
- ___ 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

Telecommunications#

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

Programmer/Hacker

- ___ 24 disk set; \$72
- ___ 14.01 - PH 1
- ___ 14.02 - PH 2
- ___ 14.04 - PH 4
- ___ 14.05 - PH 5
- ___ 14.06 - PH 6
- ___ 14.07 - PH 7
- ___ 14.08 - PH 8
- ___ 14.09 - PH 9
- ___ 14.10 - PH 10
- ___ 14.11 - PH 11
- ___ 14.12 - PH 12
- ___ 14.13 - PH 13
- ___ 14.14 - PH 14
- ___ 14.15 - PH 15
- ___ 14.16 - PH 16
- ___ 14.17 - PH 17
- ___ 14.18 - PH 18
- ___ 14.19 - PH 19
- ___ 14.20 - PH 20
- ___ 14.21B - PH 21
- ___ 14.22A - PH 22
- ___ 14.23 - PH 23
- ___ 14.24 - PH 24
- ___ 14.25 - PH 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

HyperCard StackWare

- ___ 44 disk set; \$132
- ___ 19.01A - SW 1
- ___ 19.02A - SW 2
- ___ 19.03 - SW 3
- ___ 19.04 - SW 4
- ___ 19.05 - SW 5
- ___ 19.06 - SW 6
- ___ 19.07 - SW 7
- ___ 19.08 - SW 8
- ___ 19.09 - SW 9
- ___ 19.10 - SW 10
- ___ 19.11 - SW 11
- ___ 19.12 - SW 12
- ___ 19.13 - SW 13
- ___ 19.14 - SW 14
- ___ 19.15 - SW 15
- ___ 19.16 - SW 16
- ___ 19.17 - SW 17
- ___ 19.18 - SW 18
- ___ 19.19 - SW 19
- ___ 19.20 - SW 20
- ___ 19.21 - SW 21
- ___ 19.22 - SW 22
- ___ 19.23 - SW 23
- ___ 19.24 - SW 24
- ___ 19.25 - SW 25
- ___ 19.26 - SW 26
- ___ 19.27 - SW 27
- ___ 19.28 - SW 28
- ___ 19.29 - SW 29
- ___ 19.30 - SW 30

Mac II Series

- ___ 11 disk set; \$33
- ___ 20.01 A - M II 1
- ___ 20.02 A - M II 2
- ___ 20.03 A - M II 3
- ___ 20.04 A - M II 4
- ___ 20.05 A - M II 5
- ___ 20.06 A - M II 6
- ___ 20.07 A - M II 7
- ___ 20.10 A - M II 10
- ___ 20.11 A - M II 11
- ___ 20.12 A - M II 12
- ___ 20.13 A - M II 13

Fun & Games Series

- ___ 22.01 - F/G 1
- ___ 22.02 - F/G 2
- ___ 22.03 - F/G 3

HyperCard Externals

- ___ 5 disk set; \$15
- ___ 21.01 - HE 1
- ___ 21.02 - HE 2
- ___ 21.03 - HE 3
- ___ 21.04 - HE 4
- ___ 21.05 - HE 5

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 1.5 - 1 disk; \$3
- ___ TrueType - 2 disk set; \$6

HyperCard Update

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

- 19.35† 6 disk set; \$15
- 19.36† 2 disk set; \$7

(‡) on 1.44 Meg diskette
Revised disk series

Desk Accessories#

- ___ 10 disk set; \$30
- ___ 2.01D - DA's 1
- ___ 2.02D - DA's 2
- ___ 2.03D - DA's 3
- ___ 2.04D - DA's 4
- ___ 2.05D - DA's 5
- ___ 2.06D - DA's 6
- ___ 2.07D - DA's 7
- ___ 2.08D - DA's 8
- ___ 2.09D - DA's 9
- ___ 2.10D - DA's 10

F Keys (Function Keys)

- ___ 4.01A - FK's 1
- ___ 4.02A - FK's 2

Miscellaneous

- ___ 10.01 - M 1

ImageWriter Fonts#

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

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

PostScript Fonts#

- ___ 16 disk set; \$48
- ___ 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

Digitized Sounds

- ___ 31 disk set; \$93
- ___ 12.01A - S 1
- ___ 12.02A - S 2
- ___ 12.03 - S 3
- ___ 12.04 - S 4
- ___ 12.05 - S 5
- ___ 12.06 - S 6
- ___ 12.07 - S 7
- ___ 12.08 - S 8
- ___ 12.09 - S 9
- ___ 12.10 - S 10
- ___ 12.11 - S 11
- ___ 12.12 - S 12
- ___ 12.13 - S 13
- ___ 12.14 - S 14
- ___ 12.15 - S 15
- ___ 12.16 - S 16
- ___ 12.17 - S 17
- ___ 12.18 - S 18
- ___ 12.19 - S 19
- ___ 12.20 - S 20

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#

- ___ 16 disk set; \$48
- ___ 16.01D - SU 1
- ___ 16.02D - SU 2
- ___ 16.03D - SU 3



Apple Disk Library

compiled by John Ruffatto

The Apple Disk Library has been updated and reformatted to enable you to more easily locate those disks in which you are interested. 3.5" disks are listed first, followed by 5.25" disks. Look for the and icons which distinguish them. For your reference - the numbers shown in parentheses () after the disk names are the old disk numbers. SW after the disk description indicates that it is ShareWare.

Eamon Adventure Listing:

Codes:-D = DOS 3.3 P = ProDOS PLC = ProDOS Lower Case

- | | |
|--------------------------------------|--|
| 1. Main Hall & Beginners Cave - D | 93. Flying Circus - P |
| 2. The Lair of the Minotaur - D | 97. The House of Secrets - D - P |
| 3. The Cave of the Mind - D | 98. Slave Pits of Kzorland - D |
| 4. The Zephyr Riverventure - D | 99. In the Clutches of Torrik - P |
| 5. Castle of Doom -D - P | 100. Sorcerer's Spire - P |
| 6. The Death Star -D | 106. Camp Eamon - P |
| 7. The Devil's Tomb -D | 107. The Last Dragon - PLC |
| 8. The Abductor's Quarters - D - P | 108. The Mines of Moria - PLC |
| 10. The Magic Kingdom - D | 109. The Forest of Fear - P |
| 11. The Tomb of Molinar - D | 112. Hills of History - P |
| 12. The Quest for Trezore -D - P | 113. The Life-Orb of Mevtrelek - P |
| 13. Caves of Treasure Island - D | 114. Thror's Ring - PLC |
| 14. Furioso - D | 117. Dungeon of Doom - P |
| 15. Heroes Castle - D | 118. Pittfall - PLC |
| 16. The Caves of Mondamen -D - P | 119. Grunewalde - P |
| 17. Merlin's Castle - D | 120. Orb of My Life - PLC |
| 18. Hogarth Castle - D | 121. Wrenhold's Secret Vigil - P |
| 19. Death Trap - D - P | 124. Assault on Dolni Keep - PLC |
| 20. The Black Death - D - P | 126. The Pyramid of Anharos - P - PLC |
| 21. The Quest for Marron - P | 127. The Hunt for the Ring - P |
| 22. The Senator's Chambers - P | 128. Quest of Erebor - P |
| 23. The Temple of Nгурct -D - P | 129. Return to Moria - P - PLC |
| 24. Black Mountain - D - P - PLC | 130. Haradwaith - P |
| 25. Nuclear Nightmare - D - P | 131. Nucleus of the Ruby - PLC |
| 26. Assault on the Mole Man - P | 132. Rhadshur Warrior - P |
| 27. Revenge of the Mole Man - P | 137. The Ruins of Ivory Castle - P |
| 28. The Tower of London - P | 138. Starfire - PLC |
| 29. The Lost Island of Apple - D | 139. Peg's Place - P |
| 30. The Underground City - D | 142. The Beermeister's Brewery - P |
| 31. The Gauntlet - D | 143. The Alternate Zone - P |
| 33. The Orb of Polaris - D - PLC | 145. Buccaneer! - P |
| 34. Death's Gateway - D - PLC | 146. The House of Horrors - P |
| 35. The Lair of Mutants - P | 147. The Dark Brotherhood - PLC |
| 36. The Citadel of Blood - P | 148. Journey to Jotunheim - P - PLC |
| 37. Quest for the Holy Grail - D - P | 149. Elemental Apocalypse - P |
| 38. City in the Clouds - D - P | 150. Walled City of Darkness - P - PLC |
| 39. Museum of Unnatural History - P | 154. A Trip to Fort Scott - P |
| 41. Caverns of Lanst - D - P | 155. Tomb of the Vampire - P |
| 42. Alternate Beginners Cave - D | 158. The Lair of Mr. Ed - P |
| 43. Priests of Xim! - D | 159. The Bridge of Catzad-Dum - P |
| 44. Escape from the Orc Lair - D | 160. Monty Python & Holy Grail - P |
| 45. SwordQuest - D - P | 161. Operation Endgame - PLC |
| 46. Lifequest - D | 162. Eamon 7.0 Demo Adventure - P |
| 47. FutureQuest - D - P | 163. The Sands of Mars - P |
| 48. Picnic in Paradise - P | 164. A Real Cliffhanger - P |
| 49. The Castle Kophinos - P | 165. Animal Farm - P |
| 51. The Caves of Eamon Bluff - P | 166. Storm Breaker - P |
| 53. Feast of Carroll - D - P | 169. The Black Phoenix - PLC |
| 54. Crystal Mountain - D | 170. Ragnarok Revisited - P |
| 55. The Master's Dungeon - D - P | 183. The Boy and the Bard - P |
| 56. The Lost Adventure - D - P | 188. Encounter: The Bookworm - P |
| 57. The Manxome Foe - D | 191. Enhanced Beginners Cave - P |
| 58. The Land of Death - P | 194. Attack of the Kretons - PLC |
| 60. The Sewers of Chicago - D | 195. The Training Ground - P |
| 64. Modern Problems - P | 198. Revenge of the Bookworm - P |
| 68. The Smith's Stronghold - P | 204. Sanctuary - P - PLC |
| 69. The Black Castle of NaGog - PLC | 205. Utterly Outrageous - P |
| 73. The Deep Canyon - P | 206. Curse of the Hellsblade - PLC |
| 74. DharmaQuest - P | 208. Assault on Helstar - P |
| 75. Temple of the Guild - P | 211. Lair of the Marauders - P |
| 76. The Search for Yourself - P | 213. Demongate - P |
| 77. Temple of the Trolls - PLC | 214. Deathstalker's Castle - P |
| 78. The Prince's Tavern - PLC | 215. Treasure Island - P |
| 80. The Search for the Key(80a) - P | Unk. Temple of the Undead - D |
| 81. The Rescue Mission (80b) - P | Beginners Cave - P (Pro.Eamon.01) |
| 86. Castle Mantru - P | Dungeon Designer - D |
| 87. Caves of Hollow Mountain - P | Dungeon Designer Diskette, V.7.0 - P |
| 90. The Doomsday Clock - P | Eamon Utilities Diskette - P |
| 91. FutureQuest II - PLC | Eamon Utilities 2 & 3 - D |
| 92. The Fugitive - P | Graphics Main Hall - All P & PLC Disks |

3.5" DISKS

Apple II GS

IIGS SYSTEM DISKS

- ___ GSAS-01 System 5.04 - 2 Disk Set - \$6
- ___ GSAS-02 Hyper Mover v. 1.1 (Mac/GS)-2 Disk Set - \$6
- ___ GSAS-03 GS Bug & Debugging Tools - V. 1.6 - \$3
- ___ GSAS-04 System 6.0 - 6 Disk Set - \$18

IIGS COMMUNICATIONS (4 DISK SET-\$12)

- ___ GSCM-01C FreeTerm - (2003)
- ___ GSCM-02B SnowTerm - (SW)
- ___ GSCM-03 Mega Term V. 1.3
- ___ GSCM-04 Generic Term V. 3.2 / Telecom V. 0.28

IIGS DEMO (21 DISK SET-\$63.00)

- ___ GSDM-01 Cartooner's Demo
- ___ GSDM-02 Deluxe Paint II Demo
- ___ GSDM-03 Music Studio Demo
- ___ GSDM-04 Beagle Write GS Demo
- ___ GSDM-05 Calendar Crafter Demo
- ___ GSDM-06 G.A.T.E. Demo
- ___ GSDM-07 Crystal Quest, Dragon Wars, Pyramid GS
- ___ GSDM-08 Diversi-Tune, Nexus, ProSel 16, Salvation
- ___ GSDM-09 Shanghai Demo & Extra Tile Sets
- ___ GSDM-10 Medley V. 2.0 Demo
- ___ GSDM-11 Battle Chess Demo
- ___ GSDM-12 Task Force Demo
- ___ GSDM-13 Genesis, ProTerm 2.2, TIC
- ___ GSDM-14 Space Harrier Demo
- ___ GSDM-15 HCGS Screens, MasterTracks Jr., SysEx MIDI
- ___ GSDM-16 AC Basic, Design Master, GS16 Forth, Micol, MicroDot
- ___ GSDM-17 GeNav, ProTerm 3.0, Viad Promo
- ___ GSDM-18 World Geography Program - Disk 1
- ___ GSDM-19 World Geography Information - Disk 2
- ___ GSDM-20 ABC Zoo, AnsiTerm, Dream Graphics. Math Blaster Plus
- ___ GSDM-21 Battle Axe, Deluxe Tetris

IIGS DESK ACCESSORIES (15 DISK SET-\$45)

- ___ GSDA-01 Desk Accessories 1 - (2020) - (SW)
- ___ GSDA-02 Desk Accessories 2 - (SW)
- ___ GSDA-03 Desk Accessories 3 - (SW)
- ___ GSDA-04 Desk Accessories 4 - (SW)
- ___ GSDA-05 Desk Accessories 5 - (SW)
- ___ GSDA-06 Desk Accessories 6 - (SW)
- ___ GSDA-07 Desk Accessories 7 - (SW)
- ___ GSDA-08 Desk Accessories 8 - (SW)
- ___ GSDA-09 Desk Accessories 9 - (SW)
- ___ GSDA-10 Desk Accessories 10 - (SW)
- ___ GSDA-11 Desk Accessories 11 - (SW)
- ___ GSDA-12 Desk Accessories 12
- ___ GSDA-13 Desk Accessories 13
- ___ GSDA-14 Desk Accessories 14
- ___ GSDA-15 Desk Accessories 15

IIGS DEVELOPER (11 DISK SET-\$33)

- ___ GSDV-01 Demo Source Code 1 - (2005)
- ___ GSDV-02 Demo Source Code 2 - (2006)
- ___ GSDV-03 Shell Applications (EXE) 1 - (SW)
- ___ GSDV-04 Shell Applications (EXE) 2 - (SW)
- ___ GSDV-05 Miscellaneous Developer Files 1 - (SW)
- ___ GSDV-06 Miscellaneous Developer Files 2
- ___ GSDV-07 Miscellaneous Developer Files 3
- ___ GSDV-08 Miscellaneous Developer Files 4
- ___ GSDV-09 Miscellaneous Developer Files 5
- ___ GSDV-10 Miscellaneous Developer Files 6
- ___ GSDV-11 Miscellaneous Developer Files 7



IIGS EDUCATION (7 DISK SET-\$21)

- ___ GSED-01 Astr. GS: Astronomer - Disk 1 - (SW)
- ___ GSED-02 Astr. GS: Moon 1 - Disk 2 - (SW)
- ___ GSED-03 Astr. GS: Planets 1 - Disk 3 - (SW)
- ___ GSED-04 Astr. GS: Planets 2 - Disk 4 - (SW)
- ___ GSED-05 Astr. GS: sTools - Disk 5 - (SW)
- ___ GSED-06 Astr. GS: Sun - Disk 6 - (SW)
- ___ GSED-07 Astr. GS: Utilities 1 - Disk 7 - (SW)

IIGS FONTS (27 DISK SET-\$81)

- ___ GSFT-01 A-Plain
- ___ GSFT-02 A-Fancy, Foreign, Graphic
- ___ GSFT-03 B-Plain, Foreign, Graphic
- ___ GSFT-04 B-Plain, Fancy
- ___ GSFT-05 C-Plain
- ___ GSFT-06 C-Plain
- ___ GSFT-07 C-Graphic, Foreign
- ___ GSFT-08 C-Fancy
- ___ GSFT-09 D-Plain, Fancy, Foreign, Graphic
- ___ GSFT-10 E-Plain, Fancy, Foreign, Graphic
- ___ GSFT-11 F-Plain, Fancy, Graphic
- ___ GSFT-12 G-Foreign, Fancy
- ___ GSFT-13 H-Fancy, Foreign
- ___ GSFT-14 I
- ___ GSFT-15 J
- ___ GSFT-16 K
- ___ GSFT-17 L
- ___ GSFT-18 M-Foreign
- ___ GSFT-19 M-Plain
- ___ GSFT-20 M-Graphic
- ___ GSFT-21 N-Plain, Fancy
- ___ GSFT-22 N-Foreign, Graphic
- ___ GSFT-23 O
- ___ GSFT-24 P-Foreign, Graphic
- ___ GSFT-25 P-Plain, Fancy
- ___ GSFT-26 Q
- ___ GSFT-27 R
- ___ GSFT-28 S-Fancy
- ___ GSFT-29 T-Fancy
- ___ GSFT-30 S-Plain, Graphic
- ___ GSFT-31 S-Foreign
- ___ GSFT-32 T-Plain
- ___ GSFT-33 T-Foreign, Graphic
- ___ GSFT-34 U
- ___ GSFT-35 V
- ___ GSFT-36 W
- ___ GSFT-37 Y
- ___ GSFT-38 Z

IIGS GAMES (31 DISK SET-\$93)

- ___ GSGM-01A Mean 18 Golf Courses - (2007)
- ___ GSGM-02A Mean 18 Golf Courses 2 - (2018)
- ___ GSGM-03 Bouncing Bluster Boot Disk - (SW)
- ___ GSGM-04 Bouncing Bluster Data & Docs - (SW)
- ___ GSGM-05 Bouncing Bluster Consn. Set - (SW)
- ___ GSGM-06 Games 1 - (SW)
- ___ GSGM-07 Games 2 - (SW)
- ___ GSGM-08 Games 3 - (SW)
- ___ GSGM-09 Games 4 - (SW)
- ___ GSGM-10 Games 5 - (SW)
- ___ GSGM-11 Games 6 - (SW)
- ___ GSGM-12 Games 7 - (SW)
- ___ GSGM-13 Games 8 - (SW)
- ___ GSGM-14 Games 9 - (SW)
- ___ GSGM-15 Games 10 - (SW)
- ___ GSGM-16 Games 11 - (SW)
- ___ GSGM-17 Mean 18 Golf Courses 3
- ___ GSGM-18 Games 12 - (SW)
- ___ GSGM-19 Games 13 - (SW)
- ___ GSGM-20 Games 14
- ___ GSGM-21 Columns GS V. 2.0 - (SW)
- ___ GSGM-22 Lode Runner GS
- ___ GSGM-23 Games 15
- ___ GSGM-24 Games 16
- ___ GSGM-25 Games 17
- ___ GSGM-26 Games 18

- ___ GSGM-27 Games 19
- ___ GSGM-28 Sensei
- ___ GSGM-29 Easy Dead
- ___ GSGM-30 Space Cluster
- ___ GSGM-32 Explorer GS

IIGS GRAPHICS (31 DISK SET-\$93)

- ___ GSGX-01 Demo Disk A - (2002)
- ___ GSGX-02 Slide Show 1 - (2004)
- ___ GSGX-03 Slide Show 2 - (2016)
- ___ GSGX-04 Slide Show 3 - (2017)
- ___ GSGX-05 Nucleus Demo-ROM 3
- ___ GSGX-06 GIF Graphics 1 - (SW)
- ___ GSGX-07 Pics and Utilities 1 - (SW)
- ___ GSGX-08 Pics and Utilities 2
- ___ GSGX-09A Pics and Utilities 3
- ___ GSGX-10 Pics and Utilities 4 - (SW)
- ___ GSGX-11 Modulæ
- ___ GSGX-12 Paula Abdul Demo
- ___ GSGX-13A Pics and Utilities 5 - (SW)
- ___ GSGX-14 Slide Show 4
- ___ GSGX-15 Slide Show 5
- ___ GSGX-16 Nucleus Demo-ROM 1 - (2024)
- ___ GSGX-17 PSGS Graphics 1-Color
- ___ GSGX-18 PSGS Graphics 2-Mono
- ___ GSGX-19 PSGS Graphics 3-Mono
- ___ GSGX-20 Marilyn Monroe Slide Show
- ___ GSGX-21 Pics and Utilities 6 - (SW)
- ___ GSGX-22 Pics and Utilities 7
- ___ GSGX-23 3200 Pics 1
- ___ GSGX-24 3200 Pics 2
- ___ GSGX-25 FTA Xmas Demo
- ___ GSGX-26 FTA Delta Demo
- ___ GSGX-27 Animaga
- ___ GSGX-28 Sap V. 0.5
- ___ GSGX-30 Sap Spin
- ___ GSGX-31 Pics and Utilities 8
- ___ GSGX-32 Pics and Utilities 9

IIGS HYPERCARD (6 DISK SET-\$18)

- ___ GSHC-01 HyperCard Utilities 1 - (SW)
- ___ GSHC-02 HyperCard Utilities 2 - (SW)
- ___ GSHC-03 HyperCard Utilities 3 - (SW)
- ___ GSHC-04 Utilities: General 1 - (SW)
- ___ GSHC-05 Fun & Games: General 1 - (SW)
- ___ GSHC-06 Fun & Games: Eamon 1

IIGS HYPERSTUDIO- DEMO (10 DISK SET- \$30)

- ___ GSHS-01 HS System-Demo Version
- ___ GSHS-02 HS Demo-Demo Version
- ___ GSHS-03 HS Sounds-Demo Version
- ___ GSHS-04 More Stacks-Demo Version
- ___ GSHS-05 More Stacks 2-Demo Version
- ___ GSHS-06 Video Demo-Demo Version
- ___ GSHS-07 Comm Stack-Demo Version
- ___ GSHS-08 MUG 087-Demo Version
- ___ GSHS-09 USA-Demo Version
- ___ GSHS-10 HS Art 2-Demo Version

IIGS HYPERSTUDIO (13 DISK SET - \$39)

- ___ GSHS-11 Miscellaneous HS Stacks 1
- ___ GSHS-12 Miscellaneous HS Stacks 2 - (SW)
- ___ GSHS-13 Arizona Stack Disk 1
- ___ GSHS-14 Arizona Stack Disk 2
- ___ GSHS-15 Photography Stack Disk 1
- ___ GSHS-16 Photography Stack Disk 2
- ___ GSHS-17 1906 SF Earthquake & Fire Disk 1
- ___ GSHS-18 1906 SF Earthquake & Fire Disk 2
- ___ GSHS-19 Miscellaneous HS Stacks 3
- ___ GSHS-20 Miscellaneous HS Stacks 4
- ___ GSHS-21 Miscellaneous HS Stacks 5 - (SW)
- ___ GSHS-22 Miscellaneous HS Stacks 6
- ___ GSHS-23 SoundSmith Song Player XCmd

IIGS ICONS (11 DISK SET-\$33)

- ___ GSIC-01A Finder Icons 1 - (2022) - (SW)
- ___ GSIC-02A Finder Icons 2 - (SW)
- ___ GSIC-03A Finder Icons 3 - (SW)
- ___ GSIC-04A Finder Icons 4 - (SW)

- ___ GSIC-05A Finder Icons 5 - (SW)
- ___ GSIC-06A Finder Icons 6 - (SW)
- ___ GSIC-07A Finder Icons 7 - (SW)
- ___ GSIC-08 Finder Icons 8 - (SW)
- ___ GSIC-09 Finder Icons 9 - (SW)
- ___ GSIC-10 Finder Icons 10 - (SW)
- ___ GSIC-11 Finder Icons 11 - (SW)

IIGS MISCELLANEOUS

- ___ GSMS-01 New Member's Disk - (2000) - (SW)
- ___ GSMS-02B GS Disk Library Catalog Disk 1
- ___ GSMS-03B GS Disk Library Catalog Disk 2

IIGS MUSIC (39 DISK SET \$117)

- ___ GSMU-01A SoundSmith and Songs - (SW)
- ___ GSMU-02 SoundSmith Songs 1
- ___ GSMU-03 SoundSmith Songs 2
- ___ GSMU-04 SoundSmith Songs 3
- ___ GSMU-05 SoundSmith Songs 4
- ___ GSMU-06 SoundSmith Songs 5
- ___ GSMU-07 Diversi-Tune (C) Songs 1
- ___ GSMU-08 Music Studio Songs 1
- ___ GSMU-09 MS Songs 2 (Golden Album Rock 2)
- ___ GSMU-10 A Variey Pack of Songs
- ___ GSMU-11 SoundSmith Songs 6
- ___ GSMU-12 MCS Song "Slide Show"
- ___ GSMU-13 Noisetacker V. 1.0
- ___ GSMU-14 SoundSmith Songs 7
- ___ GSMU-15 SoundSmith Songs 8
- ___ GSMU-16 Music & Speech
- ___ GSMU-18 Noisetacker Songs 1
- ___ GSMU-19 Noisetacker Songs 2
- ___ GSMU-20 Noisetacker Songs 3
- ___ GSMU-21 Noisetacker Songs 4
- ___ GSMU-22 GS-IRC Music Disk 1
- ___ GSMU-23 Noisetacker Songs 5
- ___ GSMU-24 Noisetacker Songs 6
- ___ GSMU-25 Noisetacker Songs 7
- ___ GSMU-26 Noisetacker Songs 8
- ___ GSMU-27 Noisetacker Songs 9
- ___ GSMU-28 Noisetacker Songs 10
- ___ GSMU-29 Noisetacker Songs 11
- ___ GSMU-30 Noisetacker Songs 12
- ___ GSMU-31 Noisetacker Songs 13
- ___ GSMU-32 Noisetacker Songs 14
- ___ GSMU-33 Noisetacker Songs 15
- ___ GSMU-34 Noisetacker Songs 16
- ___ GSMU-35 Noisetacker Songs 17
- ___ GSMU-36 Noisetacker Songs 18
- ___ GSMU-37 Noisetacker Songs 19
- ___ GSMU-38 Noisetacker Songs 20
- ___ GSMU-39 Noisetacker Songs 21
- ___ GSMU-40 Noisetacker Songs 22

IIGS SOUNDS (16 DISK SET-\$48)

- ___ GSSN-01A Sounds 1 - (2014)
- ___ GSSN-02A Sounds 2-Nostalgia - (2015)
- ___ GSSN-03 Sounds 3
- ___ GSSN-04 Sounds 4
- ___ GSSN-05 Sounds 5-Simpsons 1
- ___ GSSN-06 Sounds 6-Simpsons 2
- ___ GSSN-07 Sounds 7
- ___ GSSN-08 Sounds 8
- ___ GSSN-09 Sounds 9
- ___ GSSN-10 Sounds 10
- ___ GSSN-11 Sounds 11
- ___ GSSN-12 Sounds 12-Cartoons 1
- ___ GSSN-13 Sounds 13-Cartoons 2
- ___ GSSN-14 Sounds 14-Cartoons 3
- ___ GSSN-15 Sounds 15-Cartoons 4
- ___ GSSN-16 Sounds 16-Cartoons 5

IIGS UTILITIES (14 DISK SET-\$42)

- ___ GSUT-01B Utilities 1 - (2001) - (SW)
- ___ GSUT-02 JumpStart Prog Sel V. 3 - (2021)
- ___ GSUT-03A Utilities 2 - (2028) (SW)
- ___ GSUT-04A Utilities 3 - (2029) (SW)
- ___ GSUT-05A Utilities 4 - (SW)
- ___ GSUT-06A ZZ Copy-V. 2.21 Disk Copier



- ___ GSUT-07A Utilities 5 - (SW)
- ___ GSUT-08D Utility Works GS V. 2.01 (SW)
- ___ GSUT-09 Utilities 6 - (SW)
- ___ GSUT-10 Utilities 7 - (SW)
- ___ GSUT-11B Utility Works Launcher v. 2.3.1-(SW)
- ___ GSUT-12 Utilities 8
- ___ GSUT-13 Utilities 9
- ___ GSUT-14 Desktop Utilities V. 3.3

3.5" DISKS

APPLE II

APPLE SYSTEM DISKS

- ___ 2APS-01 System Disk - Utilities v. 3.2- \$3

APPLEWORKS

- ___ 2AWK-01 Claris Tech Support for AW / AW-GS

COMMUNICATIONS

- ___ 2COM-01 TCS Instructions 1.05
- ___ 2COM-02 Applenet V. 1.3
- ___ 2COM-03 Comm. Sys. 2.5/Z.Link 12.15 /Utilities

EAMON (ProDOS): (17 DISK SET (\$ 51)

- ___ 2EAM-01A Dungeon Designer, Utilities, Etc.
- ___ 2EAM-02 Adv 1, 5, 8, 12, 16, 19, 20, 21
- ___ 2EAM-03 Adv 22, 23, 24, 25, 26, 27, 28
- ___ 2EAM-04 Adv 35, 36, 37, 38, 39, 41, 45
- ___ 2EAM-05 Adv 47, 48, 49, 51, 53, 55, 56
- ___ 2EAM-06 Adv 58, 64, 68, 73, 74, 75, 76, 86
- ___ 2EAM-07 Adv 80, 81, 87, 90, 92, 93, 97
- ___ 2EAM-08 Adv 99, 100, 106, 109, 112, 113
- ___ 2EAM-09 Adv 117, 119, 121, 126, 155
- ___ 2EAM-10 Adv 127, 128, 129, 130, 132
- ___ 2EAM-11 Adv 139, 145, 148, 150, 154
- ___ 2EAM-12 Adv 149, A, B, C, D
- ___ 2EAM-13 Adv 158, 160, 166, 166A, 166B
- ___ 2EAM-14 Adv 170, 183, 191, 195, 204
- ___ 2EAM-21 Adv 137,142,143,188,208,215
- ___ 2EAM-22 Adv 146,164,198,205,211,213
- ___ 2EAM-23 Adv 159,163,165,214

EAMON (ProDOS) (LOWER CASE) (7 DISK SET \$21)***

- ___ 2EAM-15 Adv 33, 69, 77, 118, 124, 150
- ___ 2EAM-16 Adv 34, 120, 138, 161
- ___ 2EAM-17 Adv 78, 107, 108, 114, 147
- ___ 2EAM-18 Adv 91, 129, 169, 194, 206
- ___ 2EAM-19 Adv 24,131,148
- ___ 2EAM-20 Adv 126,204

*** includes 2EAM-01A

Note: (23 Eamon Disk Set-\$69.00)

EDUCATION

- ___ 2EDU-01 Newton's Apple/Cocaine & Teeth

TECH NOTES (5 DISK SET \$15)

- ___ 2TEN-01B II GS Parts 1 & 2
- ___ 2TEN-02B II GS Parts 3, 4, & 5
- ___ 2TEN-03B File Types
- ___ 2TEN-04B More Tech Notes 1
- ___ 2TEN-05B More Tech Notes 2

UTILITIES

- ___ 2UTL-01 New Member Disk 2.01
- ___ 2UTL-02A DB Master V. 1.01 (SW)

5.25" DISKS

APPLE II

APPLE SYSTEM DISKS

- ___ APSD-01 System Disk-Util V. 3.2-\$1.50
- ___ APSD-02 DOS 3.3 Sys. Master/DOS 3.3 Tut. \$1.50

APPLEWORKS

- ___ APWK-01 Desk, Printer and \$ Helpers-(813/814)
- ___ APWK-02 Food. Lists, etc.-(815/816)

COMMUNICATIONS (10 DISK SET \$15.00)

- ___ COMM-01 TCS Inst. 1.05 A & B-1 of 2-(825)
- ___ COMM-02 TCS Inst. 1.05 A & B-2 of 2-(826)
- ___ COMM-03** WAPABBS.1 Docs-(121)
- ___ COMM-04 WAPABBS.1-(135/136)
- ___ COMM-05 DI COMM-(SW)-(503)
- ___ COMM-06 Kermit 3.78-Kermit File Transfer (516/820)
- ___ COMM-07 CommTerm & Telecom -(808/817)
- ___ COMM-08 MicroModem II (SW)-Hayes Term-(116/169)
- ___ COMM-09 Comm. System 2.5 / Z.Link 12.15
- ___ COMM-10 Kermit 3.87 & Docs

CP/M (11 DISK SET \$16.50)

- ___ CP/M-01** Master Catalog-(401)
- ___ CP/M-02 Utilities I and II-(402/404)
- ___ CP/M-03 Communications-(403/409)
- ___ CP/M-04 ZCPR2 Install and Utils-(406/408)
- ___ CP/M-05 ZCPR2 Doc/Essential Util(407/410)
- ___ CP/M-06 Text Editor/ Spreadsheet-(411/412)
- ___ CP/M-07 MDM740 (SSC. Comm, 7710, & A-CAT- (413/414)
- ___ CP/M-08 Kermit Source and Running Code-(416/418)
- ___ CP/M-09** Kermit Documentation-(417)
- ___ CP/M-10 Utilities-(419)
- ___ CP/M-11 Small C. Compiler-(420)

EAMON ADVENTURES (24 DISK SET \$36.00)

- ___ EAMN-01 Utilities II and III -(220/221)
- ___ EAMN-02* Dungeon Des/ Adv 38-(180/229)
- ___ EAMN-03 EAMON MASTER /Adv 42-(181/214)
- ___ EAMN-04* Adventures 2 & 3 -(182/183)
- ___ EAMN-05* Adventures 4 & 5- (184/185)
- ___ EAMN-06* Adventures 6 & 7- (186/187)
- ___ EAMN-07* Adventures 13 & 14-(188/189)
- ___ EAMN-08* Adventures 10 & 11-(190/191)
- ___ EAMN-09* Adventures 29 & 8- (192/193)
- ___ EAMN-10* Adventures 12 & 30-(194/195)
- ___ EAMN-11* Adventures 17 & 18-(196/197)
- ___ EAMN-12* Adventures 19 & 20-(198/199)
- ___ EAMN-13* Adventures 23 & 24-(200/201)
- ___ EAMN-14* Adventures 25 & 53-(202/203)
- ___ EAMN-15* Adventures 55 & 54-(204/205)
- ___ EAMN-16# Adventures 56 & 57-(206/207)
- ___ EAMN-17* Adventures 31 & 41-(208/209)
- ___ EAMN-18* Adventures 47 & 97-(210/211)
- ___ EAMN-19* Adventures 60 & 98-(212/213)
- ___ EAMN-20* Adventures 46 & 45-(215/216)
- ___ EAMN-21* Adventures 43 & 15-(217/218)
- ___ EAMN-22* Adventures Unk. & 37-(223/224)
- ___ EAMN-23* Adventures 16 & 33-(225/226)
- ___ EAMN-24* Adventures 34 & 44-(227/228)

*-Requires EAMN-03

EDUCATION (20 DISK SET \$30.00)

- ___ EDUC-01 Ed. and Personal Ed.-(76/110)
- ___ EDUC-02 Personal Ed. 2 and Ed. 3-(131/139)
- ___ EDUC-03 Math / Science and Ed. 4-(127/140)
- ___ EDUC-04 Adv. Math / Vectors / Mot.-(510/513)
- ___ EDUC-05 Albert Camus Int/ El. Math (53/150)
- ___ EDUC-06 French Vocab/ Tutorial-(46/123)
- ___ EDUC-07 Boot for L'Hote and L'Hote -(48/49)
- ___ EDUC-08 Tic-Tac-Toe ,Fr /L'Hote Quiz-(47/50)
- ___ EDUC-09 Fr. Poetry Tut /Appollinaire-(51/52)
- ___ EDUC-10 Rafel Boot Disk and Rafel-(55/56)
- ___ EDUC-11 Tic-Tac-Toe in Sp. /Rafel Quiz-(54/57)
- ___ EDUC-12 Matute and Lo Fatal -(58/59)
- ___ EDUC-13 Reading Fun (SW)-(505)
- ___ EDUC-14 Language Arts Treasures
- ___ EDUC-15 Floppy Book 1
- ___ EDUC-16 Computation Game /AW Temp
- ___ EDUC-17 Algebra Tutorial and Bagels Disk

- ___ EDUC-18 Newton's Apple (Cocaine)
- ___ EDUC-19 Newton's Apple (Teeth)
- ___ EDUC-20 WAP Stack and Tutorial Demo

FORTH

- ___ FRTH-01 Assem/Disassem/Screen Edtr-(700/701)
- ___ FRTH-02 Go Forth Tut./Fig/Forth 78-(702/703)
- ___ FRTH-03 Forth/Floating Point Math-(704)

GAMES (13 DISK SET \$19.50)

- ___ GAME-01 Games A and B-(102/107)
- ___ GAME-02 Games C and D-(111/128)
- ___ GAME-03 Games E and F-(162/164)
- ___ GAME-04 Keyboard and Paddle Games-(72/74)
- ___ GAME-05 Pinball and Arcade Games-(142/157)
- ___ GAME-06 Text Adv/Mys. House (Sierra)-(73/517)
- ___ GAME-07 Ed. Games G and H-(508/509)
- ___ GAME-08 Sports and Utils / Games-(143/160)
- ___ GAME-09 Adventures /Game Room-(811/812)
- ___ GAME-10 Haunted House-(176/810)
- ___ GAME-11 Mostly Games/Wizard Wkr I -(122/161)
- ___ GAME-12 # Games 1 / WAP Math Games
- ___ GAME-13 Smart Dice

LOGO

- ___ LOGO-01 Logo Tool Kit \ Docs-(145/146)
- ___ LOGO-02 Sam. Disk/Dallas Apple Logo-(147/158)

MISCELLANEOUS (25 DISK SET \$37.50)

- ___ MISC-01 SS (Coin Collect) /Misc.-(93/115)
- ___ MISC-02 Miscellaneous-(119/120)
- ___ MISC-03 Misc. and Recipe Files-(125/159)
- ___ MISC-04 Glaq and No Name Yet-(129/175)
- ___ MISC-05 Spec. DBs/Jim's DB (SW)-(141/504)
- ___ MISC-06 Misc/Aplesfr/AppleWriterII-E-(152/156)
- ___ MISC-07 Astronomy Short Programs-(506)
- ___ MISC-08 Griffith and Weise Astronomy -(507)
- ___ MISC-09 Aviation-General (Disk 1 of 2)-(514)
- ___ MISC-10 Aviation-Navigation (2 of 2)-515)
- ___ MISC-11 Gardner's Assistant-(518)
- ___ MISC-12 Music and Sights / Sounds-(71/126)
- ___ MISC-13 Merry Xmas/Happy Holidays-(103/165)
- ___ MISC-14 Graphics and Car Graphix-(108/171)
- ___ MISC-15 Print Shop Graphics-(172)
- ___ MISC-16 Clr Gr. for Fun/Science /Engi-(75/106)
- ___ MISC-17 Plots/Graphs/Charts/Graphs-(163/166)
- ___ MISC-18 Business/Math Stat and SS-70/90)
- ___ MISC-19 SS (Invest.) and SS (Bus.)-(91/92)
- ___ MISC-20 Business A and B-(104/113)
- ___ MISC-21 Investments A and B-(153/154)
- ___ MISC-22 Spreadsheet A and Misc-(137/155)
- ___ MISC-23 Riley's Personal Instrumentation-(173)
- ___ MISC-24 ProDos Gr. Packer / DHR Convert
- ___ MISC-25 PSL Dual Dos

NEW PRINT SHOP (31 DISK SET \$46.50)

- ___ NWPS-01 Graphics 01
- ___ NWPS-02 Graphics 02
- ___ NWPS-03 Graphics 03
- ___ NWPS-04 Graphics 04
- ___ NWPS-05 Graphics 05
- ___ NWPS-06 Graphics 06
- ___ NWPS-07 Graphics 07
- ___ NWPS-08 Graphics 08
- ___ NWPS-09 Graphics 09
- ___ NWPS-10 Graphics 10
- ___ NWPS-11 Graphics 11
- ___ NWPS-12 Graphics 12
- ___ NWPS-13 Graphics 13
- ___ NWPS-14 Graphics 14
- ___ NWPS-15 Graphics 15
- ___ NWPS-16 Graphics 16
- ___ NWPS-17 Graphics 17
- ___ NWPS-18 Graphics 18



- ___ NWPS-19 Graphics 19
- ___ NWPS-20 Graphics 20
- ___ NWPS-21 Graphics 21
- ___ NWPS-22 Graphics 22
- ___ NWPS-23 Graphics 23
- ___ NWPS-24 Graphics 24
- ___ NWPS-25 Graphics 25
- ___ NWPS-26 Graphics 26
- ___ NWPS-27 Graphics 27
- ___ NWPS-28 Graphics 28
- ___ NWPS-29 Borders 01
- ___ NWPS-30 Borders 02
- ___ NWPS-31 Fonts 01

PASCAL (8 DISK SET \$12.00)

- ___ PASC-01 AttachBios for Pascal 1.1,Utils(300/301)
- ___ PASC-02 Crypto/Gr.& Bios/Printers-(302/303)
- ___ PASC-03 Misc.,Read/WriteDOS/Prters(304/305)
- ___ PASC-04 Cataloger/Hires Prting /Lisp-(306/307)
- ___ PASC-05 Puffin/Hol.Mus.-CPM-Pascal(308-309)
- ___ PASC-06 3D Ed./Drill /Hackers Stuff-(310/311)
- ___ PASC-07 Stocks/Weightwatch/Guerrilla Guide-(312/313)
- ___ PASC-08 Pascal / To & From DOS-(133/314)

PILOT

- ___ PILT-01** Pilot Language-(167)

UTILITIES (24 DISK SET \$36.00)

- ___ UTIL-01 New Member's Disk-2.01 A/ B- (821)
- ___ UTIL-02 New Member's Disk-2.01 C/ D- (822)
- ___ UTIL-03 Utilities A and B-(100/101)
- ___ UTIL-04 Utilities C and D-(112/118)
- ___ UTIL-05 Utilities E and F-(124/132)
- ___ UTIL-06 Utilities G and H-(138/43)
- ___ UTIL-07 Utilities I and J-(44/77)
- ___ UTIL-08 Mach. Lang. Utils/One-Key DOS-(41/42)
- ___ UTIL-09 Beg.Choice /Int. Utils.-(501/502)
- ___ UTIL-10 Diversi Copy and Diversi DOS-(45/130)
- ___ UTIL-11 Add. to ProDOS/Zap Utility-(804/806)
- ___ UTIL-12 Utils A (ProDOS)/File Cabinet-(802/803)
- ___ UTIL-13 Imageworks-(174/807)
- ___ UTIL-14 Auto Unshrinkit 1.1/ II Plus Shrinkit, Shrinkit 3.4
- ___ UTIL-15 Visi-Trend/Visi-Plot/Calculink-(93/94)
- ___ UTIL-16 AppleSoft Tut/Picture Packer-(109/117)
- ___ UTIL-17 AppleWriter Utilities-(168)
- ___ UTIL-18 AppleSoft Prog/Love's Follies-(144/170)
- ___ UTIL-19 "Old" New Member's Disk-(134)
- ___ UTIL-20 JoyReader (SW)-(819)
- ___ UTIL-21 Large Type Joy Reader (SW)-(823)
- ___ UTIL-22 DB Master V. 1.01-Prog. Disk 1 / Sample Files (SW)
- ___ UTIL-23 DB Mstr v. 1.01-Prog. Disk 2/Docs (SW)
- ___ UTIL-24 Tutorial Maker

5.25" DISKS

APPLE III

** indicates single sided disks

APPLE III

ACCOUNTING (3 DISK SET-\$4.50)

- ___ 3ACT-01A Easy Accounting
- ___ 3ACT-02 Easy System and Accounts Rec.
- ___ 3ACT-03 Easy System, Accounts Pay & Gen. Ledger

III 3EZP & AW TEMPLATES (11 DISK SET \$16.50)

- ___ 3AWZ-01 AW-EZP Bus Templates-(1060)
- ___ 3AWZ-02 Checkbook Plus by Lomartire
- ___ 3AWZ-03 Accounting/Finance Templates

- ___ 3AWZ-04 Mortgage Templates
- ___ 3AWZ-05 Checkbook Templates
- ___ 3AWZ-06 Contributions-Disk 1
- ___ 3AWZ-07 BankCalc-Disk 1
- ___ 3AWZ-08 BankCalc-Disk 2
- ___ 3AWZ-09 BankCalc-Disk 3
- ___ 3AWZ-10 Video Catalog-Disk 1
- ___ 3AWZ-11 Video Catalog-Disk 2

III BUSINESS BASIC (9 DISK SET \$13.50)

- ___ 3BSB-01 Pohlman Disk 01-(1017)
- ___ 3BSB-02 Pohlman Disk 02-(1018)
- ___ 3BSB-03 Pohlman Disk 03-(1019)
- ___ 3BSB-04 Pohlman Disk 04-(1020)
- ___ 3BSB-05 Pohlman Disk 05-(1021)
- ___ 3BSB-06 PPT Demo / BASIC Helps-(1098)
- ___ 3BSB-07 BASIC 1.23 & Utilities / Auto Basic by Boston
- ___ 3BSB-08 Best of On Three-Basic Programs
- ___ 3BSB-09A Menu Maker 6.1

III GAMES (5 DISK SET \$7.50)

- ___ 3GAM-01 Games 01-(1001)
- ___ 3GAM-02 Games for Kids-(1007)
- ___ 3GAM-03 Cap'n Magneto-Revised 1/89-(1041)
- ___ 3GAM-04 Games 02
- ___ 3GAM-05 Star Trek

III GRAPHICS (43 DISK SET-\$64.50)

- ___ 3GRX-01 Sketchpad and Slideshow-(1012)
- ___ 3GRX-02 Fig Factory Manual -(1069)
- ___ 3GRX-03 Fig Factory-Black and White-(1070)
- ___ 3GRX-04 Fig Factory-Color-(1071)
- ___ 3GRX-05 Raster Graphics Tool Kit-(1072)
- ___ 3GRX-06 3-D Modeling Tool Kit-(1073)
- ___ 3GRX-07 Chartmaker III-(1074)
- ___ 3GRX-08 Graphics Utilities-(1075)
- ___ 3GRX-09 Graphics Disk 01-(1062)
- ___ 3GRX-10 Graphics Disk 02-(1076)
- ___ 3GRX-11 Graphics Disk 03-(1077)
- ___ 3GRX-12 Graphics Disk 04-(1078)
- ___ 3GRX-13 Graphics Disk 05-(1079)
- ___ 3GRX-14 Graphics Disk 06-(1080)
- ___ 3GRX-15 Calendar by Bloom-(1081)
- ___ 3GRX-16 Typewriter Art Disk 01-(1082)
- ___ 3GRX-17 Typewriter Art Disk 02-(1083)
- ___ 3GRX-18 Poster by Bloom-(1084)
- ___ 3GRX-19 Raster Demo / Tmapio
- ___ 3GRX-20 Icon Demo / Tfont
- ___ 3GRX-21 Trixelmap Demo / Mask Demo
- ___ 3GRX-22 Tmem Demo / Treets Demo
- ___ 3GRX-23 GIF Graphics 01
- ___ 3GRX-24 GIF Graphics 02
- ___ 3GRX-25 GIF Graphics 03
- ___ 3GRX-26 GIF Graphics 04
- ___ 3GRX-27 Grafixworks 1 and 2 (SW)
- ___ 3GRX-28 Grafixworks 3 and 4 (SW)
- ___ 3GRX-29A Sign by Bloom
- ___ 3GRX-30 Scanned Graphics #1
- ___ 3GRX-31 FOTOView by Lomartire
- ___ 3GRX-32 A2/A3 Graphics
- ___ 3GRX-33 Floppy Coloring Book 1
- ___ 3GRX-34 Floppy Coloring Book 2 (Trains)
- ___ 3GRX-35 Floppy Coloring Book 3 (More Trains)
- ___ 3GRX-36 Floppy Coloring Book 4 (Winter Olympics)
- ___ 3GRX-37 GIF Graphics 05
- ___ 3GRX-38 Dino Graphics
- ___ 3GRX-39 Book Plate Graphics
- ___ 3GRX-40 Animals #1
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