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The Journal of Washington Apple Pi, Ltd.

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Volume 15, Number 4



The New TCS: An Update 12

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Artists on Exhibit 18/

PhotoEdge: Image Editor 27

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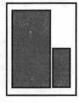




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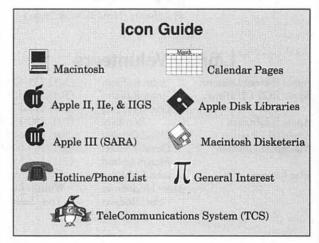
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Washington pple Pi

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.

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



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efforts, so please let him know what you think of his new layout.

...in the Pi Pan

by Debbie Hoyt

ith the new TCS moving along steadily, you likely feel that it's time for a progress report. The WAP's TCSO Paul Schlosser has written an article that will bring you up to speed on the new, soon-to-be operational TCS. And for the occasion, Nancy Seferian has created a new TCS logo. (It's on the cover, in case you missed it.) As always, Nancy has done a beautiful job.

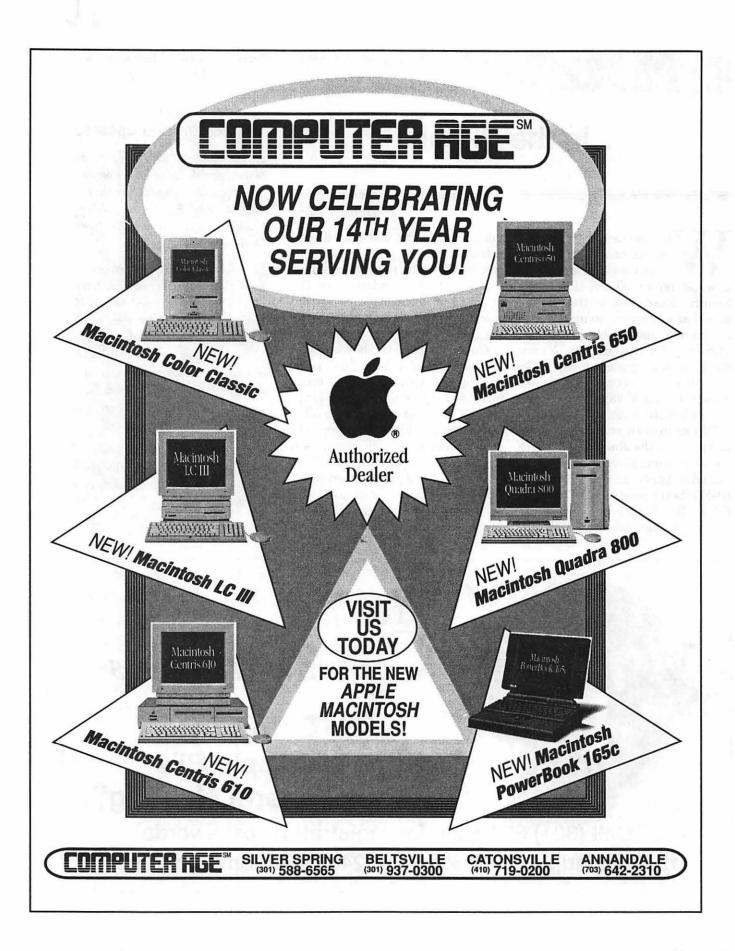
I'd like to draw your attention to two areas of the Journal that have recently been given facelifts: the calendar pages and the Apple II Disk Library pages. Our Calendar Editor Bill Wydro has completely redone the calendar pages with dramatic results. He has placed both calendars on one page for the benefit of those who tear the calendar out of the Journal and use it. On the other page, he has placed all the meeting notices. The new calendar pages look great!

Our Head Apple II Librarian John Ruffatto has also been busy redesigning the Apple II and III order forms and streamlining the descriptions of files and coordinating all of the material. What John hopes to present you with each month is a brief section introducing new disks followed by the reformatted order forms for all three platforms (Apple II, Apple IIGS, and Apple III). He's anxious to receive feedback on his

Corrections and Updates

- · The Table of Contents for the March issue of the Journal incorrectly listed the maker of WalkThrough. The copy should have read: Virtus WalkThrough, reviewed by Jaque Davison.
- Tulin Technology-the price of the Apple IIGS floptical drive is \$399, not \$489. The price of floptical disks is \$20 each, not \$25. Note that these prices are for orders made directly to Tulin. Minimum order is \$50. Tulin also offers the floptical drive with a driver for the Apple High Speed SCSI card. Tulin carries floptical drives with an eject button for those who request it.
- · DataPak Software, Inc., of Vancouver, WA-the price of the package Programmers' Bag of Tricks is now \$500, not 134.50.







SIG's and Slices

StockSIG

by Morris Pelham

StockSIG has both good news and bad news.

The bad news is that our February meeting was spent trying and failing to get the new SyQuest to work. I arrived a little early to get the SyQuest, which is new to me, up and running. I planned to install my Excel 4.0 and show some history of the "Beating the Dow" strategy. I had spent two days keypunching several years of Dow data out of Barron's into my elderly MacPlus and transferring that to a floppy.

But it was not to be. There is no manual for the SyQuest, and the only instructions that came with the cartridge are for use in an IBM-DOS system. But I got it running, only to find that there was a system file on it already as well as a system file on the internal hard drive. By this time, sev-

eral people had arrived and we took a vote. All agreed the system file on the SyQuest should be thrown away, because more than one is a no-no. So I did. Then I began the installation of Excel 4.0, which takes half an hour or so for the eight megabytes of disk space to be filled. Halfway thru it stopped, claiming the disk had no more room. Everyone gathered around me at the keyboard shouting advice, all of it good I am sure-but two people shouting in my left ear, two in my right, and several more in the background. We fiddled with several things, then restarted the installation. No good, it stopped halfway through again. After more arguing, we put the "Beating the Dow" data in and made a poor stab at showing that, then argued some more about how to shut the thing down and get the SyQuest drive to release the cartridge. It did eventually and we all went home tired and frustrated.

I do apologize if anyone took me seriously when I politely requested that they sit down and shut up.

Now the good news! We are promised the use of a new (to us) Mac II fx with a 13" color monitor and a 24-bit card. All the SIG's will have access to it, but we at StockSIG plan to make particularly good use of it. I have been promised a training session with it and our reluctant SyQuest. My personal goal is to become sufficiently proficient to be able to help our various experts show how their favorite software works in living color. In addition, we will be getting access to a modem-capable phone line at our meetings so that software that can access stock databases can be demonstrated live and in color.

We have more good news. We have a couple of new experts, Joe Lazzaro and Rusty Romaine, who have volunteered to show us the Wealthbuilder software package. They actually brought some information about it to the February meeting, but I was too occupied to pay attention.

In the next few months, we hope to



show the Trendsetter package, continue with our "Beating the Dow" on Excel, and I hope our experts on Managing Your Money and Quicken will return and put that software on our working SyQuest. All in living color, of course.

I hope that our new hardware and color monitor will be sufficiently inviting that some of you who read this at home will volunteer to come in and show us the software that you use for investing. All you have to do is show up at the meeting and speak up. We always seem to have a shortage of experts.

As always, we welcome both novices and experts at out meetings. We meet in the WAP office on the second Thursday of each month at 7:30.

Columbia Slice

by Andy Wakshul, **Apple II Editor**

At our February meeting, Tom Cook showed us the Apple IIGS equivalent of "Honey, I shrunk the Kids," a program called Auto Ark by Econ Technologies. Inexpensive software by most standards (about \$28 wholesale), Auto Ark is the first hard disk compression program available for the IIGS. It runs only under System 6.0 and gives you the ability to compress the contents of your hard drive and then uncompress them on the fly. In other words, Auto Ark (some places they spell it Auto Arc-get it right, guys!) can effectively double the size of your hard drive. For people straining to clear space on a 40 megabyte drive, this should give them the ability to compete with the 170 megabyte big boys! (Well, the 80 meggers, anyway!)

The Program can either compress "in place" (over the old file on the drive) or as a temp file (a duplicate file which you place on the hard drive while you're working). The program will work either from

the "Extras" menu on the System 6 Finder, or, for those not Finder-bound, as an NDA from elsewhere. It gives you a choice of compression protocols to use for squeezing down the size of your document. The Econ people recommend that you not compress system files or application programs which you use frequently, apparently because of speed considerations. The compression and uncompression activities, while impressively fast, do slow things up a bit.

Auto Ark is designed to work with Universe Master the hard-disk organizer also From Econ Technologies. A demo version of Universe Master is included with the package. Our few-but-consistent Apple II loyalists were impressed with Auto Ark. Someone wondered why the program doesn't simply uncompress a program into memory without having to write/ replace/write/replace each time to the drive. However, unless the entire application were to be loaded in memory (many programs don't work that way), one can see the logic of the design Econ came up with.

If we can keep our hearts from bursting out of our chests with anticipation, the main competition to Auto Ark, Hard Pressed (currently in Beta testing), will be out soon and we can compare the two packages to weigh their relative merits and demerits.

Before we toddled on home, Tom also demonstrated Shanghai II by the redoubtable John Wrenholt of Big Red Computer Club. The program works much like its predecessor (now Shanghai I?), but it offers ten (count 'em, ten) different tile sets. Some were designed by business-seeking opticians; the little designs on the tiles could put an eagle into bifocals! Shanghai II also has terrific sound effects which spring into play any time you succeed in seeing two matching, free tiles in the array and clicking them off.

This was an interesting evening, challenging in the possibilities. (And if you can find a way to compress the designs on the Shanghai tiles II with Auto Ark, you can shrink the game beyond visibility....)

IIGS SIG

byPaul Tarantino

The crowd was a bit thinner than usual for our first meeting in our new Virginia digs at the McLean Government Center. It wasn't because the place was hard to find; Gary's directions were crystal clear. Maybe it was the weather (still some Sunday snow about), or the annual February confusion that happens when we schedule a SIG meeting on the Monday BEFORE the Pi's main Saturday meeting, instead of afterwards.

Anyway, even our supreme leader was missing, but he had been excused in order to investigate the use of the IIGS and UltraMacros on the ski slopes of Austria (watch for a report real soon in the Journal). Whatever their reasons, Gary and a lot of other people missed quite a good session, led by our own GS Graphics Guru, Robert Gurskey.

Robert's plan was to walk us through the involved process of building a party invitation, starting with a color cartoon in a magazine and ending up with a printed product from Print Shop GS Companion. Interim steps included the fine tuning and use of Vitesse's Quickie hand-held scanner and extensive touchup work with Platinum Paint before the PSGS document was created. We learned a lot about the capabilities and limitations of each of these three products along the way, as well as several Handy Hints and tricks.

If you are one of those people who can never have enough graphic images in your on-disk collection, the Quickie may be an answer to your prayers. (First Handy Hint: you may need a bigger hard drive; graphics collections expand exponentially!) The hand-held scanner plugs into a card in a slot on your IIGS, and comes with software to manage the scanning process. Robert is using Quickie software v. 2.03, but a major upgrade to v. 3.0 (we presume it's major, since the upgrade alone costs \$80!) has been announced. No details yet



about new capabilities, enhancements, bells or whistles. The scanner itself has switch settings which control whether the scanned image will be saved at 100, 200 or 400 pixels per inch; a higher number yields a larger disk file and a larger on-screen image. Settings in the Quickie software adjust several variables which determine how the Quickie handles shades of grey. The software also allows for some limited onscreen image editing/processing; images can be flipped or rotated, and can be edited a pixel at a time in FatBits mode. Quickie scans can be saved to disk in any of several modes, including screen images (320x200 pixels), 400-line Paint format (recognized by most IIGS painting programs), Apple Preferred (.APF files, which can be much larger than screen size) or Print Shop GS format. Robert saved the cartoon in .APF format because it took up two screens at 400 dpi.

The greyscale output of the original cartoon scan wasn't quite ready for Print Shop GS yet, however, and Robert turned to Platinum Paint for the sort of touchup work the Quickie's own software can't do easily. There were some "noise" lines to remove from the image, and many areas of uniform color in the magazine cartoon had come out of the scanning process in several close shades of grey. One trick Robert uses when editing greyscale images in Platinum Paint is to switch from grey to the paint program's default color palette, in which minor variations in shade will show up immediately. He also used Platinum Paint's "mask" feature to protect all but one color at a time from alteration while quickly touching up the "blotches" in the scanned image.

When the touchup work was done, Robert opened the modified .APF file with the Quickie software once more and saved it as two 320x200 screens for the next step because Print Shop GS can't handle .APF files. He wanted to use this image as a "full panel graphic," so Robert then turned to Print Shop GS Companion, which can handle large PSGS images, for the next step in the process. Images can be imported into PSGS and PSGSC in Best Color, Best Resolution or Compromise mode; Best Resolution sacrifices some color clarity, but defines edges and borders best and is thus the optimal choice for line drawings like our cartoon. Multiple images (like the two 320x200 screens)

can be imported into a single PSGS document and overlaid for good alignment (use the "clear" button to make the images transparent, which makes this process easy). Another of Robert's Handy Hints in this process was the overlaying onto the work in process of a special graphic he had built (he calls it "Frame") which shows where Print Shop borders would go on a finished full panel graphic. This helped in positioning the cartoon image where it wouldn't collide with the border art he was going to add later.

Some peaking and tweaking of colors on the graphic was required within PSGSC becausePSGS palettes are very different from paint program palettes. Even after all the processes were completed and the graphic was ready to print, it didn't look really wonderful on screen in some ways, but Robert reminded us that PSGS is a PRINTING program and that the result that counts is the one that comes out on paper.

A few more Handy Hints drawn from Robert's extensive experience with PSGS are, in order:

Holddown Apple-q while exiting PSGS Companion and Print Shop GS itself will

> be launched (assuming you have both programs in the same directory on your hard drive). This trick doesn't work the other way (from PSGS to PSGSC).

> Robert uses Big Red's "Labels Labels Labels" program (using the 4inch by 5/16-inch option) to add a more extensive credit line (e.g., "A Robert Gurskey Production") to PSGS greeting cards.

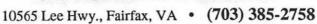
> A great source for clip art is black and white MacPaint files, which can be imported into Platinum Paint and used there or saved as PSGS graphics. There are lots of Public Domain and ShareWare clip art files available in this format; check the Disketeria or the TCS! (Clip art files on Mac 800K disks can be read directly by a IIGS running system

Join us next time!

Authorized Dealer

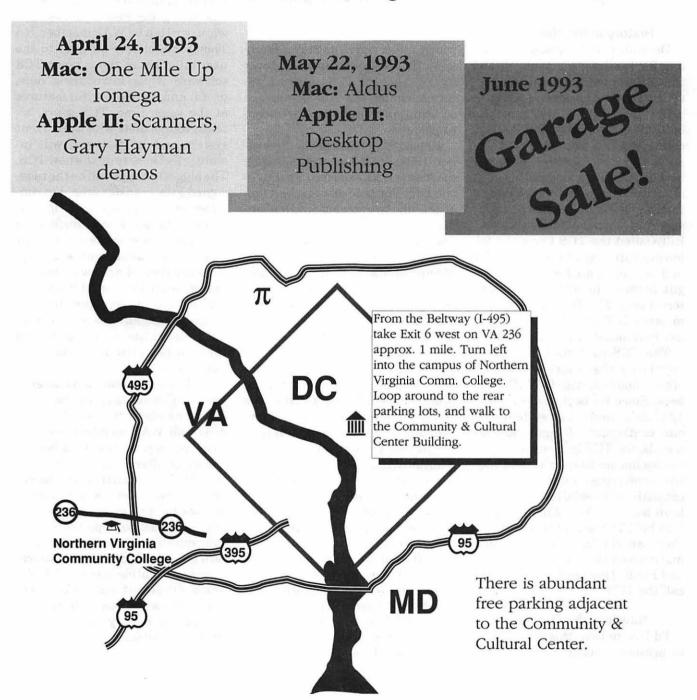
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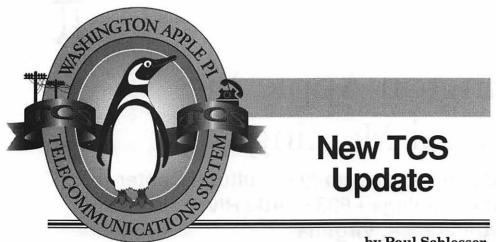
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by Paul Schlosser

History in the Making...

December 30, 1992 was a historic day for Washington Apple Pi and the Telecommunications System (TCS). The TCS logged its 500,000th caller that day at 4:48 pm. The 500,000th caller was Bill Jensen, calling the TCS from Northern Virginia. Bill chatted with a few members of the TCS Committee that afternoon via conference call and was very surprised to learn that he was part of a momentous occasion. Bill visited the TCS Crew the following Saturday at the WAP office and was presented with a modest gift package to celebrate the historic event. The TCS Crew enjoyed meeting Bill and showing off the newly-remodeled TCS Room.

The TCS continues to grow in popularity after nearly eight years of continuous service to WAP members. Since its beginning in early 1985 as a single user system with one conference of eight bulletin boards, the TCS has evolved into a twelve line multi-user system with five conferences (each conference consisting of over 30 individual bulletin boards.) Over 2,000 Pi members hold TCS accounts with which they can obtain up-to-date information and the latest ShareWare and Public Domain files when they call the TCS.

Now into the Future...

I'd like to take this opportunity to present a status report on the TCS modernization project currently underway. You may already know that we recently collected over \$9,000 from the TCS user community to enable the TCS Committee to begin an ambitious system improvement.

Hewlett-Packard, at the November 1992 WAP General Meeting, donated a DAT tape backup unit to the TCS. The tape drive is their topof-the-line two gigabyte model complete with Retrospect Remote backup software for the Macintosh.

The new TCS will make use of a Macintosh file server, rather than the network of Corvus disk servers that the TCS uses at present. We've purchased a brand-new Macintosh IIfx to act as a file server replacing the Corvus network. The new server was immediately put into service and is now being tested running the prototype TCS. We've enhanced the IIfx's random-access-memory, boosting it from the standard 4 megabytes to 20 megabytes. This addition will enable the TCS server to perform various background tasks while tending to the needs of the TCS' Apple IIe's.

We've also purchased two hard drives for the new system. First, the internal 170 megabyte Quantum hard drive which will be used to store the server's operating system and associated utilities, as well as the TCS' message base file system. The TCS' library of ShareWare and Public Domain files will be

stored on a Quantum 1.2 gigabyte external drive. We're looking forward to using these high-performance drives with the new TCS.

While awaiting release of the Apple II Ethernet interface cards (which connect the Apple IIe's to the Macintosh file server), we've been busily testing the new software and hardware using a LocalTalk network-and the testing has been going well. The new software, written by WAP member Jon Thomason, closely adheres to the user-interface of the current TCS software while introducing new, useful and more powerful features at the same time. TCS users, already comfortable with the current system and its features, will instantly feel at ease on the new TCS. The biggest change will be the redesigned File Transfer area. I'm confident our users will feel right at home in the new File Transfer area as it now very much resembles our message base area. The file descriptions are treated as new messages, and presented in a similar fashion. It's very easy to configure the File Transfer module so you see as much-or as little-as you desire (and the same holds true for the message base area).

Feel free to contact a member of the TCS Committee if you have any questions about the new TCS. As usual, all WAP members are welcome to stop by the Pi office on Saturday afternoons to chat with the TCS Committee members present. We meet every Saturday to back-up and maintain the system, and we'll be happy to answer your questions, whether they concern the new TCS, telecommunications or computing in general. We're proud of the effort that's taken place so far, and we're looking forward to getting the new system online as soon as possible.



TCS Improvement Fund Update

by Paul Schlosser

ver a year ago the TCS Com mittee embarked on an ambitious project to modernize the Pi's Telecommunications System. Because the TCS is a self-supporting, break-even operation (TCS fees are spent on operating expenses), the only way to raise the money to fund the modernization program was to go directly to the TCS user community and solicit donations.

The response was overwhelming! The first donations began to arrive at the WAP office only days after the donation requests were mailed last August. Donations continued to flow in for many weeks. The fund balance grew to more than \$9,000.

The TCS Committee would like to thank each person for his or her generous donation to the Improvement Fund. Your donation will enable the Committee to provide WAP users with a faster, larger, more powerful and more reliable system requiring less maintenance.

TCS Improvement Fund Donors (in no particular order):

David Jernigan, Jon Hardis, Craig Tyler, Lori Wohlschlaeger, Arnie Springer, Raymond Bennett, Meg Gabriel, John Swartz, David Falksen, Richard Berg, Frederick Holmes, Eric Norby, David Harris, Dan Hinz, Paul Barker, Grace Gallager, Lawrence Simon, R.C. Sydenstrider, Steve Schulin, Mary Matzen, Dennis Sheppard, James Rite, Eric Metzger, Roger Burt, Patricia Wiklund, A.W. Snell, William Schneider, Robert Ketchel, Lawrence

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Community Affairs

by Phil Shapiro

How the Macintosh is used in Managing Resources in Emergency Service

[Last month our user group received a phone call from the Maryland Search & Rescue Group asking if we might be able to assist them in soliciting donations of Mac SE's for their search-and-rescue operations. Since one of the functions of a user group is to match up those seeking to donate computers with those who have a pressing need, it was suggested that the Maryland Search & Rescue Group write a short piece for our Community Affairs column describing how they're currently using Macintosh computers in their operations. The following remarks by Peter McCabe describe how standard offthe-shelf computer technology is streamlining the personnel management tasks of search-and-rescue operations.

Using Apple Macintosh SE computers, Explorer Search & Rescue Post 616 in Maryland is developing a unique resource management system to track personnel in search and rescue services and emergency services from their arrival at a mission base, through all their assignments and jobs, to their departure from the emergency scene, to their return to home base.

Each year in the United States there are thousands of organized searches for lost persons and missing airplanes. Most are local efforts, drawing little or no attention. Others are high profile search and rescue efforts drawing wide media attention and public interest.

In the mid-Atlantic region of the United States, the Appalachian Search & Rescue Conference provides volunteer professional search and rescue services in urban and wilderness areas at the request of local and state governments.

Explorer Post 616, known as the Maryland Search & Rescue Group, is one of eight Appalachian Search & Rescue Conference accredited units providing volunteer professional wilderness search and rescue services in Virginia, Maryland and Pennsylvania. The group is the only program for high school students in the Conference, and the only program for young adults in the United States accredited for wilderness vertical rescue services by the Mountain Rescue Association.

The resource management system developed by Post 616 can be used by any emergency services program to track emergency workers on the scene, en route, or available for service. In August 1992, the system would have been a definite benefit when the Group provided management support assistance in south Dade County, Florida to the U.S. Public Health Service's National Disaster Health System following Hurricane Andrew.

All search-and-rescue efforts share a common personnel man-

agement thread: the development of incident "command management" procedures to identify, allocate, and use appropriate personnel in the search and rescue effort. Traditional procedures are based on wilderness fire fighting and "smoke jumper" programs developed in the 1950's by the U.S. Forest Service. Nearly all state and Federal emergency services agencies use procedures which follow these Forest Service incident command procedures. The procedures are paper intensive management operations, using many forms to provide instructions to teams in the field, or to report the status of command planning, operations, and logistics.

Using Apple Macintosh computers, the Group is developing a relational database resource management system to track individual search and rescue personnel from their arrival at a search mission base-through assignments to search teams-back to mission base for rest-to "ready" status for reassignment-and back and forth to other assignments-until the individual signs out from the search mission. The database contains detailed records on 330 personnel from eight Conference wilderness search and rescue teams. The resource management system creates individual search team Task Assignment Forms by computer using personnel resource information identified when each individual arrives at the search and signs in.

Beyond the efficiency of using fewer paper forms, and providing directed communication, there are many advantages to this system:

In the diverse environment and terrain of the mid-Atlantic region we need to know the status and availability of several types of search-and-rescue specialists. With this system, we know in a moment who is present at a search. But we also know who is not present.

Offline we can query search-andrescue team dispatchers to determine the availability of specific personnel for the immediate period, and to obtain contact information for communicating with them quickly.

Using map coordinates to track teams in their assignments in the field, we can find in a moment which team has an advanced life-support emergency medical technician (EMT) and where the team is located. This information enables us to determine the distance between the specially trained individual and the injured or lost person. The most efficient, speedy overland route to the injured person is then plotted. Alternately, geographical information may indicate that it is quicker to request outside resources (e.g., a helicopter) to reach the injured per-

With this resource management

tool in place, more work can be done at mission base by fewer personnel. Getting additional resources into the field means a higher likelihood of finding the missing individual. In the sometimes harsh environment of the mid-Atlantic states and the Appalachian chain, this may mean the difference between life and death.

[Should you know of anyone with Macintosh equipment they'd like to donate to a worthy cause, kindly pass along Peter McCabe's name and phone number: (301) 596-5554.]

Community Center in Southeast DC Requests Assistance With Their Apple Ile and Ilc

I received a phone call yesterday from the Reverend Ponce Brown, who explained that a kind and generous soul has donated both an Apple IIe and an Apple IIc computer to the Allen Community Center. Help is needed in getting the best use of these computers for the elementary and middle school children who use the center.

If you know of anyone with Apple II educational software they'd like to donate, kindly pass along the name and phone number of Rev. Brown. Donated computer supplies, such as 5.25 inch floppy disks (new or used), tractor feed paper, and printer ribbons, are also greatly appreciated.

By supporting such "public access" computer projects, we can help give these city youths a positive creative and intellectual focus in their lives. Few of these youngsters get more than an hour or two of computer use each week at their schools.

Reverend Ponce Brown, Director Allen Community Center 2443 Ainger Place, SE Washington DC 20020 (202) 889-5607 (daytime) (202) 526-1215 (evenings)

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Request for Bid for the Position of Managing Editor

he 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 substantial 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
- 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 even's 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 production and any potential problems that will have a negative impact on the Editor's ability to meet established deadlines and/or require-
- 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 upto-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.

Notice

The Washington Apple Pi would like to thank all those who contributed Giant and Safeway cash register receipts for the enhancement of educational programs of local area schools. The schools sponsored were:

Owens Road Elementary School Seabrook Elementary School Trinity School

The Kennedy Institute

Note: The selection of the schools which received the benefits of this collection was based on receipt of a letter of request from the schools themselves.

Thinking About Online Communications

by Phil Shapiro

Approaching a More Perfect State of Human Communication (Part II)

Before the days of online communication, connecting up with other people who shared your specific interests was not all that easy. You'd consider yourself quite lucky if you found someone in the same county who shared some of your specific areas of interest. Sometimes the only way to communicate with those of similar interest was to physically transport yourself to a statewide or national conference.

In this age of the modem, however, powerful new tools are available to help connect like-minded souls. Making full use of these tools can link you up directly with colleagues in other states and countries. Model railroading buffs, for instance, can connect up with each other online. So too can Civil War buffs, quilting buffs, doglover buffs, alternative health care buffs, and any of a myriad other human interests, hobbies, and pastimes.

But modem communion need not be restricted to recreational interests. People with more serious interests can likewise find fellowship online. On information services and bulletin boards across the country people with special interest in drunk driving, AIDS, violence against women, and many other "community interest" concerns are congregating, communicating, and working together to address these problems with the full force of group action.

Unlike printed communication,

which is slow and expensive to distribute, or phone communication, which is one-to-one, expensive, and disruptive, online communication is cheap, fast, and inherently streamlined. The power of online communication was made real to me in a personal way two years ago. Hoping to attend the annual KansasFest summer conference in Kansas City, Missouri, I posted a short message in the A2Pro Roundtable here on GEnie. The message I left stated simply: "I'm hoping on sharing a ride out to KansasFest July. I'd be interested in hearing from anyone driving out from the East Coast."

Ten days later I received a phone call from Dave Ciotti, of Trenton, New Jersey. Dave's verbal response to my inquiry was equally brief: "Saw your message on GEnie. I'm driving out to KansasFest in my RV van. I'll stop by your house to pick you up."

Somehow Dave's phone call didn't take me by surprise. Given the power of online communications, the chances of my linking up with an Apple II user driving to the KansasFest conference from a mid-Atlantic city were fairly good. The chances were increased even higher since Dave is a regular user of the GEnie Master offline message processor, which can be set up to capture to hard drive all new messages posted in designated roundtable topics.

Whenever human beings write messages, online or offline, it is always with a sense of hope that someone may read and act upon the message. The inherent efficiency of online communication is such that hope becomes integral to the communication process.

Of course, the first step of any communication process is the articulation of that hope. Without articulated hope, the desired communication exchange can never progress past that all-important first step.

It's interesting to think that over time, as online communication becomes more widely used by the general population, an invisible web of social and intellectual connections will be woven across the country. And once that web is in place, the Wozniaks and the Jobs of this world need not necessarily live in the same town to cross-pollinate each others' minds.

Living on opposite sides of the country Wozniak and Jobs could still exchange messages in, say, the "Homebrew Roundtable" under the topic of: "Making home computers a reality." A young fellow with the user name "B.Gates" would likely stop by to catch up on the new messages every once in a while. "Gee, he sure seems energetic and focussed for his young age, don't you think?" "Nah. Once he starts dating women he'll forget about computers completely."

[The author takes an interest in the social dimensions of communication technology. He can be reached on GEnie at: p.shapiro1; on America Online at: pshapiro; and on Internet at: pshapiro@pro-novapple.cts.com]

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

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: Larnie Higgins, our guest artist this month, is originally from Mt. Pleasant, Mighigan. He studied graphic design at Brigham Young University in Provo, Utah. He is currently the Design Manager at Discovery Network in Bethesda, Md.

Tools: Mac Quadra 900, Adobe Illustrator, QuarkXPress, Adobe Photo-shop

Techniques: "When I was studying graphic design, the school didn't have computers there, so I bought a Mac SE and taught myself how to use it. Ever since then, I haven't once looked back to doing things the old way! Also, since type layout is the

basis of many of my designs, I would have a much harder time if I had to do it traditionally.

"On the Learning Channel brochure, as with 95% of all of

our four-color work, the photos were sent directly to a high end pre-press shop. They scan them and give me a low resolution image that I can import and use for placement in my document. Then I send my Quark document over on a disc. They re-





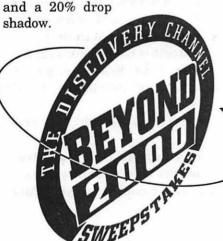
place the low resolution with high and do all the trapping. All the type was done in Quark with placed images. One thing I find useful is that I can play around with color and images, and vary the letter spacing on the screen. Quark will do fine type adjustments to letter spacing through tracking and kerning. I can easily do away with widows (one or two words left on a line by themselves) and wrap type. I juxtapo-sitioned a variety of type sizes and the computer was a great aid in visualizing the spacing and styles, therefore helping me to maintain unity.

"The Executive Protocol logo was created with an unconventional typeface named Beowolf designed by Erik Van Blokland. The letters are randomly generated so that no two letters print exactly the same and each letter will print differently each time.

"For The Man Who Loves Sharks logo, I sketched the type, including the pieces of 'ripped flesh', and scanned it in. Then I did an auto trace in Illustrator to get a rough



effect and used the auto trace as the final art. I filled the letters with black, used a one point white outline and a 20% drop



"The Beyond 2000 Sweepstakes logo was created in Illustrator and rotated in Satellite 3-D.

"On the Beyond 2000 Sweepstakes ad, the art was done in Photoshop. I

scanned in a black and white photo which was free from NASA. I converted the image to RGB and cop-

ied it. I specified a vignette of color in the document window and pasted it inside the woman's body. I saved it as a Photoshop document and opened a new image. I chose another vignette of

color for the background and ran a wave filter to swirl the colors. I used

recution

the mosaic filter to get the large pixels or facets. I saved the background in a Photoshop format and pasted the figure on top as a second layer. Then I restored the background by using the copy pen and revert command. I converted the file to CYMK and saved it as an EPS for the pre-press house. I imported it into Quark to apply the type."



Macintosh Tutorials

Volunteers and Instructors

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

I am very pleased with the response to our requests for volunteers. We have a very bright and enthusiastic group of volunteers working to bring you the best possible classes and programs. We encourage and welcome additional support for the training program. Graphic designers, desktop publishers, and illustrators—we could use your help in promoting our program with brochures and fliers. For further information call Beth Medlin at the Pi office, 301-654-8060.

Macintosh Tutorials

The Macintosh Introductory tutorials are a three-part introductory series designed for beginning users or those desiring to brush up their skills. The primary focus of these courses will be on the System, Desktop, Icons, Windows, and basic concepts in System 7, but System 6 hangers-on are welcome and encouraged to participate. Their issues and concerns will be addressed. Please try to take all three parts; this is the most beneficial arrangement.

Introduction to the Macintosh, Part I (Course # M41293) 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., April 12, 7-10 pm.

Introduction to the Macin-

tosh, Part II (Course # M41993)

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., April 19, 7-10 pm.

Introduction to the Macintosh, Part III (Course # M42693)

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., April 26, 7-10 pm.

Maintaining Your Macintosh (Course # OS42893) 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., April 28, 7-10 pm.

Introduction to the Washington Apple Pi Teleconference System (TCS) Coourse #(041093) 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, April 10, 1993, 9:00 AM - 12:00 NOON

Introduction to Microsoft Word 5.X, (Course #MW041393) 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, different 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, April 13, 1993, 7-10 pm.

Introduction to HyperCard Coourse #(H042193) This class is designed for tHyperca novices. This is the perfect seminar for those of you wanting to enjoy the many benefits of HyperCard.

Location: Farlington Community Center, Virginia

Course Date: Wednesday, April 21, 1993, 7:00-9:45 pm.

Using Claris FileMaker Pro. Part 1 (Course #FMP 042093) An introduction to the popular and powerful flat-file database program from Claris will include the basic database management terminology, ow 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, April 20 1993, 7-10 pm.

Other Educational Opportunities

I've listed some training resources to supplement our class schedule. The Pi is not endorsing the listed resources. Call or write me on your training experiences outside the Pi. I am very interested in documenting courses at local

schools, colleges, universities, Adult and Continuing Education programs, at the Smithsonian, and any other Macintosh or Apple II training. Any information would be very helpful in this regard.

- Personal Training Systems (828 S. Bascom Avenue, Suite 100, San José, CA 95128): 1-(800)-TEACH-99. Offers a comprehensive set of 90-minute tutorial modules which consist of an audiocassette and computer disk. Most sets have four or more modules ranging from beginning to more advanced topics. At mail order prices of \$60 or less per module (\$99.95 list), these packages are relatively cheaper than other such training materials. Check them out.
- Northern Virginia Community College, Alexandria Campus (3001 North Beauregarde Street, Alexandria, VA 22311): 703-845-6301. Loudoun Campus (1000 Harry Flood Byrd Highway, Sterling, VA 20164): 703-450-2571. Continuing education classes in Macintosh computing. Associate Degree in Applied Science programs in Communication Design and Computer-aided Graphic Design at the above campuses. The primary Mac classes are Computer Graphics I and II. Advanced projects and seminars are required for degree students.
- AFI-Apple Computer Center for Film and Videomak-ers, Los Angeles, CA: 213-856-7664 or 1-800-999-4AFI. Courses in film, video, and multimedia-most involve Macintosh computing. Courses primarily at the LA campus.
- Avid Education Services: 617-221-



6789. The Avid Media Composer is the premiere off-line editing system in video and film (cine as the insiders call it). It is Mac-based. If you're interested in video, film editing, or production, learning the Avid system is a good idea. Courses around the country.

- The Corcoran School of Arts: 202-628-9484. Courses in Mac color computing, design, illustration, art, and electronic pre-press. Location: Georgetown.
- The Eastman Kodak Center for Creative Imaging, Camden, Maine: 1-

- 800-428-7400. State-of-the-art, Mac-based imaging, digital photography, and electronic pre-press. Courses on beautiful Maine campus in the Atelier.
- The Sony Video Institute (The Sony Institute of Applied Video Technology, 2021 North Western Avenue, PO Box 29906, Hollywood, CA 90029): 213-462-1987, then #*. Film, video, and multimedia courses many involving the Mac. Courses in Hollywood and around the country.
- Dynamic Graphics Educational Foundation: 1-800-255-8800. The

- "Step-by-Step Graphics" people offer courses on Mac-based graphic design, electronic publishing, color pre-press, etc. at a Peoria campus, at DC area hotels, and other locations around the country. Prices range from approximately \$200-800.
- Diversified Technographics (formerly Don Thompson Laser Service)
 Seminars: 1-800-457-5776. Seminars in laser printer repair that are taught at various locations in the area and around the country. Maximum class size is 12 persons. 23072
 Lake Center Drive, Suite 100; Lake Forest, CA 92630. 1-800-457-5776.

Washington Apple Pi Tutorial Registration Form	Washington Apple Pi 7910 Woodmont Ave., Su. 910 Bethesda, Maryland 20814 301-654-8060		
Basic Information	Course Numbers		
Name	Please fill in the course number of the class(es) that you wish to attend. Class #1		



Mac Q&A

by Jonathan Hardis

aul Schlosser is taking a break from writing his "Notes on the Mac" column. Instead, this month, we offer an encore of my old "Mac Q&A." The focus is on hardware—inspired by the new products released in February.

Q: In summary, what had Apple done, now?

A: Apple sells Macs in price categories. Today, each category has the performance of last fall's model from next up on the price ladder: the LC III costs like an LC II but runs like a IIsi, a IIvx costs like a IIsi but runs like a IIci, a Centris 650 (C650) costs like a IIci but runs like a Quadra 700 (Q700). While there are differences—for example the C650 doesn't come with the microphone and its built-in video is 16-bit rather than 24-bit—it takes some reorientation because this is now the \$2500 machine.

Table 1 shows benchmarks for some of the new models and old Quadras. The numbers are useful only as rough guides; differences of less than 10% may not be noticeable. Computational-intensive tests, such as Whetstones, Dhrystones, and the others in that block measure CPU speed, as may be important in recalculating spreadsheets. The numbers on the bottom measure screen drawing, as may be important for graphics programs. Generally speaking, these numbers do not take into account disk access times, which often cause most of the perceived "slowness" of a computer.

Q: How does the Centris 610 (C610)

compare to the old IIci (besides being less expensive)?

A: Dale Adams of Apple (who provided much of the information used

in this article) responds:

From a performance standpoint, the C610 has about twice the speed of a IIci. This will vary somewhat with the application, but that's a pretty good estimate. For floating point operations it's about a wash because the C610's 68LC040 processor does not have hardware floating point support. [Note, however, that the IIci can run System 6 while the C610 must run 7.1. Now, pretty much everyone agrees that System 6 runs (quite?) a bit faster than System 7.] Video and SCSI are faster on the C610, also, The C610 uses the same

Test	LC III	IIvx	C610	C650	Q700	Q800	Q950
CPU	6.89	7.03	13.01	16,32	16.17	21.62	21.62
Graphics	7.91	8.31	17.08	21.26	20.19	27.38	25.62
Disk	3.40	2.93	4.94	4.99	5.14	5.09	5.24
Math	23.87	23.52	24.58	95.95	95.87	128.07	127.97
P.R.	8.20	8.24	13.77	23.50	23.14	30.69	30.18
KWhetstones	47.51	46.70	31.73	195.69	155.08	256.85	205.48
Dhrystones	5.85	5.72	15.71	19.74	19.74	26.32	26.32
Towers	5.83	5.29	15.22	18.91	18.91	26.00	24.96
Quick Sort	6.52	7.15	14.31	17.76	17.76	23.41	23.41
Bubble Sort	7.71	8.18	14.46	18.00	18.00	24.55	24.55
Queens	7.90	7.39	14.77	19.08	19.08	24.10	25.44
Puzzle	8.95	10.27	17.91	22.46	22.84	30.11	30.11
Permute	6.92	5.13	16.38	20.25	20.63	27.85	27.17
FFT	25.86	24.82	21.35	123.59	123.59	163.07	165.37
F.P. Matrix	25.54	25.24	22.68	124.75	122.40	170.71	166.33
Integer Matrix	7.36	8.73	19.25	23.53	24.20	32.58	31.37
Sieve	8.61	8.06	16.69	20.54	19.07	27.09	25.26
Bench Ave.	13.71	13.56	18.37	52.03	48.44	69.39	64.65
FPU FFT	1.95	2.00	N/A	5.60	5.60	7.64	7.64
FPU KWhet	2.10	2.69	N/A	11.31	11.02	15.36	14.83
FPU Matrix	2.12	2.73	N/A	11.50	10.73	14.64	13.42
FPU Ave.	2.06	2.47	N/A	9.47	9.12	12.54	11.96
Monochrome	2.03	2.14	4.16	5.08	4.83	6.46	6.08
2-Bit Color	2.17	2.24	4.43	5.42	5.17	6.91	6.53
4-Bit Color	2.31	2.28	4.58	5.60	5.26	7.16	6.69
8-Bit Color	2.33	2.17	4.64	5.72	5.36	7.33	6.79
Color Ave.	2.21	2.21	4.45	5.45	5.15	6.97	6.52
L							

Table 1: Benchmark measurements of new Macintosh models. The LC III had an floating point coprocessor (FPU) installed. The Centris 650 had a 68040 (not a 68LC040), and the Centris 610 had a 68LC040 (i.e., no FPU). The Apple 1 GB hard disk was used in all cases, and the disk cache was set to 256K. An Apple 14-inch monitor was used for all tests. Data courtesy of Dale Adams, Apple Computer, using Speedometer version 3.11. (The IIci was roughly comparable to the IIvx.)



SCSI controller as the Quadras, while the IIci uses the older 53C80 controller (although, the IIci has probably the best 53C80 implementation Apple has done). The maximum SCSI transfer rate on the C610 is in the 4-5 MB/ sec range, while the IIci maxes out at 1.8-2 MB/sec regardless of how fast a hard drive is attached. The C610 has a fast VRAM-based video system, while the IIci uses a cycle-stealing DRAM approach which can have a significant impact on processor performance at higher pixel depths. Of course, you could add a NuBus card and bypass this problem (although you would gain some new performance problems by going to NuBus. but then this is true for both machines).

From a feature standpoint (ignoring expandability for the moment), the C610 has some advantages. It has optional onboard ethernet and supports a much wider range of displays from it's onboard video than the IIci. The C610 video supports everything from NTSC/PAL timing on up to 21" two-page displays. The 16" displays can be driven at up to 15 bits per pixel (bpp), while larger displays can be driven at up to 8 bpp. The IIci supports only a limited range of monitors and maxes out at 8 bpp. If you only need 8 bpp on a 640 x 480 display, however, then the IIci works just fine. The C610 also has a sound input port, which the IIci lacks. On the other hand, the IIci has a connector for a second, external floppy disk.

Now, the IIci is more expandable than the C610. It has 3 NuBus slots versus the C610's one 7" slot, which you must buy an adapter card to make use of. The IIci has 8 SIMM sockets permitting 32 MB of memory (using 4 MB SIMMs), or 128 MB (using 16 MB SIMMs). The C610 has 2 SIMM sockets for 72-pin SIMMs (which can be 4, 8, 16, or 32 MB each). While the IIci has more slots, the C610 has an extra internal drive bay which can accommodate an internal CD-ROM, SyQuest drive, etc.

Q: Is an upgrade available to add a floating point (math) coprocessor to the C610?

A: It would be expensive and not necessarily cost-effective compared to getting a C650 in the first place. However, you could replace the socketed 68LC040 microprocessor with a 68RC040. The ROM in the C610 can tell the difference between the two types and use the hardware floating point that's built into the "full" 68040, if it's there. There are many stories that say it can't be done because the 68RC040 requires a large heat sink. In fact, it only requires the heat sink when it's operated at 25 MHz. The C610 operates at 20 MHz. Apple hardware engineers have verified that the 68RC040 will operate in a C610 cool enough without a heat sink. (You could use a heat sink anyway, except that it would preclude the use of addin cards because it would occupy space needed by the card.) You would need a heat sink if upgrading a C650 for floating point, making it like the ones from the factory.

Q: Why can Macs with the same CPU and clock speed, such as the Quadra 700 and Centris 650, actually run an application at different rates?

A: Computers can gain time by overlapping steps rather than by doing them in sequence. The C650 and Q800 use trick called "memory interleaving" whereby they overlap the reading and writing of pairs of SIMMs (RAM memory). It's not a new trick, but these are the first Apple products to do it.

The RAM in the C650 and Q800 is organized into ten banks, where each bank holds 4 or 16 MB, if it's not empty. These ten banks form five pair; interleaving happens if both banks of the pair contain the same amount (4 or 16 MB) of RAM. All Q800s and some C650s contain 8 MB of RAM on the motherboard: two banks of 4 MB each, one pair, and interleaved. (Other C650s contain only one unpaired, non-interleaved

bank of 4 MB on the motherboard.) Both machines also have four sockets for SIMMs, which count as two banks each because the SIMMs can be either single-sided (one bank filled) or double-sided (both banks filled). However, the pairing is done between sockets 1 & 2 and 3 & 4. For example, if side-one of the SIMMs in both sockets 1 & 2 contain the same amount of memory, these two banks will be interleaved, even if side-two of these two SIMMs don't match (and therefore aren't interleaved).

The bottom line is that while you can expand memory by adding a single SIMM, these computers will run faster if you expand memory by adding pairs of identical SIMMs. A C650 purchased with 8 MB on the motherboard will run faster than a 4 MB C650 with a 4 MB SIMM. The actual speed gain will depend on how often the program has to access RAM (remembering that the 68040 has a large amount of cache memory in the CPU itself).

Q: What kind of SIMM memory do the new Mac models use?

A: As most of us know, almost all Macs since the Mac Plus used a type of add-in memory (SIMMs) in common. (The exceptions were the Mac IIfx and the LaserWriter IINTX, which used their own special type of SIMMs, as well as the Classic, Portable, and PowerBooks.) While the capacity and speed differed between Mac SIMMs, they were all on the same 60-pin module.

However, Apple has just changed their standard. Most of the new products, the LC III, C610, C650, Q800, and the LaserWriter Pro 600 and 630, use a 72-pin SIMM style that's also used by the IBM PS/2 and several workstations. (They are not used in the new Color Classic. Mac SIMMs need not contain, and add nothing if they do, parity bits that other computers might require.) They can be either single-sided or double-sided, an issue that didn't arise in the older, 60-pin style. 72-pin SIMMs come in



4,8,16, and 32 MB capacities (singleand double-sided 4 and 16 MB). You don't have to add the 72-pin SIMMs in groups of two or four. Each SIMM by itself is 32-bits wide. (60-pin SIMMs were 8-bits wide.) The LC III and Centris models require 80 ns SIMMs; the Q800 requires 60 ns. (By the way, this means that you have to buy new SIMMs when upgrading an LC or LC II to an LC III.)

Q: What are the built-in video capabilities of the Centris 610/650 and Quadra 800? How do they differ from the Q700 and Q950?

A: The built-in video on the new

machines runs approximately 6-10% faster. However, 24-bit video capability was dropped (1) to save money. (2) because market research showed that people fussy about 24-bit video bought their own video cards anyway, and (3) most people can't tell the difference between 16-bit video and 24-bit video. Also dropped was "Apple convolution" (flicker reduction) for NTSC and PAL because so few people used it. Table 2 shows the sizes and specifications of the supported monitor sizes, and the video memory (VRAM) required for each. The C610 requires 100 ns VRAM; the C650 and Q800 require 80 ns VRAM. (Old Mac

LC VRAM works fine.) VGA support is problematic, since there are differences between VGA monitors. Try a monitor before presuming it will be acceptable! For example, some VGA monitors will look very greenish if the cable is wired in a certain way: make sure the cable you use is right for both that model of monitor and Macintoshes. (It has to do with the Sync pulses being on both the green video line and on separate lines, as well.) Others just have poor picture quality. I hear that the source of an adapter that allows you to connect an SVGA monitor to one of these new Macsis James Engineering Inc., (510) 525-7350 voice, 510-525-5740 fax. Ask for the MacVGA Q adapter, for \$25. Additionally, with the right cable, you can have monochrome "television standard" video, without the need for an RGB-to-NTSC con-

"television the need f verter.

Q: Please explain the difference between 4-, 8-, 16-, and 24-bit color.

A: When color Macs first came out, video memory was much more expensive than it is today. The 4and 8-bit color use a trick to limit the amount of memory needed. A 4-bit number can be any of 16 different values; an 8-bit number can be any of 256 different values. They select, respectively, which of 16 or 256 different colors to show on the screen for each dot. That is, there can be only 16 or 256 differently colored dots shown on the screen at the same time. However, each of these colors was specified to 24 bits of precision. That is, the intensities of the red, green, and blue portions of the color could each be set to any of 256 different levels (8 bits each for red, green and blue).

As video memory became less expensive and users demanded it, 24-bit color became available. In this system, all of the dots on the screen could be set independently to 24-bits of precision (again, 8 bits each in red, green, and blue). This feature wasn't

Table 2: Built-in video capabilities of the Centris 610/650 and Quadra 800. The type of monitor in use is determined by connector pins 4, 7, 10, and 11 on the end of monitor cable plugged into the Mac. u indicates that the pins are wired together. Maximum Bits/Pixel are shown for the two possible quantities of VRAM installed.

Connect Pins	Pi:	xels	Dot Clock	Scan Rate	Bits/	Pixel			
Display4 7 .10 11	Horiz	<u>Vertica</u>	(MHz) <u>'</u>	Vert (Hz) . Horiz (kHz	512K	<u>1MB</u>			
Standard Sense Codes:									
						_			
Apple 21" Coloru .uuu	1152			. 7568.7	4	8			
Apple 21" Mono u u	1152			. 7568.7	4	8			
Apple Portrait u u u	640			. 7568.9	4	8			
Apple 13" Coloruu	640			. 66.7 35.0	8	16			
Apple 12" Mono u u	640	480	30.24	. 66.7 35.0	8	8			
Apple 12" Coloru u u	512	384	15.6672	. 60.15 24.48	16	16			
NTSCuuuu			12.2727	59.94 15.7	8	16			
underscan	512	384							
overscan	640	480							
(To produce a color NTSC signal, an RGB-to-NTSC converter is required.)									
, ,				- · · · · · · · · · · · · · · · · · · ·					
Extended Sense Codes:									
19" Color u u	1024	768	80	7560.24	4	8			
16" Color u u	832	624	57.2832	75 49.7	8	16			
VGAu u u	640	480	25.175	59.95 31.47	8	16			
SVGAu u u	800			5635.16	8	16			
(To enable SVGA, after configuring and connecting the monitor as VGA, open									
the Monitors control panel and select Options. Choose Super VGA from the									
dialog and restart th			Tribina Circu	o cupo. I carjirani i					
PALuuu			14.75	50 15.625	8	16			
underscan	640	480			·				
overscan	768	576							
(To produce a color PAL signal, an RGB-to-PAL converter is required.)									
(10 produce a cour 1 AL signal, an NOD-10-1 AL converter to required.)									

NOTE: The terms underscan and overscan are used to describe the portion of the screen that is used during NTSC and PAL modes. Underscan means that the image is deliberately kept smaller than the screen, with a black surrounding border filling the remainder of its area. This ensures that the entire image is displayed on all monitors. Overscan utilizes the entire possible screen. However, most monitors and televisions will cause some of the image to be lost beyond the edges of the display, so the entire image will not be seen.



needed for word processing and spreadsheets, but it was very important for viewing color images (photographs, video, etc.). And 24-bit color is sometimes called 32-bit color because the Mac actually defines an additional 8-bits, called an "alpha channel," for other uses, when needed (such as for transparency data).

The Mac LC inaugurated 16-bit color, which is now the standard on the new Centris and Q800 models. In this arrangement, like 24-bit color, all dots on the screen can be set independently. However, each primary color can only be set to 5 bits of precision rather than 8. Nevertheless, the eye is hard-pressed to differentiate 32 (5 bits) different levels of primary color, and so using 256 different levels (8 bits) betters it only slightly. The system is called 16-bit. rather than 15-bit, since one additional bit is allocated (though not used) for an alpha channel, and 32,768 different colors are possible.

Q: What does it mean when a laser (or other) printer is described as "PostScript" or "QuickDraw?" Why should I care?

A: QuickDraw is the native graphics language on Macs. Applications draw on the screen and print to paper with a series of QuickDraw commands-such as "draw a line from here to here" and "put a rounded rectangle of these dimensions here."

PostScript is a much richer graphics language that's built into some printers (and some computers, like the NeXT). Until recently, its big advantage was in the use of text; PostScript printers could handle many quality fonts and scale their characters to any size. Today, QuickDraw has similar capabilities, using TrueType fonts. PostScript still has some advantages, such as its use on many brands of computers. Files containing pictures or entire documents in the PostScript language

can be exchanged between different computing environments. QuickDraw is solely an Apple standard. The capability differences between QuickDraw and PostScript will be reduced further, in the near fu-

Most Mac applications print equally well to PostScript and "QuickDraw" (that is, non-PostScript) printers. In both cases, the printer driver (what you select using the Chooser) converts the QuickDraw commands the application makes to either PostScript or something else, whatever the specific printer requires. Calling a printer a "QuickDraw" printer is a misnomer since it's the Mac operating system, not the printer, that deals with the Quick-Draw commands from the application. Remember, the application usually uses QuickDraw, no matter what kind of printer is selected. However, a distinction arises if an application wants to send PostScript to the printer directly, bypassing the normal QuickDraw to PostScript conversion. This can happen if a document contains PostScript, perhaps received from another source (i.e. an "encapsulated PostScript" picture), or if the application generates PostScript itself(i.e., Illustrator). In these cases, a PostScript printer is required. (An exception: an application called Freedom of Press can take PostScript from a Mac and print the image on some non-PostScript printers, even in color.)

All laser printers require a computer to calculate where to put the black dots that form the image on the paper. Usually PostScript printers contain a computer in the printer itself to do this calculation. Often times "QuickDraw" printers require processor time and megabytes of memory from the Mac instead. As a result, a concrete advantage of PostScript printers has little to do with the PostScript itself-less Mac time and resources are required for printing because the printer can do more of the work.

Q: What does the rumor mill say the next new Mac will be?

A: A six-slot machine, IIfx style, with a very fast 68040 processor, digital signal processing (for voice recognition and audio-visual-excuse me, multimedia-support), and very high speed everything. Look for it in late summer or early fall. Also, I expect an upcoming color PowerBook with an active matrix screen. (The 165c has a passive matrix screen.)

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Software Review

PhotoEdge: Image Editor for PhotoCD

by Dennis Dimick

If you have Photo CD on your Mac, the next step is finding software to fix those "little problems" left over from when you first took the photographs. Image processing programs offer just the solutions needed—they provide tools that can enhance an image in several ways.

You can adjust the image's framing when a subject is too small and improve an image's brightness or exposure. Image contrast can be adjusted to compensate for flat, dull light the day you took a photo. Maybe you wish the image was just a little (or a lot) sharper, or you want to turn a horizontal frame into a vertical. You can accomplish all this with image processing programs.

Kodak's Low-Cost Program

If you've got (really) deep pockets, Adobe's Photoshop works well. This program does more than you will ever need to fix up an image needing repair. With its PhotoCD Plug-In, you can directly import and manipulate PhotoCD images. The problem is its cost; street price is about \$550.

If you've already paid for a CD-ROM drive to get going with PhotoCD, the last thing you need is another big expense to do basic work on images: cropping, sharpening, or altering contrast.

Eastman Kodak, the company be-

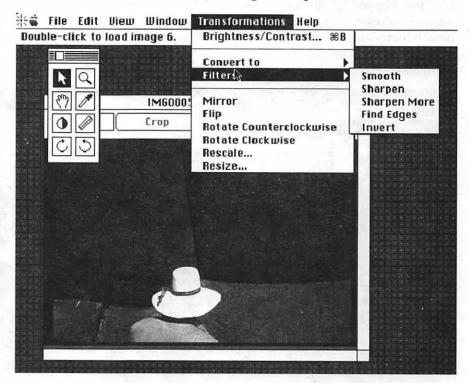
hind PhotoCD, recently released a modest image-editing program that will enable you to improve photos now on PhotoCD. Called PhotoEdge, this program provides basic image-editing features at a fraction of Photoshop's price. Retail is about \$140.

PhotoEdge: What You Get

When a photographer wants to "clean up" images for publication or presentation, basic challenges include cropping and sizing; exposure: lightness or darkness; contrast: the range of light to dark in the image; and orientation: whether or not the image has a level horizon (or the amount of "levelness" you intend.)

Photographers try to solve these problems when making normal photographic prints in a darkroom. Since the arrival of digital imaging programs, it's also been possible to improve the appearance of sharpness (and some programs also allow you to clone areas or move, and even add, objects). Of course, you can't make an unsharp image sharp, but these image editing programs now make it possible to create the impression a modestly unsharp image is sharper than it really is.

PhotoEdge offers most of these basic tools and a few others for image manipulation. It has an on-



Kodak's PhotoEdge image editing program offers a variety of tools to enhance the quality of photographs stored on PhotoCD. The most powerful features are offered via the program's "Transformations" Menu. PhotoEdge also supports TIFF, PICT and RAW formats from other sources.



screen palette with six tools and rotation controls. A half-dozen menus offer customization tools. Besides PhotoCD format, PhotoEdge supports file types TIFF, PICT, RAW and EPS (export only.) This means PhotoEdge will allow you to import and edit existing TIFF and PICT files, for example, from sources other than PhotoCD.

You can view images in five different sizes in black-and-white, gray-scale up to 256 shades, and color up to 24-bit (millions of colors) if your Mac's video supports it.

On-Screen Tool Palette

The tool palette's features include a cropping tool, a magnifying glass (to zoom in and out on an image,) and a mover hand that offers an alternative to scrolling bars when an image is too large to fit on-screen. The palette also includes a ruler tool for measuring distances between two points, eyedropper and densitometer tools to measure the color and relative brightness of pixels in an on-screen image, and tools

for 90-degree image rotation.

You can crop an image either by the click-and-drag technique with the mouse to create a box of appropriate size, or you can create a box of preset size and move it around on the image to select an area.

Menu "Transformations"

PhotoEdge's most powerful menu is Transformations, which offers tools and filters to change image quality and type. This includes a command to modify image brightness and contrast, or individual colors in an image. You can change intensity and contrast of just the red, blue, or green hues to create a different mood or color balance than found in the original scene. This tool helps when you've taken images indoors under incandescent or fluorescent light using outdoor film meant for daylight use. PhotoEdge allows you to add or subtract selected colors to help an image look more natural.

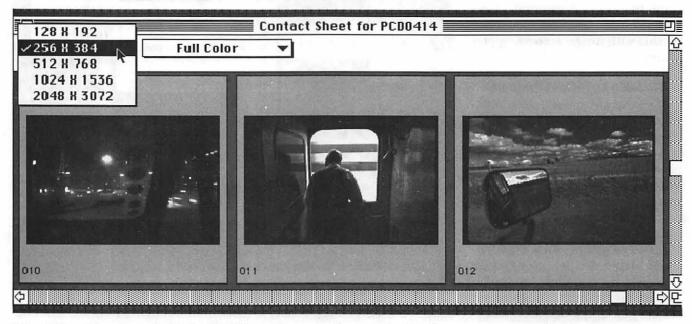
Other transformations tools include Sharp, Sharpen More, Smooth

(or Blur, in my opinion), Find Edges, and Invert.

Sharp or Sharpen More filters obviously make an image look sharper. By applying these filters many times you can also create striking abstract images from original photos. The Smooth filter tends to reduce the grainy texture of some images taken on high-speed film, but also creates a soft-focus feeling. The Invert filter will reverse the color scheme of an on-screen image creating the look found on a frame of color negative film.

The most intriguing tool is Find Edges. You can use this to create a line etching of the original color or black and white image. This etching can be exported to a drawing program and used as a basis for illustrative artwork.

The Transformations menu also offers features to mirror, flip, rotate clockwise and counter-clockwise, rescale and resize. The program has extensive on-line help that should answer most questions while you



PhotoEdge allows you to decide how big picture icons on a "contact sheet" will appear. A contact sheet is a visual directory of all images stored on a PhotoCD disk. You can select and open an image for editing by double-clicking on its "contact sheet" icon. All Photos © Dennis R. Dimick



work.

PhotoEdge also prints to most Macintosh-compatible color, grayscale, black-and-white PostScript or QuickDraw printers.

A Good Beginning

PhotoEdge was released in December, and though any version 1.0 of a program can be considered suspect, I found the program to be quite stable—but some tools and commands are less than intuitive. In an age of "WYSIWYG: What-You-See-Is-What-You-Get," this program needs some work.

On-screen and image processing aspects seem well-wrought, especially for the price. Features dealing with printed output might as well have been left off though. It's easier to save an image as a PICT or TIFF image and print it from any program with more powerful printing capabilites later [hmm, such as PhotoShop?—ed.]. On-screen image size has no bearing on printed output size, and no option exists for onscreen rulers. You must use a rescaling tool via dialog box to adjust the size of printed output. There

is no way to visualize or preview what printed output size will be, or to directly adjust dots-per-inch (dpi) on printer output. This is done in reverse by means of a dialog box that uses only pixels measurements. You must then use a table and math calculations to get approximate output size and dpi.

Instructions don't say what to do if QuickTime 1.5 and Apple Photo Access Extension are installed. Most other programs require these tools to access PICT versions of PhotoCD images. When I tried to open PICT versions of PhotoCD images into PhotoEdge, all I got were distorted black and purple double images on screen. All worked fine once I opened images stored on disk from the PhotoCD format folder. PhotoEdge also processes PICT and TIFF format photos from sources other than PhotoCD.

Besides editing photo coverages for National Geographic Magazine, Dennis Dimick tries to keep up on digital imaging technologies that use and affect photography. Title: Kodak PhotoEdge: PhotoCD Software. Package also contains sample PhotoCD disk with 25 images.

Publisher: Eastman Kodak Co.

Address: 343 State Street, Rochester, NY 14650

Price: \$140 (retail); lower through mail order vendors

Ordering Information: 1-800-2424, extension 53.

Hardware Required: Macintosh computer with 4MB RAM minimum, 4MB free hard disk space; 8 MB RAM preferred, 10MB free hard disk space; 8-bit color video minimum, 24-bit optimum; PhotoCD compatible CD-ROM drive. (Call 1-800-242-2424, extension 51 to determine CD-ROM drive compatibility.)

Software Required: Minimum System Software version 6.0.7, appropriate CD-ROM driver software.



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A Less Taxing Way to do Your Taxes

by © Hunter Alexander 1993

TaxCut vs. MacInTax vs. Turbo Tax

All that paper you send to the IRS must be re-typed into IRS computers. The typists can—and do—make mistakes. By filing electronically, you ensure that what you send is what they receive. The government wants you to file electronically.

If you file your returns electronically, you can get your refunds in about 21 days [if you gave the IRS your bank account number for direct deposit]. Paper returns may take six to eight weeks. The IRS error rate for electronic returns is under 3 percent, as contrasted to 14.3 percent error rate on paper returns [according to Guide to Income Tax Preparation. Consumer Reports Books].

The \$25 to \$40 that many IRSapproved transmitters charge for electronic filing is deductible as a miscellaneous expense.

This year over 14 million forms will slide along to the IRS over the wire and never see a post office. In 1990 only 4.2 million returns came in by wire or satellite.

Some Misconceptions

Electronic filing is paperless. Wrong. You still have to send in Form 8453 [the Electronic Filing Transmittal form], your W-2s, and occasionally other supporting documents.

With electronic filing, you send your tax return via a box called a modem directly to the IRS? Wrong. An IRS-approved transmitter sends your return to the IRS. You just send your return to a transmitter. The IRS is not yet accepting transmissions directly from people's homes/offices.

About seventy million Americans get refunds every year and the number is increasing. Refunds due on returns filed by mail typically take months.

Mr. Internal turned on his electronic filing in 1986. In 1988 about 600,000 returns came in by modem. A modem [modulator demodulator] lets a fax machine or a computer pick up the telephone and talk to another fax machine or computer.

Electronic filing can work like this. A customer drops off her tax return at a bank. The bank either faxes the return or mails it to a third party processor, which inputs the tax data and sends it electronically into the IRS's system.

A bank can make money in two ways, according to Jay V. Haigler, sales representative for the San Diego-based InstaRefund Electronics Filing Services. Haigler said banks can charge a fee for collecting the tax forms and receive a processing fee for advancing the refund in what is called a Refund Anticipation Loan or RAL. The bank will get the customer her money almost immediately. RAL's are advertised a lot but they are not a tax deductible expense as are tax software, books and the fee your accountant charges you. Jackson Hewett [1800

277 FAST] is one service that advertises on local buses that it can get you your tax refund to you in as little as three days for a price.

Only certain taxpayers will benefit from the IRS electronic filing program, those with substantial refunds due them who don't have any tax liens and use a tax preparer who has the proper software and hardware.

According to Andrew Rosenberg [phone 1 216 678 9015, developer of some software for electronic filing and former president of CPAid Inc., Kent, Ohio], electronically filed returns have a five percent error rate, compared with 20 percent for returns done on paper. [Andrew Rosenberg sold CPAid to John Graves.] Although CPAid sells for \$1000, it does not have the useful Form 1040PC.

On February 15, 1992, I filed my forms using TaxCut, printed out 1040s on a daisy wheel Brother HR 20 printer and got \$335 back from the IRS on April 4 and \$341 from Virginia on March 30. I did not use electronic filing just the Post Office.

TaxCut, TurboTax and MacinTax are heavily advertised in and written up in newspapers and magazines and often referred to as market leaders.

I bought a Macintosh 512K and researched MacInTax to do my 1992 forms but decided that my PC, TaxCut software and 60 MB [megabyte] hard drive may be just as efficient to get tax forms on screen, filled out and printed up. Some use TurboTax claiming it's faster. I haven't upgraded my PC to Microsoft Windows but cling to MS DOS 4.01. That is good enough for 1992 for me.

TaxCut comes from MECA, Fairfield, Connecticut 06430-0912 while MacinTax and TurboTax, another much praised product, comes from ChipSoft, San Diego, Califor-



nia 92186.

Next year I'm going to file electronically. But it is not yet a good enough deal.

Electronic filers may be in a class who get extra IRS scrutiny. Last year the IRS discovered many scams, some using electronic filing and babies that lived only in tax forms, in Virginia.

Electronic filing tricks often depend on "first-time" filers. As electronic filing increases, so does refund fraud. IRS methods detected 11,082 phony electronic refund claims in 1992's first seven months, up from 5.746 in all of 1991. But the true number may be far higher, the General Accounting Office says. Because many scams involve purported first-time filers, the GAO recommends - and the IRS agrees that all first-timers' electronic returns be treated as questionable until the IRS establishes the returns' validity.

The IRS agrees with the GAO that filers should show two types of identification, one with a photo, to electronic-return preparers and plans to require that in 1994. But the IRS disagrees that it should delay returns until it matches electronic returns with the signature papers it receives later by mail. That

would thwart the IRS's selling point for filing by modem: fast returns.

When someone tries to sell you expensive tax software, ask, "Does your product include the Form 1040PC?" If the answer is no, then vou may not be getting value for your money. The Form 1040PC only prints lines where taxpavers have an entry. For example, if a taxpayer had only wages and interest income to report, the 1040PC format would only print those two lines. This compares to 17 lines on the Form 1040 reporting all types of income. By printing only lines with entries, the Form 1040PC is shorter, saving you time and money.

MacInTax is not as good as it used to be when owned by Softview. According to people who spoke up at two recent meetings of local Mac user groups, MacInTax crashes a lot under System 7.1. Macuser of August 1992 carries MacInTax claim to be number one but review on page 217 says the product has declined. [I've not used this product. Apparently almost all Mac users cling to it despite its problems. MacInTax is the only Mac tax system advertised in MacUsers I could find.] My friend Wayne bought a Macjust to do his tax with MacIntax. In 1992 MacInTax was sold to

ChipSoft of San Diego, California, owner of TurboTax.

TurboTax, "is a little faster" than TaxCut, according to a review in New York Times of February 12, 1991. TurboTax claims being able to do your taxes in just a few hours. Apparently ChipSoft grew on his and other reviews, migrated to the Mac world with enough bucks to buy MacInTax. Not all mergers are good for users.

My suggestion is that you should stay with a PC and Tax Cut/TurboTax it that's what you have. I don't know enough about TurboTax to say it is faster or slicker than TaxCut. I paid \$10.40 for TaxCut Final '92 at Micro Center, Pan Am Shopping Center, 3098 Nutley Street, FairFax, Virginia.

According to Journal of Accountancy January 1993, the leading tax software products designed for accountants are: Lacerte, Prosystem fx; Fast-tax, TurboTax, Arthur Anderson and 1040 Solutions.

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Money, January 1993 PC Magazine, Feb. 9, 1993. MacUser, Feb. 1993

Hunter Alexander has written articles for BYTE Magazine, ComputorEdge, and The New Yorker.

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Software Review

Ace Detective

by Thomas Berens

ce Detective, by Mindplay, is an educational game for children of ages 7 to 13. Although the purpose of the game is to investigate crimes and provide a judge with enough probable cause to arrest a suspect, the underlying objective of this educational software is to develop reading comprehension, organizing, and notetaking skills in young detectives.

Ace Detective will run on a Mac Plus or higher. It requires an 800K disk drive, System 6 or later, a hard disk and 600K of RAM. It has both a color and black-and-white version. The game has been ported from the IBM and Apple II versions. I think this is fairly evident, when compared to other games that were originally developed for the Mac. The graphics and sound effects are unexceptional for a Mac game.

Being a typical Mac user, I tried

to install the software without using the manual but found that I had to refer back to the book. Since the installation application on Disk 1 did not prompt me for the second disk, I erroneously assumed that Disk 1 included everything needed to run the game. However, you must also install either the black-and-white or color version of the game and these reside on disk 2. Bottom line: Follow the instructions in the manual and you can't go wrong.

Prior to solving a case, you need to select your level of expertise (Rookie, Detective, Ace Detective). You can also select the particular crime to investigate (twenty cases are included, and the software enables you to create more) or you can let the game select one at random. Finally, you need to decide if you want to race the clock, and if so, you need to set the appropriate time.

Once you the start game, you are given a Police Report which essentially states the type and location of the crime (See Figure 1). By pressing various buttons, you can visit the Crime Scene

where various witnesses give you statements, use the Phone button to call up suspects, witnesses, etc. (see Fgure 2), or look at Mug Shots to see physical descriptions and arrest records of suspects. Every time you visit an area and interview witnesses, their comments are automatically added to your Notes, which are available to you by pressing the appropriately marked button. More on that in the next paragraph. The Warrant button should only be pressed after you have reviewed your notes and put together enough of a case to arrest one of the suspects.

Once you press the Notes button. you are asked to select a suspect on which to collect notes. After doing this, you will see a new screen with six new buttons (see Figure 3). The three left buttons are the Motive, Opportunity, and Means buttons (if you need clarification on what these three terms mean, press the Help button or refer to the manual). You must toggle through these buttons as you put your case together. For example, suppose we are taking notes on Al Gator, one of our likely suspects, and we need to determine the means by which he allegedly committed the crime. Press the Means button and "Means:" appears in upper portion of the screen to the right. Now use the Next Clue button to toggle through your notes until you find the words you need (never more than three words, and always side-by-side). Click on the appropriate words in the narrative (in this example, "hose") and the words will appear under "Means:" at the top of the screen. Continue toggling through the three left buttons and the Next Clue button until you have made a case against one of the suspects. Then press Done and ask for the Warrant.

At this point the Judge will review your motive, opportunity, and

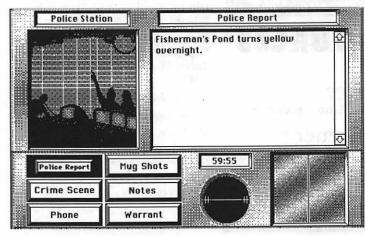


Figure 1-The Police Station.



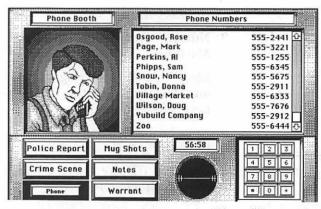


Figure 2-The Ace Detective Phone List.

means and tell you if they are correct. If you are "three for three," then the suspect is apprehended; otherwise, the judge will tell you which ones were incorrect, and you can go back and try again.

I found that picking out the opportunity was usually a "nobrainer"; opportunity equates to the location of the crime, which is listed in the police report and is automatically included in your notes. As long as you picked the right suspect, the judge will accept the scene of the crime as opportunity. However, the judge can be pretty particular when it comes to accepting the exact wording of the

motive or means. For example, in the water pollution crime, the culprit hauled the pollutants to the pond in a truck and used a hose to pump the ooze into the pond. The judge considered a hose to be the correct means, but not the truck.

Many people will

probably want to compare this game to the Carmen Sandiego (CS) series. Having used the Apple II version of CS several years ago, I think that the two programs are similar in their presentation of the crimes and suspects. However, CS involves more outside research; with Ace Detective, everything you need to play this game is either in the notes or can be readily deduced.

The reason I chose to review this game is that I have a 7-year-old son, Luke, who is having difficulty reading in school. He's a big fan of the Nate the Great detective books, so I thought that this might interest and encourage him. I found that he likes

the game and can play the rookie level with ease, but he needs help with the reading and with understanding the concepts of motive, opportunity, and means. For younger children, I wouldn't recommend that they play this game solo.

One of the pluses to Ace Detective is that it allows you to create your own crimes, witnesses, and evidence. Although this takes some time and creativity on your part, your child would probably enjoy solving cases that involve people and locations with which he/she is familiar.

In summary, Ace Detective is fairly easy to play, and the ability to create new cases certainly adds to the value of the program. Young detectives will probably enjoy it. However, considering the \$70 price tag, I wouldn't recommend buying it when there are so many other excellent educational games designed exclusively for the Mac and selling for comparable or cheaper prices.

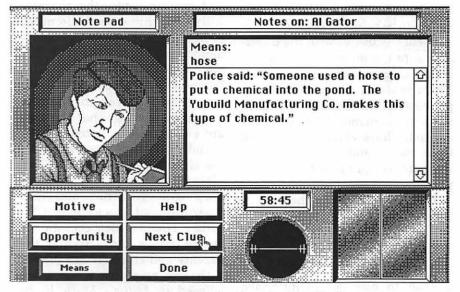


Figure 3-The Ace Detective Note Pad.



Software Review

Millie's Math House

by Sharon Freiman

his new children's software encourages creativity, inde pendent thinking and lots of giggles. The program begins with lighthearted circus music and an introduction by Millie, a cartoon cow (at least, her creators intended Millie to be a cow, it's a bit difficult to tell from the picture!) The sound is clear and distinct and the use of children's voices for the characters in the program appeals to the under seven set.

The program requires a Macintosh Plus or later, a hard disk with 5.5 MB available during installation, and System 6.0.7 or later. To run the program on System 6.0.7 you will need one megabyte of RAM for the black and white version and 2MB for the color version. For System 7 owners, you will need two megabytes of RAM for black and white and four megabytes for color. The Installer automatically determines your model, system software, memory and monitor and selects accordingly. You can override the automatic selection if, for example, vou have a color monitor but wish to install only the black and white version in order to save memory. The installation instructions, like all instructions in the guide, are easy to read and are illustrated to assist you.

Once the software is installed and you have accessed it, you will first see Millie's Main Room. This screen shows the inside cutaway of

a house with Millie plopped right in the center. Each of the six rooms in the house contains one learning activity. To engage in the activity, you need only to click on one of the rooms. A child's voice then says "Let's play in the Cookie Factory," or "Here are Little, Middle and Big," depending on the room selected. To return to the Main Room, you must click on the picture of Millie at the bottom left corner of the active screen. Also conveniently located at the bottom of the screen in each activity room is a little notebook which, when activated, allows the parent to enter the Adult Section of the program. In each of the activity rooms featuring a drawing activity, at the bottom of the screen, there is a picture of a printer which when clicked, will cause a copy of the screen to be printed. This feature is particularly useful with the Build-A-Bug program, which is like the children's game Cootie, only better. There is also a picture of a microphone at the bottom of the screen in two activity rooms, which when activated allows children to record their own sounds (provided their computer is equipped with a microphone).

The activity rooms themselves focus on the following skills:

- Size comparisons (Little, Middle, & Big)
- 2. One to one correspondence

(Build-A-Bug)

- 3. Number recognition (Number Machine)
- 4. Identifying and matching shapes and developing spatial awareness (Mouse House)
- Recognizing and completing patterns (Bing & Boing); and
- 6. Counting (Cookie Factory and Number Machine)

One unique feature of this program is the fact that each activity (except for Build-A-Bug) may be played in either an explore and discover mode or a question and answer mode. In the first mode, the child is permitted to experiment with objects in the room. To change modes, the child needs to click on the framed picture in the room. In the question and answer mode, the child is challenged to identify the correct answer to requests made by characters in the room. For example, in the Little, Middle & Big activity room, the child can try different size shoes on three different cartoon figures. character's face will then react to the shoes chosen. In the question and answer mode, the character will identify himself as little, middle or big and will ask for shoes. Humorous statements like "I'm Big; I have cold toes." bring out lots of laughter from children. If the incorrect size is chosen, the character will frown and say that the shoes are either too big or too small. A friendly voice says "Good-bye" when the child decides to return to the Main House screen. The authors of the program guide have also generously included pages entitled "Together Time," which contain suggested games and activities that parents and children can play together to reinforce the concepts learned in Millie's Math House.



There is a "Together Time" page for each of the six activity rooms.

In Mouse House (explore and discover mode) the child can build a house for Mr. Frank Llovd Mouse using various shapes and blueprints of a house. Alternatively, the child can create his own version of a mouse house using the shapes provided and the blank blueprint. The child can then print what he has built and expand his design by coloring it and adding trees, people, animals, etc. In the question and answer mode, Mr. Mouse asks for particular shapes which, when clicked, will appear in the appropriate place on the blueprint. There are three blueprints of varying complexity to choose as a base for construction. If one of the more complicated blueprints is chosen, the mouse will ask for a particular size and shape, such as a "large square," thereby reinforcing not only shape identification but size comparison as well.

Bing & Boing are bouncing figures that bear some resemblance to space aliens, albeit friendly ones. They help children identify and complete patterns. The patterns are created by various pictures and accompanying sounds. In the explore and discover mode, the child may create his own pattern of three pictures and their sounds. When Bing is clicked, he will repeat the pictures in the pattern selected by the child and will then play the entire six picture pattern for the child to hear. Although each picture has a particular sound associated with it. any sound may be changed by recording a different sound in its place. In the question and answer mode, a pattern of two or three pictures is shown and the accompanying sounds are played. Some of the pictures making up the pattern are repeated while Boing asks "What comes next?" The child is then required to find the appropriate picture or pictures to complete the pattern. If the child selects the correct picture, Boing then plays the pattern; if not, Boing asks the child to try again. If the child continues to err, the incorrect pictures are gradually removed from the screen, leaving only the correct item to choose.

Build-A-Bug is just what the title implies. The child is given a choice of three bug heads which show up on a predetermined bug torso. There are six additional parts for the bug, which may be placed on the bug in any order and in any number by clicking on the part and on numbers displayed at the top of the screen. The child can also create new and unusual creatures by dragging parts from the bug to other areas of the screen. The entire picture may then be printed and embellished.

In Number Machine the screen shows what appears to be a giant cash register, but instead of money in the cash drawer, there are various little animals. When a cash register number key is clicked in the explore and discover mode, the cash drawer opens and the corresponding number of critters pop up. As they pop up, a voice counts them. Different kinds of animals appear even if the same number is chosen in succession. In the question and answer mode. Annie, the worm, appears and asks the child to find a particular number. If the correct key is clicked, the drawer opens, the creatures pop up and are counted. If an incorrect answer is given, Annie identifies the number incorrectly selected and repeats the original number requested. The child can keep trying until he find the right number key. Once again, if the child continues to select the incorrect answer, the number keys are gradually blanked out to enhance the child's chances of choosing correctly.

Cookie Factory encourages children to count out the correct number of ielly beans as they decorate cookies for the horse, Harley. Harley is accompanied by his friendly sidekick, Froggy. Clicking the cookie pipe makes a cookie appear; the cookie will move under the jelly bean dispenser if the conveyor belt lever is clicked. In the explore and discover mode, the child can put as many as 10 jelly beans on one cookie. The number of jelly beans will be counted aloud and the corresponding numeral will show on the screen as the jelly beans are dropped onto the cookie. A click on the lever makes the cookie move along the conveyor belt. By clicking on the gloved hand the child can have the hand drop the cookie into a bin marked with the number corresponding to the number of jelly beans on the cookie. In the question and answer mode. Harley will ask the player to put a certain number of jelly beans on his cookie. The child must then click the jelly bean dispenser once for each jelly bean requested. The child then clicks the hand to feed the treat to the horse, which says "Thank you," loudly munches the cookie, and then says, "That's good!" If the child counts out too many or too few jelly beans, the horse says either "That's too many jelly beans" or "That's not enough ielly beans." and then says "This one is for you, Froggy." The frog then opens his mouth wide and eats the cookie. Unfortunately, watching the frog stretch his mouth to three times its size in order to eat the cookie has so much appeal that many times my child intentionally put the wrong number of jelly beans on the cookie just so that he could watch and laugh as Froggy ate the cookie.

The Adult Section of the program includes an Adult Information Note-



book, a Records folder and a Preferences section. The Adult Information Notebook contains five pages for each of the six activities: Game Play contains brief directions for the game; Learning Goals identifies the educational skills honed by using the particular activity; About Kids provides developmental information related to the skills discussed in Learning Goals; and School Play and Home Play which list enrichment activities to do with the child. The Records Folder contains a system that will permit parents or teachers to keep track of the total number compared to correct number of responses in a particular period of time for each child using the program. The adult can then print these records and compare them over time as the child continues to use the program. Finally, in the Menu bar (which appears only in the Adult Section) under Edit, is Preferences. If you select Preferences, you will get a dialog box in which you can customize the program to a limited degree. You can allow/disallow printing, turn the music on or off, and allow the STOP sign to be visible or hidden. The STOP sign appears only in the Main Room and is the method used to quit the program. You can also activate single switch scanning from the dialog box for special needs users.

This program has the benefits of both being fun and educational. Although a bit on the expensive side (\$35-\$40), the program's wonderful graphics, appealing sound effects, and interesting games will entertain children for relatively long periods of time. The helpful hints for parents provided in the guide enable adults in the family to reinforce the important skills reflected in the program. All in all, I think

this is a worthwhile program to have in a computer library for young children.

Sharon Freiman is the owner of a Macintosh LC and the mother of two boys, ages four and a half and seven years. She claims to own "practically every children's Mac software program made for the under seven set."

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Review of Tesserae

by Jeff Stetekluh

Tesserae is one of several award winning games from Inline Design. It was written by Nicholas Scott. The object of the game is to clear a board covered with tiles by jumping the tiles over each other. There are three basic types of tiles and they combine to form other, more complex tiles. On black and white monitors, the tiles are distinguished by patterns. I played the game on my black and white monitor without difficulty.

With the combination of nine different boards and three different levels of difficulty, there is plenty of variation in the game, so I have not lost interest in it yet; and I find myself coming back to it from time to time. This is nice when one considers that after games are mastered they often become dull. *Tesserae* is not copy protected, so it can be run conveniently from the hard disk. This convenience is another reason that I play Tesserae now and again. The Macintosh user interface is well done except for some modal dialog boxes that should have been implemented as modeless dialog boxes so that there could be immediate access to the menu.

I enjoyed this game and can recommend it to anyone who likes puzzles. *Tesserae* requires a Mac Plus or higher and a drive that can read an 800K disk.

Publisher: Inline Design SRP: \$49.95

Telephone: 800-453-7671 **Discount Price:** \$32.00

Fax: 203-435-1091



Software Review

Kill the Courier!

by Frank Potter

dobe-House of a Million Fonts, or so it seems-has done it again. SuperATM, newly released and available at quite reasonable prices, lets you see what a document that someone else has prepared is really supposed to look like, even if you don't have every font they did.

But to recap briefly...ATM from Adobe has been out for some time already (and free copies were handed out last year at one of the meetings, although I don't remember when). Anyway, what ATM does is create smooth bitmap displays on the screen and allow you to send them to non-PostScript printers. Super-ATM takes the next step and creates a surprisingly close approximation of the fonts in the original document.

Most of us who do any work in document preparation that uses more than basic, boring Times and Helvetica have been brought up short from time to time when trying to print those documents and finding them produced in Courier, which has to be one of the world's least attractive type-

faces. Okay—so it's supposed to look like a monospaced IBM typewriter. It's still ugly, and it can depart dramatically from what you thought you were getting.

With SuperATM installed in your

system, Adobe has added a couple of multiple-master fonts (Adobe SerMM and Adobe SanXMM) as a substitute type that looks much like the original and matches its metrics precisely. All this with no effort on your part, assuming that you are using an application that supports

No Parking

No Parking

No Parking

No Parking

The graphic was scanned from MacWeek. The top shows Bodoni Bold with ATM and fonts installed. The second shows fonts substitution with the fonts not installed and the third shows font substitution with the Adobe multiple master fonts and SuperATM in place.

it (most Adobe, Aldus, Claris and Microsoft applications do so, along with Quark XPress, WriteNow and several others).

It is not yet seamless: The Apple Personal LaserWriter can't use it, nor can non-Apple PostScript-clone printers that can't use multiple masters. I can't be certain that SuperATM was not the culprit when I tried to fax a document using a not terribly exotic Adobe font, but I can say that my Mac hung in the process and did just fine when I turned SuperATM off. Maybe my IIfx was just having an attitude problem. It does that.

SuperATM won't run on anything earlier than an SE, and it needs two megabytes of RAM under System 6 and four megabytes under System 7. Worse still, you need four megabytes of space to install it, although you get about two of these back when it's all over, so it doesn't hurt all that much. **Do not** run Super

ATM, v.1.0 with Apple's new 32-bit system enabler. Serious INIT conflicts WILL occur, and hard-drive corruption is possible. Adobe has admitted this problem and says they're working on it as quickly as they can. I cannot say what it does to non-Adobe fonts because Adobe fonts are all I have been using. I have been told that SuperATM is useless for Type 3 fonts—fonts that do not take advantage of hinting.

You get the Type On Call CD-ROM with the package (which of course is no use at all if you don't have a CD-ROM drive), containing bitmap fonts for just about every font Adobe had as of six months or so ago. These do not contain the outline fonts that accompany the bitmaps—to get those, you need to call

Adobe and pay for those you want unlocked. But they will give you a wide range of fonts to look at, and the real thing is just a phone call (and credit card charge) away.

Who are the people for whom this



Washington Apple Pi

This is the original, in Bodoni Poster Compressed:

Washington Apple Pi

This is what it looks like, without SuperATM. And...

Washington Apple Pi

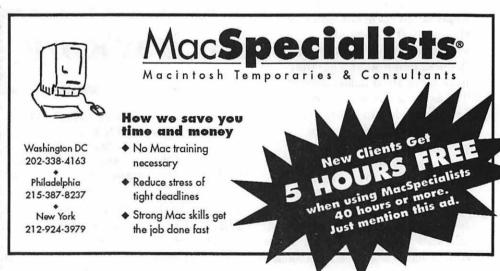
...this is what it looks like, without Bodoni directly available, but with the help of SuperATM.

kind of application is a virtual necessity: you are probably one of them if (1) you receive documents from other places that depart from the standard 35-font LaserWriter list of suspects,(2) you want to see or print these in some form that approximates their original status, and (3) your printer can handle the task that SuperATM imposes upon it.

What does it cost? As usual—it depends. The list price is \$149, but nobody pays list price any more. If you already have an earlier version of ATM, Adobe will send the package to you for \$49, and this includes the CD-ROM and five additional typefaces as well: Bellevue, Cottonwood, Madrone (two WoodType faces), Symbol and Zapf Dingbats, which you probably already have. Mac-

Connection will sell it to you for \$89 all by itself or will sell it to you for the upgrade price of \$49 (which

means no sales tax and no shipping costs to members of WAP). If you can use it, it's a bargain.





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Ken De Vito	(703) 960-0786	Barry Fox	(717) 566-6709	TELECOMMUNICATION	S
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April-May

April 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Columbia Slice Game SIG	2	3
4	5 PI SIG	6 TeleComm SIG	Mac Program mers SIG DTP SIG	8 Stock SIG	9	TCS Class 10 Annapolis Slice Frederick Slice
11	12 Intro to the Mac-Part 1?	Art SIG	DB SIG WAP BoD	Writers' Deadline	16	17
18	19 Intro to the Mac-Part 2	20	21 Excel SIG UltraMacros SIG	22 Ed SIG	Editors' On Deadline	WAP General Meeting AW SIG
25	IIGS SIG- 26 McLean Gvt Ctr Intro to the Mac-Part 3	27	28 Maintaining Your Mac	29	30	

May 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
May 30	May 31 MEMORIAL DAY					1
2	3	4 TeleComm SIG	Mac Program- mers SIG DTP SIG	6 Columbia Slice Game SIG	7	AIII SIG 8 Annapolis Slice Frederick Slice
9	10 Intro to the Mac-Part I	Art SIG	DB SIG WAP BoD	13 Stock SIG	Writers' Deadline	Kawasaki 15 NIH
16	17 Intro to the Mac-Part 2	18	Excel SIG HyperTalk SIG	20	21	WAP Gen-22 eral Mtg AW SIG
23	IIGS SIG- 24 NIH Intro to the Mac-Part 3	25	26 Maintaining Your Mac	27 Ed SIG	28	29

April-May

Meeting Notices

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

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

Apple IIGS SIG—Monday after the WAP General Meeting; 7:00 PM; MacLean 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).

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

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

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

DeskTop Publishing SIG—1st Wednesday; 7:30 PM; PEPCO Auditorium, 1900 Pennsylvania Ave. NW, DC.

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. Cracker Barrel BBS (301) 662-3131.

Game SIG-1st Thursday; 7:30 PM; WAP office.

HyperTalk SIG—meets bi-monthly on the 3rd Wednesday of the odd numbered months 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 or so; 7:30 PM; WAP Office.

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

Telecomm SIG-1st Tuesday; 7:30 PM; WAP office.

UltraMacros SIG-Meets bi-monthly on the 3rd Wednesday of even numbered months at the Fairlington Community Center, 3300 South Stafford St., Arlington, VA. 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 Sefarian (202) 333-0126) for details.

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

Election: The May issue of the Journal will contain the ballot for this year's annual election of WAP officers and directors. Please look for it, and vote!



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Mort Greene	(703) 522-8743		(301) 972-4263	SoundEdit	(703) 332-1323
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Software Review

In a Word

by Debbie Hoyt

o be honest, when I first sent away for my upgrade from Microsoft Word 5.0 to 5.1, I didn't expect a whole lot. After all it was only an incremental upgrade and, if you called Microsoft directly, they'd send it to you for \$14.95. So, I was set to be unimpressed with the difference. That is until my software arrived and I had installed it.

The first thing that I noticed when I opened the application was the ribbon. I had grown fond of the new ribbon feature that was one of the major upgrades from Word 4.X to 5.0. Finally, I said, Microsoft Word behaves like a Macintosh word processor. But the 5.1 ribbon though-it looked three-dimensional and it was a grayscale, and there was a another ribbon-like bar across the top, the Toolbar. What a sharp first impression!

After using it for several months, I feel comfortable enough with it to tell you about it. The program sports several major improvements over its predecessor as well as other more minor improvements. I'll break these up into two categories: major upgrade and enhancement to existing features. The Toolbar is Word 5.1's most obvious major improvement. Depending on the size of your monitor, the Toolbar can hold up to 30 buttons which give you quick access to those commands that you use most often in Word. And its customizable. This is especially important if you have one of the smaller nine inch screens because it allows you to choose which buttons appear on the Toolbar. But that's not all. If there is a command that you use that is not one of those on the Toolbar, Word 5.1 allows you to cre-

ate a new button and assign to it the command that you need. To do this click on the Toolbar button (the one at the end which looks like an upside down triangle), hold down the mouse button and drag over to Customize. This brings up a dialog box which enables you to choose a new button from among 121 featured buttons and assign it a command from among those offered. Close and you're finished. Your new button will appear as soon as the dialog box closes.

Another major upgrade is the Graph button which you'll find on the ribbon. Many of you generate monthly reports in MS Word and often find that you need a graphical representation of your data. This used to be a lengthy process. Now with the inclusion of Microsoft Graph, all you need to do is create a table of the data in Word (just click the Table button on the ribbon), and then click the Graph button and voila, you have a two- or three-dimensional chart without ever leaving the application. What a timesaver.

There are two more major upgrades that I'd like to mention. One is the addition of a Create Envelope button on the Toolbar. Click this button and a dialog box comes up



The new Microsoft Word 5.1 Ribbon.



Horizontal view of the new Microsoft Toolbar with most of its buttons showing.



into which you enter the return address and the address of the recipient. You are even able to store addresses for future use so that you won't have to be retyping frequently used addresses. One annoying thing though, believe it or not, Word 5.1 is still unable to mail-merge with a data file.

If you share your documents with other users, you will be pleased to learn of the another major upgrade: the Annotation command. The Annotation command is found under the Insert menu. When selected it puts a non-printing icon that you choose into the document at the insertion point and opens a box for you to type in your note. To read the note, just double-click on the icon. This is far more space conscious and attractive that the notes that cluttered up the margins in Word 4.X.

Now on to the enhancements that Microsoft made to existing features. One improvement is to the Drop Cap command. The previous version of Word had you jumping through hoops to make a drop cap. Word 5.1 has only a button on the Toolbar-click it and designate the position of the drop cap and you're done. Simple!

If you have QuickTime installed in your system, you can add QuickTime movies to your documents. Just choose Movie from the Insert menu. To play your movie, choose Play Movie from the View menu. The print function of Word has also been improved. Word 5.1 allows you to print documents on both sides of the paper by allowing you to print Odd Only and Even Only. Here is a list of some of the other enhancements:

- monitor you PowerBook's available battery power
- insert a table, cells, rows, etc., into an existing table
- add bullets automatically to one or more paragraphs

 get feedback on your spell checker's progress

All told, this is one great upgrade. If you haven't upgraded from Word 5.0 to 5.1 yet, don't delay. Microsoft is still offering the upgrade to registered users for a mere \$14.95. You won't be sorry that you did.

Title: Word 5.1

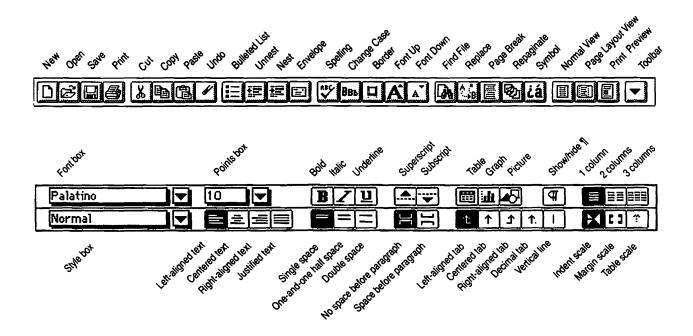
Publisher: Microsoft Corp

Address: One Microsoft Way Redmond, WA 98052

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The new Microsoft Word 5.1 Toolbar (top) and the enhanced Ribbon (bottom) with button designations.



Software Review

Power Menus

by Jim Campbell

iwi Power Menus is billed as the Ultimate Menu En hancement for System 7. From what I have seen, I agree! Power Menus provides instant access to your most used files through the Apple menu. You eliminate the window shuffling, and click, click, click that it takes to leaf down through several folders to find your most used files.

Power Menus is installed by simply dragging the icon into the Control Panels folder in your System 7 folder (System 7 or better is a MUST) and then restarting your Macintosh. Submenus are then attached to ev-

ery non-empty folder in your Apple menu. The submenus are denoted by a triangle to the right of the folder name. By dragging your mouse sideways while holding down the button, you display the chain of folders within folders until you see the file you want to launch. The Macintosh System places a limit of five on the number of sublevels that can be created and displayed. Power Menus breaks this limit with a feature they call "DeepLevel," and it lets you browse through as many submenu levels as you would like. This feature does impact on the normal speed of the

> Apple menu-but not until you go deep into the submenus.

> Aliases can be used to place in one of your Apple Menu folders. Using aliases will slightly slow the Apple menu process but again not significantly.

> Control Panel fonts can be changed from the normal Chicago 12 to whatever you desire. Power menus encour

ages Geneva 9 because it is in everyone's System and it makes optimal use of space on the display.

PowerBook users will enjoy the "Manual Updating" mode which lets you browse though the Apple menu without requiring any disk access which is a real help and time saver when your PowerBook hard disk is in "sleep mode."

One nice feature that comes on the master disk is a demoversion which you are encouraged to give away to your friends.

No problems were experience in testing. It's very easy to install and use. The instruction book is only eight short pages. Power Menus' beauty is its simplicity and power. There's really nothing else to write-it is that easy to use, and it is great! Try ityou'll like it!

Jim Campbell, P.E., is an enthusiastic Mac user who is always trying to increase personal productivity by using the Mac. He plies his trade with Interlog, Inc. in Falls Church, VA where he is currently the Principal Operations Research Analyst. Jim is also Chairman of the Greater Washington Chapter of the Society of Logistics Engineers (SOLE).

About This Macintosh... Chooser **KiwiEnvelopes! 3 Applications Control Panels Desk Accessories Favorite Folders Holidays** Work Sets Letters

Title: Power Menus

Publisher: Kiwi Software, Inc.

Address: 6546 Pardell Road Santa Barbara, CA 93117

Telephone: 805-685-4031

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by Madge Van Ness-Brucato

ou have a database need which is too small to buy FileMaker Pro and has special requirements which go beyond available stand alone data holders. You have just the incentive to create your own stack. HyperCard was designed to be a "Software erector set" for the non-programmer. So let us consider what you want to do.

This is the first in a series of articles to examine some aspects of HyperCard you may not have considered. Some of them may be very basic; some are for advanced scriptors or authors who are considering issuing ShareWare. I will admit to stealing extensively from many authors; the nice part about HyperCard is that in many cases sharing scripts and ideas is encouraged. On the other hand, you may feel that only someone who has registered your ShareWare is entitled to see your scripts.

In any case, every stack starts with an idea. You have something you want to do with HyperCard: a new type of database, a specialized phone stack, it could be anything. I would discourage things that are heavy on calculations because they can be slow, but you can do them. Try and turn your idea into a picture. List the types of information you need to store and what you want to do with it. Do you just want to make an address list, but include a separate line for fax numbers and a large field for Notes? Do you want

to make radio buttons for choosing which number to dial? In a library reference, do you want to see what other books you have by the same author?

Then decide on the size of the stack. I suggest using the standard "8x5 card" size which matches the original Mac screen. Some stacks can be made smaller, if the information needs are very simple, some may need to be much larger. I strongly suggest that you not make it wider than 512 pixels because anything wider tends to cause printing hang-ups. Unless you have no intention of printing a card, of course. The height should not be greater than 688 pixels; this is the size for an 8.5 x 11 piece of paper. Some people will be unable to open this size stack without giving HyperCard at least 2 megabytes of memory in the system Get Info box.

When you have decided on a starting size, think about layout. The conventional approach is to treat the stack like a newspaper, with the most important information at the top in larger type, and the less important and/or more detailed information in smaller type toward the bottom. Some stacks move left to right, rather than top to bottom. Then of course, you occasionally find stacks that operate on a different premise. It all depends on the purpose of the stack and the style of its author.

Once you have decided on the

information layout, think about where you want to put the buttons. Every card should have buttons for going home, Next Card, and Previous Card. Many people have buttons for functions, such as calculations from data on the card, for dialing the phone, or going to associated stacks. If you are sticking with the 8 x 5 card, or standard size, you can group them anywhere. It is usual to put Next and Previous buttons with a horizontal orientation, and Home is often in the middle. Go Last Card and Go First Card, arrows with a line "Stopping" the point, are usually on the outside of the next and previous buttons. The function or associated stack buttons can be grouped either vertically or horizontally on the outside edge of the stack. You can make a floating palette, or use one of the standard floating palettes, if you are planning on using only HyperCard 2.0.

The most unusual button arrangement I can recall seeing was on a HyperCard magazine stack. They arranged the buttons as little tiny thin sticks around the edge, many on a side. (I also recall stealing the idea for buttons I don't use regularly and don't want to take up much space with. Or want an icon for.

Fonts are another question it is much easier to decide early. In general, appearance is better if you use one font in different sizes, rather than different fonts. You may wish to use a unique font for major headlines, stack titles, etc. If you do, use them as a graphic. People differ in the fonts they have available, and HyperCard will substitute an available font for the one they don't have, often resulting in something out of character with the stack. I like New York for larger points (12 and up) and Monaco for the smaller ones. (In this series, I will be using Monaco for scripts.) I also use Monaco



for labels of fields because at 9 pt it is easier to read, being Sans Serif. I stick with the standard font for button names, for the same reason. Chicago is another standard, but heavier font. I use it for labeling check-off boxes.

Graphics. They do make a stack stand out. They should not compromise readability, however. HyperCard has a lovely set of graphics tools, and even a non-artist can produce things of beauty. I have found that with a little work, you can produce pictures of anything. It's all 72 dpi B&W, of course.

Take a look at the Home stack. Notice that information is on a white background, that background buttons are placed on a slightly darker background than the one behind the card button area. They standout better that way. Notice the fill behind the central information holding area. This is a fairly easy way to differentiate between stacks or subsections of a stack. Fill patterns can be personalized to fit. If you are using non-transparent individual fields, rather than grouping your fields and labels on a white background, look carefully at whether the background fill obscures the field label. You may not feel you need to label fields; it depends on who will use the stack, and if you have given additional clues by arrangement or graphics.

The next article will discuss a script that you can use to help you create identical fields and buttons without the tedious clicking and opening up of field or button information boxes, one by one.

© 1993 Madge Bruce Van Ness, 11 Crescent Court Sterling, VA 20164. This information may be picked up by other users' groups, but must credit the Washington Apple Pi Journal and send a copy to the above address.

New Macintosh Files on the TCS

The following are some of the files uploaded to the Macintosh File Transfer areas of the TeleCommunications System (TCS) from mid-January to mid-February. Two words of caution: first, files are frequently replaced, with the frequency based on how popular and useful a file might be, and how much space it occupies; second, the TCS is undergoing a major remodeling, and much of what is listed might be outdated by the time this is printed.

This listing represents 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 14: Macintosh Games

MST3000FAQ.SIT: everything you've wanted to know about Mystery Science Theater 3000... (but were afraid to ask) MACQUBIC.2.2.SI: nice three dimensional game of four in a row.

MACTURNOVER1.2: a version of Othello.
ORBITRACK.2.1.4: a sophisticated application for charting orbits of satellites.
Has color, an impressive database, lots of impressive scientific terms, etc.

BILLIARDS.CPT: Billiards, Snooker, 8-Ball, 9-Ball, others. Great graphics, several "support" tools (such as a "blackboard" and a piece of chalk if that's how you'd like to keep score). Requires 13" screen.

ARASHI.SIT: a wild arcade game with lots of spacey sounds. Requires 256 colors.

IMG.FEB.93.C.SI: Inside Mac Games First Electronic Issue — great graphics with screenshots from FalconMC, Hellcats and soon-to-be-released F-18.

MADNESS.CPT: Madness Rage is an insanely great Control Panel that lets you blast simulated holes in your Mac's screen with any of 6 different weapons. The demo version, with only the 44 Magnum. TRIS211COLOR.SI: Yet Another Tetris

Clone: three dimensional, allegedly like Welltris

MAELSPRTS.CPT: some funky Maelstrom sprites to go with your funky Maelstrom sounds.

MACMORIA: good Macintosh supported "dungeons" text game.

File Area 15: Macintosh Graphics

SEGA.CPT: the trailer of the Sega Genesis TV ad, wherethe dragster goes speeding by and the guy flips open his visor and says "SEGA!"

MACPINUP.CPT: Demo of MacPinup from Pixis — a pin-up calendar for your Mac! PAGEMAKER.5.0.D: a spectacular combination audio-visual commercial and game announcing and demonstrating (to some degree) the forthcoming PageMaker 5.0.

OFOTO..TOUR.SIT: nice, informative, and pretty "movie" demonstration of Ofoto, the revolutionary imaging software Apple includes with its OneScanner (and which can be purchased separately).

PBCMORPH.SIT: a morph of the 3 Presidential candidates. First, Ross, then George, then Bill.

SAXY.BILL.SIT: QuickTime movie of Bill Clinton playing the saxophone on the Arsenio Hall show.

ALEXA.CPT: Alexa, Supermodel, appears in a 530x402 16-bit PICT file, all done in Photoshop.

NEWMACS.SIT: QuickTime movie of the 3 new Mac models with new cases.

BEEF.CPT: Claira Peller appears in one of the more famous Wendy's commercials from the "Where's the Beef!" series.

STONEHENGE.AT.W: stand-alone application which gives you a high-speed tour of Stonehenge, in color.

TOASTERMORPH.SI: Toaster Evolution is a QuickTime movie of the 5 styles of Toaster Macs so far.

MAGECAT1.5.SIT: Excellent utility for cataloging pictures. You can add to the catalog one at a time, or an entire folder at a time. It will automatically read in the picture, create a thumbnail (in color if appropriate) in a size of your choice, and also creates a text listing with detailed information on the picture.

TOKJPG.CPT: Color picts of Macs introduced in Tokyo: the new Centris 610, 650, PowerBook 165c and Quadra 800.

GUY.ON.STEVE: Guy Kawasaki talks about NeXT and Steve Jobs — with the most outrageous, uncomplimentary praise imaginable. This is a subtitled movie with sound, which is different, but you'll understand when you see and hear





- the last sentence.
- USS.WISCONSIN.S: QuickTime clip of the battleship Wisconsin firing its guns.
- BIRDOFPREY.SIT: Klingon Bird of Prey does a sweep and then fires back at you.
- CLOWN.MORPH.SIT: short QuickTime clip shows a man in street clothes evolve into a clown in full makeup.
- NOT.THE.MOMMA.: Baby Sinclair, now legally declared to have the name Baby Sinclair, offers his most famous line.
- CLASSIC1.CPT: Hope, Palmer, Ford tee off, a Quicktime movie.
- TNGSTARTUP.CPP: a startup combo of StartupScreen graphic (created in HyperCard and converted to SCRN format using GIFConverter) and a sound.
- GRKWALK.SIT: Stand-alone application gives you a "walk through" of a Greek temple. Fun.
- MOLECULE.MOVIE: QuickTime movie showing a rotating molecule.
- SCULLEYUNION.SI: Photo taken during Clinton's State of the Union message showing Hillary Rodham Clinton and her escort for the evening, a former soft drink salesman.

File Area 16: HyperCard

- HUBBLEPICT.SIT: HyperCard stack containing color photos taken by the Hubble Space Telescope. There are a number of "before" and "after" shots, plus an excellent narrative on the telescope itself and of the objects shown in the photos.
- SLICK.WILLIE.CO: for those with nothing better to do with their computers, here is a HyperCard stack showing a doctored picture of the President playing a sax, complete with a countdown showing the days, hours, minutes and seconds till the end of his presidency. Note: the times shown are off by four years.
- STACK.DISSECTOR: Stack Dissector 1.1.1 is a stack browser that allows you to look through the component parts of a stack by clicking on the names of objects that interest you.
- STACKTOOLS.MENU: the ultimate freeware HyperCard utility. StackTools Menu creates a custom menu which provides access to a variety of indispensable scripting and authoring tools.
- BROADSIDE.2.0.S: game in which you sail your fleet into battle against an enemy fleet.
- STARTREK.TNGGUI: Star Trek TNG Episode Guide, provides episode plot synopses, other good trekkie stuff.

File Area 17: Technical Notes

- TIDBITS159 (18 Jan 1993) to TIDBITS163.SIT (15 Feb 1993): the latest Apple and Mac news, faster than MacWeek, more powerful than MacWorld, easier to understand than MS-DOS, etc.
- INTERNET.GLOSSA: extensive glossary of Internet and advanced networking terms, in Word format.
- INTERNET.GOLD.S: Thar's Gold in them thar networks — an informal guide to resources on the Internet, plus free magazine subscriptions and other strange things.
- INTERNET.INTRO: Internet guide of guides, or indexes of guides, or — well, a nice list of "things" to help you.
- INTERNET.Q.A2.S: Questions and answers on the Internet for advanced users
- INTERNET.Q.A1.S: Questions and answers about the internet for novice users.
- NAMING.COMPUTER: Advice on how to name your computer. This is particularly interesting if you are on the Internet, but the rules apply to Macs (and other "name-able") computers as well.
- INAUGURALADDRES: Clinton's Inaugural Address and Proclamation, in text format, uncompressed.
- INAUGURALPOEM.T: Maya Angelou's poem, written for the Clinton inaugural, in text format, uncompressed.
- JPEGINFO.CPT: technical treatise on JPEG & GIF written by Tom Lane, Organizer of the Independent JPEG Group.
- MAC.AND.IBM: a very-techy comparison between the Mac and IBM product lines, reflected in their CPUs, video standards, etc, in order to answer the question "What is like what?"
- CENTRIS.SIT: postings on internet by Dale Adams from Apple, Inc. about Centris capabilities.
- PRICES0210.SIT: Apple price lists, hardware and software, as of Feb. 10, 1993.
- PB.100.DISASSEM: Instructions for taking apart a PowerBook 100.

File Area 18: Macintosh Utilities

- MACLPR1.3.CPT: utility for drag-and-drop printing. Written by a Japanese programmer, with interesting documentation and error messages.
- POWERLESS.CPT: application to shut off your Mac at a specified time.
- DS9SOUNDS.SIT: Deep Space Nine sounds in system 7 format.
- LW7UPDATE.SIT: Installer scripts and resources to change your *version 7.xx
 LegerWriter driver.

- FAMILY.EVENTS: a database program designed for, and useful for nothing else, family trees and archives.
- GMS.CALENDAR1.3: a nice little calendar for recording information.
- INFOMAKER2.62.S:Utility for slicing and dicing data from "foreign" sources for importation into Macintosh database programs.
- PEACEOFMINDLITE: demo version of Polybus Systems Corporation's Peace of Mind Macintosh diagnostic program.
- MACLAWYERFMPRO: sophisticated File Maker Pro template for managing a law office. Has time billing, various client letters, and lots of stuff.
- FEDWORLD.CPT: text files of NTIS Gateway BBS to more than 70 other federal boards.
- CLOCKSYNCH: utility that will synchronize all the clocks on an AppleTalk network.
- ZIPIT.1.0.SIT: Create ZIP archives for MS-DOS or Unix machines.
- STTNGSNDS.SIT: More ST:TNG sounds.
 NONAME.CLOCK.V1: tiny application, designed to run in the background, puts up a strip of clocks showing times around the world.
- POPCORN.CPT: free utility for playing QuickTime movies.
- BMP.PICT.SIT: filters for translating Windows bitmaps (black and white and 16 color) into Macintosh PICT images.
- CHECKLIST.1.0.S: utility which will check installed fonts and files and compare them with a PageMaker document to determine if you have everything you need to print the document correctly.
- COLOR.TOOLBAR: add color icons to the Microsoft Word 5.1 toolbar.
- COMPUTER.INVENT: FileMaker Pro 1.0 template for keeping track of computer hardware and software.
- MUGSHOTS.SET..1: Gray-scale icons of Star Trek characters (TOST, ST:TNG, ST:DS9), ready to paste onto file and disk icons on your machine. PAUL.S.ICONS.1: nice color icons for System 7 users.
- SYS7FLDRICNS.SI: nice color System 7 folder icons.
- MACPEF.DOC: revised MacInTax Electronic Filing document that explains how to send your Tax Forms in to get an quick return.
- HOLIDAYS.FOR.NU: Now Up To Date Holidays file. This is a far more extensive list of "holidays" than the sample file included with Now Up To Date.
- VISAGE..SIT: utility used to change the appearance of the hard disk icon.
- MT.IMAGE. 1.0.SI: drag-n-drop utility to





- 'mount' Disk Images. More convenient than MountImage and you don't have to mess with floppies as with DiskCopy.
- PROTECT.CPT: an application for locking files to ensure they can not be copied from hard drive to floppy, or hard drive to hard drive.
- LIGHTNING.CPT: nice shareware paint program.
- DO.IT.ALL.CPT: shareware calendar/ scheduler/organizer.
- BASICVIEWER.CPT: written by WAP member Jon Thomason, enables you to list, save and print Applesoft BASIC programs on a Macintosh. Applesoft BASIC programs saved to disk as text files then may be loaded into your favorite word processor too. A must have for folks with a Apple II/Macintosh network!
- SPINDFKEY: small utility for PowerBook owners, after installed it will shut down your hard drive without going to sleep.
- DALI.SIT: clock application that you can run in the background under System 7 (probably works with System 6, too).
- DISKREJUVENATOR: supposed to correct the problem of disappearing custom icons. SPEEDOMETER3.1:tests your hardware
- configuration for speed. STUFFIT.DLX.3.0: StuffIt Deluxe Update
- to 3.05

File Area 19: Apple System Software

- LASERUTIL.SIT: version 7.4 of Apple's LaserWriter Utility.
- LASERWRITER.SIT: version 7.2 of Apple's LaserWriter driver.
- SWII.SIT: software set for StyleWriter II.
 Also seems to work with StyleWriter I.
- A50.COLOR.ADDTN: system extension fixes a bug in the ROM of the Quadra 950.

File Area 20: Macintosh DA/INIT/CDEV

- RAMDISK3.2.1.CP: superb RAM disk utility written by the author of SilverLining, the award winning disk formatting utility used by La Cie. This utility operates as a control panel device, and has many nice features.
- AUTOCLOCK1.3.1: maintain your Mac's clock accuracy via automatic periodic updates to the Naval Observatory's Atomic Time Standard.
- WINDOWSHADE. CPT: utility for decluttering your desktop. When you click the title bar of an open window, the window "rolls up," leaving only the title bar.

- SCRAPIT.CPT: the Scrapbook the way Apple should have done it!
- AD. VECTORBALLS: module for use with After Dark.
- AD.SEIRPENSKI.S: AfterDark module produces the fractal named Seirpenski's Gasket/Triangle.
- AD.SPACESHIP.SI: a PICS file that can be used with the PICS player in After Dark 2.0
- GATEKEEPER. 127: updated version of an established anti-virus utility.
- HOMER.CPT: System 7 extension that has Homer & Barney in a belching contest.
- DLS.1.0...SIT: little control panel device which automatically adjusts in spring and fall for Daylight Savings Time.
- FORWDEL1.0D2.SI: extension to enable the forward delete key (bottom left of the cluster of six 'page keys') on extended keyboards.
- ATTENTION. 1.0.S: control panel to set how you want background tasks (databases doing sorts, timers and alarms, backup programs, whatever) to communicate to foreground tasks.
- BUTTONKEY.SIT: control panel that allows you to use the keyboard to respond to buttons, checkboxes and such instead of using the mouse.
- DISK.CHARMER. 1: allows you to format
 and use diskettes with flaws.

 OPENSPACES.SIT: extension that allows you to use the keyboard to move through listings of files and, still using the keyboard, open files just by tapping the space bar. Intended for use by PowerBook owners.
- GREG.S.BUTTONS: control panel that replaces the boring Finder buttons with beautiful three dimensional versions.
- RADIATION.CPT: annoy your friends (or better yet, non-friends) by creating custom alerts with any message. A reasonably creative person can terrorize someone.
- HEADLINES. 1.0.1: After Dark module which tosses up disgusting, randomly generated tabloid-style headlines on your monitor.
- KEYPM.SIT: QuicKeys definitions for automating PageMaker.
- KEYQXP.SIT: QuicKeys definitions for automating Quark XPress.
- KINGYOPICS.SIT: PICS file that can be played with the PICS Player in After Dark. Once set up, a strange little pink fish will cavort around your screen.
- TWILIGHT.SIT: screen saver which dims the screen of any Mac that supports screen dimming.
- KERMIT.TOOL.GH: Kermit tool for the

- Communications Toolbox.
- YMODEM.TOOL.GH: Ymodem (and Ymodem-G) tool for the Communications Toolbox.
- GREP1.1F.SIT: desk accessory with GREP find capabilities.
- POWERSLEEPFKEY: FKey will put your PowerBook or Portable directly to sleep without the intervening, "You will lose some network services..." message.
- AD.FILL.SIT: After Dark module draws thin multicolored lines in a hatch pattern across the screen.
- AD.LETTERS.SIT: AfterDark module creates nice multi-colored patterns of letters, properly punctuated and capitalized, up on the screen. While it is totally random, eventually the module could recreate the entire works of Shakespeare, if left on an infinitely long length of time.
- AD.MESS.SIT: AfterDark module rapidly draws multi-colored lines across the screen.
- AD.POX.SIT: AfterDark module rapidly places lots of (user definable in terms of size) dots up on the screen.
- AD.WALK.SIT: two AfterDark modules.
 One puts up a random walk path that randomly changes color. Another puts up a random walk path that changes color in a rainbow sequence.

File Area 28: GIF Images

- MACQUARIUM.GIF: large, clever painting done in PixelPaint Professional shows a Mac video screen — filled with fish.
- CINDYC.GIF: Everyone's favorite Pepsi girl.
- ELLE1990.GIF: Australia's best export since Foster's.

File Area 29: TCS Essentials

- UZ201.SIT: Latest version of the Mac app to extract files from MS-DOS ZIP archives.
- STUFFIT.LITE: StuffIt Lite 3.0.5, latest version of the classic archiving and dearchiving utility.



APPLE II BYTS AND PYCES

by Gary Hayman

his 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

Switch-It!—A Multi-Application Switcher For The Apple IIGS

Procyon Enterprises, Inc., of Littleton, Colorado announced that they have released Switch-It!, an extension to Apple Computer, Inc.'s GS/OS, that brings Macintosh MultiFinder style capabilities to the Apple IIGS. Switch-It! allows the user to load any number of desktop programs (limited only by main memory) and switch between them instantly. The addition of this important new ability makes the Apple IIGS computer one of the most versatile and cost effective personal computers on the market today.

Switch-It! is fully compatible with the most popular applications for the IIGS, including AppleWorks GS, Platinum Paint, DreamGrafix, Medley, Finder, Graphic Writer III, HyperCard and HyperStudio, and many more. Matt Gudermuth, President of Procyon, Inc., said "For anyone who finds themselves moving between a lot of different GS/OS desktop programs, you'll save an amazing amount of time. Switch-It! allowed us to produce the documentation in roughly half the time it normally takes. Switch-It! is the perfect way to increase your productivity."

Switch-It! is closely integrated with System Software 6.0 via its Inter-Application Communication features, turning the plain IIGS Finder into a MultiFinder. "When you launch a program from the Finder, the Finder remains resident. This not only greatly speeds up launching and quitting, but means the Finder is always handy in the event one needs to format a disk or do other Finder operations from another program." Jawaid Bazyar, Vice-President and Chief Technical Officer, explained. "With Switch-It! those long periods waiting for a program to load or for a program to quit back to the Finder are gone. This is especially beneficial to users without hard disk drives." Mr. Bazyar continued. "Switch-It! also makes cutting and pasting between applications quick and easy."

Switch-It! is fully compatible with and requires GS/OS System 6.0. It

comes with several desk accessories that help exploit the power of switching technology. Switch-It! also comes with Apple IIGS Installer scripts, so putting Switch-It! on a hard drive is a simple operation. Product support is provided by telephone and online through InterNet, America Online, GEnie, and Delphi.

Switch-It! has a list price of just \$79.95 and will be available from mail order houses For more detailed information, contact Procyon Enterprises, Inc.; P.O. Box 620334; Littleton, CO 80162-0334; (303) 933-4649.

Refreshing Some Files

I was having some trouble with Pointless 2.0 a while back and received some valuable information from Seven Hills (GraphicWriter III) that suggested that certain existing "special" files contained on my hard drive be deleted, for upon re-boot, they will be again constructed. Among the files were CDEV.DATA (in my */SYSTEM/ CDEV folder) and FONT.LIST (in my */SYSTEM/FONTS folder). This repaired my problem so I asked if there were any other files that were updated or re-written automatically that I might want to delete so that I can clean things up. Jon Thomason gave me a detailed discussion that I am presenting here. Which may be of value to you.

"You've got the idea. Except that deleting Finder. Data files Does sacrifice the information of where icons are placed, so it's not a cache file like the others. (Neither is the invisible Desktop file on the GS, though Mac folk know to delete/rebuild their Desktop files when they have icon troubles. GS folk shouldn't do that, to my knowledge, unless I'm wrong and the Finder generates a very basic one at



startup.)

"Font.List isn't generated at every boot, but it's compared to the files listed in the Fonts directory-if a file's modification date has changed or another is added, etc., the list is regenerated.

"The process of Font.List regeneration is a fairly long one-it looks through the headers of each and every font file for name, ID, size, etc. information. Way back in the days of ProDOS 16, the Font Manager used to do this every time it was started up (not at system boot, but when an application started it up.) It was the first GS/OS, System 4.0, that put an end to this behavior and subsequently reduced boot times significantly by only rebuilding this list when it Needs to be rebuilt, and storing/reusing it when it doesn't.

"The same idea happens for CDevs. Some of them need to be opened up and tickled at startup time (those with inits in them, like Twilight II and Pointless.) Others don't-they just sit there until someone pulls down the Control Panel and asks for them (those that just set various parameters, like Slots and Modem Port.)

"Let me explain caching another way-it's redundant data, organized in an efficient way for later reference. The original data is still important, but some of it can be summarized for things that need it. For instance, Icon files are partly used for information which isn't strictly unique-GS/OS could search through every folder on every volume to find a particular application when you double-click on an icon, but it doesn't. That would be ridiculously slow. Instead, the Icon files contain pathnames which serve as convenient reference to where the applications were last found.

"But sometimes that redundant information gets out of sync-somebody moved the application to a different place, and didn't change the pathname in the Icon file. So the cache lookup fails: the provided data proves invalid, and the Finder must fall back to a more reliable, but slower and less convenient scheme. In this case, it pops up a dialog and asks you where the application went. Then it does a clever thing: it tells the Icon file what it just learned, so it can find the file again when it has to.

"End of example—I hope it made sense, because I'm moving on. At startup, the system checks the validity of the CDev.Data and Font.List caches. If either is

out of sync with the data it's summarizing, it's repaired (in this case rebuilt from scratch.)

"Incidentally, Greg Schaeffer didn't want to go with such a cache for PT3, but Dale [Smith] whined.:) For some people, the extra speed of not having to examine every last PTD, PTE and PTM file was worth the mental leap of dealing with invalid/corrupted cache files.

"Also incidentally, the FastFont file is a cached Shaston 8 font in convenient form for QuickDraw II so it doesn't have to bother converting it each time. However, if the FastFont file is missing, another one will NOT be created-the system will simply cope with the old method and use the normal font."

Neil Laubenthal added, "Gary, the problem with the CDev.data file isn't the installers fault-it's just a minor bug with the operating system itself. It's supposed to get rewritten when a cdev is installed but sometimes it doesn't; so you have to delete it manually then it gets reconstructed properly [upon reboot]."

Dale Smith offered his opinion, stating, "My suspicion is that it was the "data" files created in the Fonts and CDevs folders that held the offending information that gave the problems. It is very logical that files created on the fly such as Fontlist and CDev.Data, will cause problems when the file that used particular data in them is no longer present to make proper use of it. An analogous thing happens in ProTERM 3 when you get a new version and omit deleting the PT3.BIOS file-or can happen-it might or might not, but Murphy's Law applies: it might not until the most inopportune moment."

AppleWorks (Classic) to the **GCC Blp Elite Laser Printer**

For those of you who have not been following this topic on the Telecommunications System (TCS), let me bring you up to speed. As you know, AW (Classic) will print to my PostScript laser printer with Courier, Helvetica and Times by using the P1, P2 or none Printer Options. The output-for short documents-is

A problem occurs when you want to print a document larger than 3+ pages or a large mail merge with labels. It seems that since AppleWorks sends all the information to the laser printer in a steady flow, without memory full X/ON X/ OFF handshaking, when the flow reaches the memory boundary in my printer, things go haywire. This usually happens at about 3.5 pages of the document or after 40 or so mail merge labels have been printed. The only way I have been able to circumvent this problem in the past was to send three pages of a document at a time or only allow 40 mail merge labels at a time. This is easy to do, but does take time and



attention. It particularly became a problem when I was sending a one page letter to each and every Congressperson on the "Hill." I had to do that in stages.

With my cries of Help, TCS readers attempted to assist me and these are the results.

First, I went into the graphic control panel of my IIGS to send the ImageWriter Emulator to my laser printer. AppleTalk had been activated. No problem here. Then, as a base of comparison, I loaded a 27K document into AppleWorks. This spread to eight pages. I did a Command-P to print the document and sent it to the laser printer through a Printer selection that I had previously established that sent the material to where AppleTalk was located. The first three pages were excellent, but in the middle of the third page several paragraphs were left out and the material was "butted" against the last correct character. The printer

then thought is was through after the fourth page. This is what I expected to happen as it has occurred more than once before.

A suggestion was given me to hand feed the paper to the laser printer one at a time causing the printer to halt with a "Paper Tray Out" message, stopping the processing. I attempted this, inserting a page at a time. Of course, AppleWorks was already all through sending the flow to the printer. My results were exactly the same as the "base" experiment. At the same exact spot, things went haywire.

Another suggestion was to go into the printer specifications in AppleWorks and set the "Stop at Each Page." Hmmm, this had possibilities. Sure enough, the

AppleWorks thermometer bar only went part way when I started to print and then paused waiting for me to press the space bar. When the first page-and it looked good-was printed, I pressed the space bar and the thermometer continued for a little way sending the next page. However, the printer thought it was through and went back to IDLE mode, ignoring the new send.

Well I though I could trick the printer by sending the first two pages-pressing the space bar onceand while the first page was printing, I would press the space bar again and send the third pagethinking that I would always have two pages in the printer and the printer would not think it was through. Guess what, two pages were printed, and the printer felt it was through, even though I kept sending additional pages.

Each page that I printed, by the above methods took approximately 1 minute to be processed and printed.

I didn't get anywhere with this approach, so I opened up Publish. It! 4, imported my eight page AppleWorks document selecting the Deerfield (Times) font, told it to print and within 18 seconds my first page was coming out of the printer. The whole job took two minutes and 20 seconds for an excellent PostScript eight page document printout.

Well if any of you out there have some ideas that I could experiment with in an attempt to get AppleWorks (Classic) to interface with my GCC Elite PostScript laser printer for the printing of longer documents, please let me know. Until then, I will use Publish. It! for the printing, and when it comes time for mail merge, I will only send a few records at a time to the clipboard for printing. [I have the same setup with a GCC Elite and have printed up to 10 pages with no problem. The thermometer shows printing progress with halts for the printer to catch up. SP]

Joe Kohn Likes The HP

Joe Kohn (an inCider/A+ columnist) writing on Pro-Line all the way from San Francisco, California expressed his liking of the Hewlett-Packard printer with, "The keywords to remember when thinking about a new printer is Hewlett-Packard. I personally am thrilled with the HP LaserJet IIP Plus that I connected to my GS a few months back, and I know many who have bought HP DeskJet 500 and connected them to their IIGS.

"And, if HP's are too expensive, there are a dozen HP LaserJet clones that start at a street price of \$525. Printers from such major players as Epson, TI, Okidata can be used in plug and print fashion on the IIGS. So, what is needed?

"If it's a printer with a serial connector, you get a Mac Plus to ImageWriter I (not IW II) cable. If it's a parallel connection, get a AE Parallel Pro or a Grappler. Parallel cables are generic and cost less than \$10 anywhere.

"To print from AppleWorks Classic, just copy the printer codes from the manual to the custom printer option.

"To use with IIGS software, you'll need to purchase a set of printer drivers. Harmonie from Vitesse or Independence from Seven Hills will do just fine. With those, you can print from any GS/OS program.

"The only limitation in using a HP printer on a IIGS is that with ProDOS-8 software, you'll be lim-



ited to text. You won't be able to print from any graphics based program, including any version of Print Shop.

"With the recent intro of the LaserJet 4, I bet the prices of II and III series LJ's are going to fall to \$500 soon. I paid \$755 for mine in October."

In another message he added, "Maybe to elaborate on mine and Bob Sherman's comments about using HP printers from ProDOS-8....

"If a driver for a HP LaserJet (or clone) is included with the ProDOS-8 software, then it can be used to print from graphics based P8 software.

"As a matter of fact, in my next Grapevine column in in Cider, I suggest that Apple II owners of HP printers write a letter to Broderbund, asking for an update to Print Shop so that it would include drivers for DeskJet and LaserJet printers. Personally, that's the only P8 based graphics based software that I've used in recent years. The truth is that Broderbund recently issued an update (or upgrade) for the IBM-PC versions of Print Shop so that HP printers are supported.

"Why not us? I miss using Print Shop."

PT3 Dropping Characters

Our Apple II Journal Editor, Stan Palen was experiencing difficulty in having dropped text characters when he was reading the [WAP Telecommunications System] TCS using ProTerm 3.0 (PT3). Many of us have experienced this. My unique problem was due to a program called El Macro that I was attempting to use with America On Line. Dale Smith, our resident expert in almost anything, offered some advice to Stan that may contain some gems of wisdom that you might be able to

"Well, the problems that occur with PT3 vary depending on the particular release you have. There have been many different releases to PT3 mostly incorporating bug fixes into the master code and adding some hardware support and some corrections to emulations. The most recent release date in 11/28/ 92 with an update to the PT3.CODE0 file on 12/22/92. Most of the bug fixes can also be obtained from applying the UPDATE.* patch programs to an older version-not every fix is possible this way, but most are. These fixes are not ones the relate to the character loss problem-and these fixes are the ones included in the PT3 updates file located in Area 2 of File Transfer [a file transfer area on the TCS].

"The other update that does relate is obtained by getting the 12/ 22/92 CODE0 file from the InSync BBS-this file cannot be posted elsewhere as the UPDATE* files can, so you have to call the InSync BBS to get it.

"In it there is a driver called "Apple IIgs Modem Port (GS/OS)" [formerly "Xmit unbuffered IIgs Modem Port"] that was modified a little while back to tell GS/OS that PT3 would handle all interrupts first. This is for use when you launch from GS/OS and it helps with contention problems (that may cause character loss) with AppleTalk and some CDAs/NDAs/INITs/etc.

"I do remember El Macro being a problem-even when I turned its clock capabilities OFF-it uses the same key combos that PT3 uses and it is only natural that two things trying to use the same command keystrokes for different things will get confused, to put it mildly. Other things that caused character loss were usually items that "watched the clock" (Menu Bar clocks, screen blankers, alarm clocks, etc. whether separated or part of some larger item of the same time, e.g. DeskTop Utilities NDA). Most of these kinds of conflicts should have been alleviated with the modifications to the CODE0 (drivers) which includes the "Apple IIgs Modem Port (GS/OS)" driver. It uses less interrupts (none for transmitting, but supports them for receiving). It is the best that can be done within PT3 without rewriting the ROM code in the GS.

"The preceding statement applies to PT3 running under P8 launched from GS/OS; some speed freaks have managed to get 5000cps sends/receives with PT3 running directly from booting into P8 and using the 57.6Kbps macro to modify PT3 and with hardware handshaking to a high speed modem. Booting directly into P8 will reduce still further the rarer remaining contention problems.

"My tests for character loss are the Now On System (NOS) display and the Lists of files in File Transfer-both highly columnar displays that quickly display any lost characters whether spaces or letters. Usually I'll see the effect of something I've added immediately upon logging onto the TCS with the NOS and I'm immediately off and the offender is gone. [Further investigation indicates that with Appletalk active some characters will be dropped at 9600 baud or higher. It needs to be turned off in anything that is active, not just the control panel. I still have the problem. SP]

"I've been using a 2400bps modem and haven't had any character



loss problems in a long time. I've also found an NDA called MenuTime that does not contend with PT3 and cause character losses, so I can have that active if I want. I haven't gone back to retest all the culprits that I threw out before the Apple IIgs Modem Port (GS/OS) driver was released. Oh, BTW, the earlier versions did have a problem in them and were not as effective as intended; this problem was fixed several CODE0 updates back.

"The InSysc BBS number is 602-992-9789 and if you've sent in your registration card (or provide the same information in your request) you can be granted access to the support board and library within a couple days (I think). Anyone can call the BBS, but you have to request access to the support areas and they do verify ownership of PT3 as the criterion for giving access."

It Might Just Be My Style-Writer

Bill Hark was highly interested in the StyleWriter article by Bernie Benson, but had a couple of questions which he posted on the TCS.

Bill writes, "'StyleWriter Review,' by Bernie Benson in the December WAP Journal triggered some questions. Given the current price, I could consider a StyleWriter for those special documents that need a higher quality print. I had heard comments suggesting that this was not a particularly good machine, however, speed being the most lacking characteristic. Maybe some one of you out there will have suggestions for me or, at least, answers to the following:

"Just what is the speed of the StyleWriter? Mr. Benson doesn't say. I'm thinking in terms of AppleWorks GS or Graphicwriter text. Does it do graphics?

"I had thought that printer speed was a function of the printer itself and of the printer driver. The article seems to emphasize the high speed "port driver." I assume those are not the same things. I seem to recall that my Imagewriter II is connected to the computer with data flow at about 9600 baud. Does the 57600

baud port driver increase data transfer to 57600 baud? Does the application have anything to do with print speed? If the port works at 57600, do the printer driver, having trouble reconciling the thoughts in the two articles.
"Benson says to select "condensed print" in the page setup dialogue box for best results. I understood and observed that condensed print has more characters per inch. Why would this selection (condensed) cause the printer driver to select a font 5 time bigger than the one

wanted. Suppose you wanted ac-

thought Harmonie and Indepen-

dence ARE printer drivers. Do

Harmonie or Independence replace

the StyleWriter driver that comes

with System 6 and are they better

than that driver? Or are H & I

drivers for another printer such as

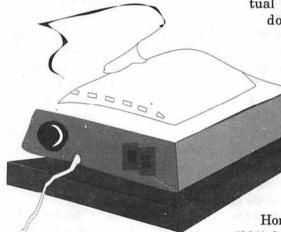
the HP ink jet? As you see, I'm

tual condensed print in your document? I understand about the bigger font beingthen reduced for bet-

ter print definition.

"Please forgive
the length of
these questions/
comments. I
would appreciate any
thoughts."

Font expert and head Honcho of the CatHouse BBS (301) 840-8567, Kim Brennan responded to James with the following,"...The StyleWriter is a printer that uses a serial interface to the computer. Due to the nature of a serial connection, it is often times the limiting factor in the speed of the printer...often, but not always. With a high resolution printer (such as the StyleWriter) it can take an AWFUL lot of data to be transmitted from your computer to the printer. As an example, at 300 dpi (and the Stylewriter can actually do 360 dpi) it takes nearly a MB of information to be sent to "image"



software, cable, and printer all work at 57600?

"Mr. Benson notes that the Apple printer driver" is not as robust as drivers for other printers." He then suggests that a better StyleWriter driver might be developed as part of the Independence or Harmonie packages. In Seth Mize's article in the same Journal, Bill Heineman is described as the author of the 57600 baud port driver "for use with Harmonie and Independence on your IIGS and a StyleWriter. I



a printed page in the best resolution. On a serial interface at 19.2Kbps that would be 8 minutes. In fact the Stylewriter can receive information faster than that, and rarely is a complete MB of information needed to transfer to print a page, but the reality is that you can usually expect several minutes of waiting while your page is being printed.

"As the port speed...there are several aspects of interfacing printers on to your GS (or any device for that matter). In the case of printers, you have a PORT driver (which handles what type of interface is used for transmitting the data. This can be a parallel card, a serial card, a built in serial port, a MIDI device attached a serial port, etc. etc. etc.) Plus you have a device driver (in this case a printer driver) which interprets what the computer is sending into a form that the device can understand. All of these need to communicate to the next/previous link in the chain between your application and your printer. If everything has been done correctly and "by the rules" this works nicely.

"But, there is that IF. Apple, in its infinite wisdom, sometimes (frequently) bypasses the rules it lays out for other people. In the case of the StyleWriter printer driver it doesn't deal gracefully with the Apple serial port driver. Hence, it is sometimes necessary to use Bill Heineman's High Speed Serial PORT driver. This driver is a special PORT driver that communicates on the built in GS serial port at 57.6Kbps, something the Apple serial PORT driver doesn't do.

"Harmonie and Independence are commercial packages of printer drivers, which also include Bill Heineman's free PORT drivers.

These PORT drivers cover a wide range of parallel interface cards and the high speed serial port driver.

"Condensed Print on the Printer Driver refers to Condensed vertical print not horizontally condensed print."

Wood You Choose Platinum Paint?

David Wood, from the distant Eastern Shore of Maryland had some comments on Platinum Paint (Beagle Bros-now by Quality Computers). "I've had mine [Platinum Paint] for a little while now, and now feel justified in passing judgment on it.

"For the most part, it's very good. I had 1.01 before, which was fraught with problems. 2.0 fixed a great many of them ...but not all:

"If you use Rotate, you're still going to lose one row or column of bytes off one side of the rotated object. Account for this when you select an object to rotate.

"Gradient filling an object which is larger than the screen— even if you selected "Object" fill-is identical to filling just the object in the window— which is itself identical to the "Window" fill.

"The page size selector is fantastic! I've been trying to create a banner-sized graphic (8" tall, 21.5" wide) of a logo I don't think I'm going to need for quite some time. That is, in fact, how I discovered the bug in the Fill/Range dialog (directly above). If you want to see it for yourself, select new with either the option or shift key down. Good stuff.

"You may now put sounds into a paint document, which apart from making paint documents noisier, may also cause trouble if you try to

read the document into another paint program. The instruction manual says you can read raw sound files as well as HyperCard sounds, but Platinum Paint will not actually open up HyperCard stacks to get sound resources; what it means is that it will open dedicated sound resource files (type \$D8/0003).

"You can now type across several screens; all your text will be placed as you typed it. Unfortunately pasted selections do not do the same.

"And finally, the instruction book still bears the Beagle Bros. logo. Not only does Beagle Bros not support the product, but right now Beagle Bros. has trouble supporting Beagle Bros! Something about being bought out by another software company?

"Don't get me wrong; it's a much better program now than it was before.

"But there are still a few things that I'd like to see corrected in future versions."

The author is currently Chairman of the Apple Works 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 MAC-ROS-THE ABRACADABRA COL-LECTION are presently selling in-

ternationally.



GEnieLamp Profile of Kenrick J. Mock

GEnieLamp: Kenrick, how did you first come to start programming the Apple II? Do you have any anecdotes you can share about your early experiences with the Apple II?

Mock: I first started programming in BASIC on my Apple II+ back when I was in the fifth or sixth grade. I'd have a grand old time typing in games from books. At the time there were also a couple of magazines that would publish games in BASIC for users to type in and run. Eventually I took a class in assembly and Pascal, but I learned most of my programming skills by just hacking around on my own.

Probably my favorite Apple II story comes a bit later in life. At one of the San Francisco Applefests, Activision sponsored a contest to promote their new GS game, GBA 2-on-2 Basketball. They had Joe Barry Carroll there and everything-it was a big deal! In the contest, whoever had the most points after playing the computer would win a new GS system. I made it to the final round in the playoffs. I played last-and the other two contestants actually lost their games to the computer! When it was my turn, I jumped out to an early lead and started messing around. The computer slowly caught up, and suddenly with

about ten seconds left to play, the game was tied! Fortunately, I was able to call a time-out and pass to my computer teammate, who made the basket and won the game! The slight controversy was that the other contestants didn't know about the time-out feature, but I won the GS nevertheless. (Ironically, I already owned a GS, while the other two contestants owned IIe's.

GEnieLamp: Can you tell us a little about your background and education. I understand you graduated from college not long ago. Did you study computer science in college?

Mock: I graduated from high school in 1986 and attended UC Davis where I received my degree in Electrical Engineering and Computer Science. Originally, I had intended to focus more on the hardware aspects of computers (I have always enjoyed tinkering with electronics since an early age-I once made a robot which I could control from my Apple II+), but towards the end of my sojourn at UCD I found that I enjoyed the computer programming the most. I worked at the Los Alamos Nat'l Laboratory in New Mexico for about three-fourths of a year, doing some work with virtual-reality, user-interfaces, and software maintenance. A lot of the ideas for my games actually arose when I was working out in New Mexico. After I'd finished there, I worked for the MIS department of Chevron Chemical Company for another three-fourths of a year primarily doing work with multimedia.

I left the "real world" to go back to school. Currently, I'm working on my PhD at UC Davis, majoring in Artificial Intelligence. At the moment I'm being funded by NASA Ames to develop a prototype system for reasoning about failures aboard Space Station Freedom. It's kind of a precursor to a HAL 9000 because we are communicating with the user in plain English. I have a few AI projects I've been thinking about converting to the GS...

GEnieLamp: Your ShareWare disks have achieved national recognition for their quality and originality. Can you comment a bit on your ideas about ShareWare as a publishing channel?

Mock: I think Share Ware is a pretty good publishing channel. However, Share Ware certainly doesn't reach as wide an audience as a commercial program. Moreover, as I'm sure you know, only a small fraction of those people who use Share Ware actually send in the fee. Nevertheless, I've been fairly pleased with the response to my programs, and would like to thank those who have paid. I'm not really in this for profit, so the money is really icing on the cake.

GEnieLamp: Continuing further on the subject of ShareWare, what is the furthest place on the globe from which you've received a ShareWare fee? Any interesting letters from ShareWare fans?



Mock: I've gotten letters from all over the world. Quite a few from Canada and Australia, and a handful from Japan and the Middle East. One of my favorite letters contained a computer printout of the high score screen, showing that my score had been surpassed! (BTW, if you read this, my new high score is 1420.) My favorite is a letter which described how Columns GS had interested their learning-disabled daughter enough to want to play with the computer. After playing Columns, she began to branch out to using the computer for other things. It was quite heartwarming to hear how Columns had gotten someone else started with the Apple IIGS.

GEnieLamp: Kenrick, all of your games seem to be centered around the English alphabet-Boggled. LetterSlide and now VIAD. Is this due to a strong background in English?

Mock: I've always enjoyed reading and word games, but I don't have much of a technical background in English. VIAD was actually written first. While I was waiting for James to finish the music, I thought I'd make use of his alphabet block-set and cranked out Boggled. At that point, James was still working on the music, so I was able to finish LetterSlide as well.

GenieLamp: Many people who use and enjoy your games must wonder what programming tools you used to create them. Which are your favorite tools and what particularly do you like about them?

Mock: I use a mixture of Orca/C and Orca/M for my programming. The nice thing about Orca is that it's

possible to integrate assembly and a high-level language (like C) together. As far as tools, there's a package of text tools from 360 microsystems which I kind of like. I've also used the FTA's tool 219 to play soundsmith music, although one of these days I'll switch over to Ian Schmidt's music player. I've also got a variety of graphical and input/output tools I've developed myself-I used some of them in my SAP animation program.

GEnieLamp: The background music for your Columns GS game is quite striking. Did you compose this music yourself, or was it "inspired" from another source?

Hardly! The music and graphical genius for Columns and VIAD is all the work of James Brookes. You've probably seen his work on the IRC demos, DuoTris, DuelTris, and a couple of other programs. In fact. Columns GS 2.0 would never have existed if it weren't for James. I was ready to stop programming at version 1.0, but James sent me some music and graphic samples which he'd created. Since he had already made them, I had no choice but to use them! As a result, Columns GS 2.0 was released and it would never have been as popular as it is without his music and graphics.

GEnieLamp: Besides programming, what other hobbies and interests do you have? What do you wish you could spend more time doing?

Mock: Aside from computers, my next hobby has to be running. I used to run on the cross country and track teams in college. Lately, I've been a bit lax in my workouts, but I've been trying to get back into racing shape. I also enjoy various types of theater, concerts, anything having to do with the outdoors, and I've just started windsurfing. One of the things I'd like is to have some more free time for reading-I've got a long list of books I've been wanting to catch up on.

GEnieLamp: As someone who has exhibited a strong creative flair. can you share any ideas about ways of promoting creativity? Any general comments about the nature of human creativity?

Mock: I subscribe to the same theory of creativity as a psychologist named Mednick-creativity is just the ability to take different ideas and mush them together to make new ones. I believe one way to promote creativity is to stop worrying what others may think about your work. Don't worry about being "graded"! Just have fun.

GEnieLamp: Whose work do you admire most in the national Apple II community? What about their work do you admire? Locally, was there any one person who helped ignite your interest in computers?

Mock: The last question is the easiest to answer-my dad is the one responsible for getting me going with computers. As far as other people, that's a tough call. James Brookes is certainly a stud. I'd have to give him the artistry award. I've also enjoyed Will Harvey's and Bill Heineman's programs. Ken Franklin's relief-ware concept is also quite admirable.

GEnieLamp: Any ideas on where the future of telecommunications is is taking us? What services do you think GEnie might be offering in the year 2000? What services do you think it SHOULD be offering?



Mock: Here in Davis, we've got a project called the Davis Community Network. It will bring digital communications to every home in town. I'll essentially have 57.6 Kbps lines going straight to my room! I think the future will see high speed networks and internet availability coming to residential areas. Eventually I see GEnie communicating to its users via a variety of media; e.g., visual and auditory, rather than just text.

GEnieLamp: Are you currently working on anything that you can tell us about?

Mock: I have an artificial intelligence board game called Pente that will be out very soon. After that, I hope to finish up a dictionary editor for the word games, and I also want to make some improvements to the SAP program. After that, I've got a couple of ideas but nothing concrete.

GEnieLamp: Where can people reach you to send their ideas for the next great Kenrick Mock game?

Mock: I'd love to hear any ideas or comments. My mailing address is: Kenrick Mock 2300 Sycamore Lane, 18 Davis, CA 95616-5511. And I can be reached via electronic mail at: GEnie: K.MOCK Internet: mock@toadflax.cs.ucdavis.edu BBS: (916) 757-7856

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GEnie and the Apple II

by Dean Esmay

eneral Electric Network Of Information Exchange (GEnie), Rockville, MD, U.S.A, 1993 JAN 1 (A2 ON GE-NIE)-A2, the Apple II RoundTable on GEnie kicked off the new year with a celebration of it's 20,000th upload, awarding thousands of dollars worth of hardware and software to the first person to upload a file to A2 in 1993. In association and cooperation with sixteen prominent Apple II supporting companies-C.V. Technologies, Charlie's AppleSeeds, Digital Data Express, DreamWorld Software, Econ Technologies, GEnie, GS+ Magazine, inCider/A+ Magazine, InSync Software, Kitchen Sink Software, Quality Computers, Resource Central, Roger Wagner Publishing, Seven Hills Software, Softdisk Publishing, and Vitesse, Inc.-GEnie client Tom Smith of Willowdale, Ontario won a package of prizes including some of the latest and greatest products for the Apple II.

The prizes Mr. Smith chose are: a RamFAST Rev. D caching DMA SCSI card, a DreamGrafix 3200color paint program, Universe Master hard drive management utility software, one free weekend on GEnie online in A2 and A2Pro, the Apple II Programmers and Developers RoundTable, a GS+ Magazine T-shirt, a one-year subscription to inCider/A+, Signature GS system enhancement utilities, Formulate formula calculating software, Salvation-Supreme hard driv management utility software, a oneyear subscription to Studio City, and a six-month subscription to Softdisk G-S.

"People say the Apple II is dead, but that's hogwash," said Dean Esmay, Head System Operator (SysOp) of GEnie's Apple II RoundTables. "There are millions of these computers still in operation. The first Apple II was introduced in 1977, so the way we see it, 1993 is the beginning of the second fifteen years of Apple II computing. This celebration shows the amount of support the Apple II still gets from users and third parties alike. We like to think of the 20,000 uploads we've received in A2 to date as 20,000 reasons why GEnie wholeheartedly supports the Apple II, as well."

Remaining prizes donated by the listed companies are to be given away throughout the months of January and February in selected online Real-Time Conferences (RTCs) in the Apple II RoundTable on GEnie. These prizes are: two Copies of ProSel-16 hard drive management software, one copy of ProSel-8 hard drive management software, one Neuromancer game, one Shogun game, one Zoyon Patrol educational game, one free day on GEnie online in A2 and A2Pro, four one-year subscriptions to inCider/ A+, two InSync T-shirts, two ProTERM 3.0 telecommunications



software packages, one AccuDraw CAD software or Amazing Window educational software, one subscription to A2-Central On Disk, one subscription to Script-Central, one subscription to Timeout Central, one Roger Wagner Publishing software product of user's choice, and three Harmonie high resolution printer driver packages.

"We didn't announce it in advance," said Esmay. "We just secretly got all these companies to help us out and sprang it at the last minute. It was a lot of fun. The guy who won was very surprised."

All of the Apple II vendors mentioned provide direct online support on GEnie through individual support Categories and Topics in the Bulletin Boards of the A2 and A2Pro RoundTables.

"We're incredibly grateful for the support we got from these companies. The amount of enthusiasm they showed for this idea actually caught us by surprise," said L. Bruce E'Sex, the GEnie Apple II RoundTables' Head of Promotions and Marketing. "Though these companies are only a small percentage of those which still support the Apple II, they're a big part of what makes the Apple II line continue to be interesting, fun, and as useful as ever for millions of computer users."

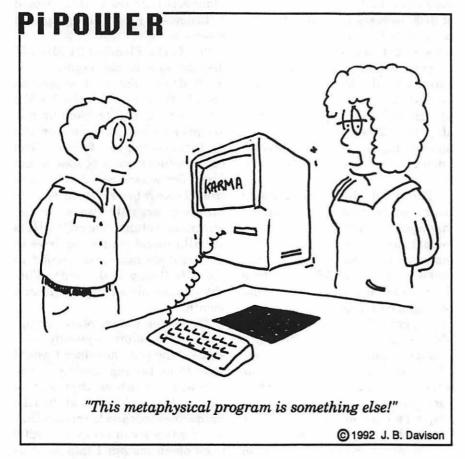
20,000 Reasons GEnie Supports the Apple II/Add One

In spite of continued reports of the demise of the Apple II line, the line itself and support for it continues unabated in the Apple II RoundTables on GEnie and around the world. The products above and many others released within the past year by both Apple Computer, Inc. and many third parties prove that the Apple II is a highly capable and dependable line that can be easily advanced well into the 1990's and beyond. Through the efforts of Apple Computer, Inc. and various third party companies, the Apple II now supports optical character recognition, TrueType font technology, high-speed high-capacity SCSI hard drives, Magneto-Optical drives, Floptical(TM) drives and SyQuest removeable media, 1.4 Meg floppy drives, multi-operating system disk format compatibility (including Macintosh HFS, MS-DOS, and High Sierra/ISO 9660), multitasking. Ethernet networking, online disk compression software, PostScript laser printing, background batch print spooling, and graphic editing software that supports up to 3200 colors on screen simultaneously.

One of the first personal computers ever developed, the Apple II line has survived, flourished, and continued to be updated for fifteen years, a feat unparalleled by any other PC. A2 and A2Pro, the Apple II RoundTables on GEnie, in cooperation with dozens of third party companies providing direct online support in the A2 and A2Pro Bulletin Boards, are dedicated to continued support for the Apple II line of computers for its next fifteen years and beyond.

(Lunatic E'Sex/19930101/Press Contact: Dean Esmay, 708-597-0141, Head SysOp, Apple II RoundTables on GEnie)

GEnie information: 1-800-638-9636 (voice)





On The Trail Of The Apple III

by David Ottalini Apple III SIG Co-Chairman

First Off

Congratulations to Paul Campbell, who has agreed to become our SIG's new co-Chairman. He replaces our good friend Jim Jutzin who has moved on to another platform. Thanks Jim for your time and efforts on behalf of the III!

Software Development Project

The SDP (Software Development Project) continues to move forward. Thanks to those who attended our February meeting, the SIG decided to work on three possible projects with Bob Consorti of On Three:

- SOS Speed upgrade using a 65802 chip and disk cache
- Floptical Disk Driver
- Com Manager Upgrade to 14,400 baud (with appropriate modem)

There was also interest in Bob's proposal concerning a Finder-like utility program for the III. I communicated with Bob shortly after the meeting and asked him to provide a proposal for each project, that I could then take to the WAP Board of Directors.

Here's what he told me via CompuServe:

"I've done some serious thinking about the 65802 in the III. Way back when, Rob (Turner) and I wrote an Apple III assembler that used the 65802 to speed things up tremendously. However, one of the problems with the 65802 is that to run in 16-bit mode on the III, inter-

rupts have to be turned off. This would play havoc with communications programs and I don't think people would like that. I could easily guarantee a 20% speed up but the new SOS wouldn't work with any communications program.

"Without the 65802 chip I could do a new version of SOS to do disk caching but I don't know if I could guarantee a 20% speed up. On lots of disk accesses it would probably come close but I'm not sure. There are a host of other things you can do to speed SOS up, i.e., automatically optimizing files by swapping index blocks to the front of the file when a file 'grows.' All in all I could probably get a 20% overall disk speed increase from a new version of SOS. I don't know if that would be worth it.

"The simple disk caching would require a rewrite of the SOS memory manager to dynamically allocate memory as needed and the SOS file manager to direct output to the cache ram space. Additionally a separate configuration utility would be required since some programs blindly grab all memory that's available rather than as they need it. I would probably have to allocate one 32K bank of memory to be used as a disk cache. The update would be a very quick patch of the boot code to drop off a bank of memory, just as The Desktop Manager does it.

"The new version of SOS would be compatible with Catalyst and Selector as well as all stand-alone programs. I'd even fix a couple of more obscure bugs as well as have the SOS utility manager be able to return time after 2000. Note that most programs will be stuck displaying things in 1900 time but the update will cause SOS to display the correct time. Since I don't now think the 65802 chip option is viable I would estimate that it would take me three months to complete.

"The Apple III Finder project would involve a core file selector (ala Catalyst or Selector) and a core system utilities file and device utility, all wrapped in a graphical user interface. I would love to do this project and I estimate it would take about three months to complete. I have some of the core utilities routines already written (from the Disk Manager), the hard (fun) part would be to devise a Finder-like graphical interface.

"To do the Floptical 21 MB 3.5" disk driver it would require a new SCSI driver, one that supported the 21 MB format and the 1.4 MB 3.5" floppies. The problem here is deciphering how to switch on the fly between the two formats. The driver would have to be like the old Micro-Sci where two drivers controlled access to a single drive. The first one (actually two since the maximum volume size on the III is 16 MB.) would access the drive in 21 megabyte mode, the second in 1.4 MB floppy disk mode. This should take me a little less than a month.

"To do the Comm Manager update would require basically a rewrite of the program since I would have to be talking directly to the hardware to achive that sort of speeds. Also, I've looked at the III's hardware specs and it appears that the hardware can setup for 19200 baud operation but I find it interesting that the driver manuals de-



scribe 9600 baud as the max. I don't know how fast you can actually push it but we should be able to get up to over 9600 baud speeds and most likely 14.4K baud. This should take about 2 months to complete. I think the "x" number of copies up front payment method would work best for all of the projects. For the SOS update/cache I would want \$2000 or 40 copies at \$50 per. For the Finder I would want \$2000 or \$40 copies at \$50 each. I could do the Floptical for \$750, or 15 copies at \$50 each. I would need a drive during the development, which I would return upon completion of the project. For the Comm Manager update to higher speeds I would want \$1500, or 30 copies at \$50 each and would need one and possibly two high speed modems during development, which I would return upon completion of the project."

Bob says he would love to do all these projects. The challenge for us is to get enough funding to make sure we can have at least one of them completed. Without strong III community support (read that financial support through donations), I frankly doubt we could do all of them.

By the time you read this, I plan to have submitted a report to the BoD and hopefully gotten their permission to move forward with fundraising for the project. I ask that all interested consider making a donation so that we can get things going as quickly as possible. We will have met in March to discuss these projects, and will continue to keep you posted as we go along. Again—if you have any suggestions or comments I urge you to call me or contact me by mail or on the TCS.

Paul's Comments

New co-Chairman Paul Campbell took a look at Bob's proposals and offered these thoughts:

"I read Bob's reply to the projects and think that we need to make some serious considerations about the 65803 project. Would it be possible to have a 'downshift' to 8-bit mode for Communications, or is it a deal where you cannot change from 16 bit unless you reboot with a different disk? If we do go for a Finder-type interface and the mode can be changed on the fly, then we could have the Finder toggle the mode, something such as having the CPU turbo on or off. Could we compromise on the speed a little to enable the interrupts? Could we go with a different chip which CAN use the interrupts?

"A different method of obtaining similar results would be to upgrade the III's video, patch S/OS to run the CPU as if the video were toggled off, and use the disk caching to help disk access delays. The disk caching alone won't do the job, we want CPU speed that will help with more than just disk I/O, but if disk caching is all we can do for now, lets go for it. We also have to remember that this project won more votes than anything else discussed. Another aspect to consider is the fact that the current 6502 will run comfortably at 200% of it's current maximum clock speed.

"The Finder sounds great, my biggest question is; will this Finder allow me to go to another program without quitting the program I'm in? I don't care if the program in the background stops running, can we get to our Three Easy Pieces database from Draw On III? Can we do a little editing with Draw On III without dumping all our lignments and settings in the Graphics Manager? The Finder could borrow the Desktop Manager's 'picture' file method for memory management when another application is opened, but assign a sequence number such as picture1, picture2, picture3, etc.

depending on what level you are on. Tandy's Deskmate uses a 'Task Switch' to go from one program to another, up to 10 levels deep.

"The floptical sounds great. Even if they do change the format to 28 MB, most of the work will have been done. I know a side project that would help this one along; how about a Pascal update that removes the 16 MB limit... the Apple III limit is actually 32 MB (No, Virginia, virtual memory is not a new concept).

"No real comment on the Communications Manager rewrite, other than it will clearly enhance the III's longevity. Maybe in the process we can modify the method of entering filenames when uploading with the Binary II protocol,... it's a pain not being able to enter the filenames beforehand while off-line."

Lost Classics Program

We got a nice letter from Tim Tabor whom I mentioned last month as heading up an Apple II "Lost Classics" program through the GEnie On-Line Service.

We have Tim to thank for getting Paul Lutus to officially release our version of AppleWriter as FreeWare—which means Paul will allow its free distribution while he retains full copyright protection. That's a point I needed to clarify because this means AppleWriter is not officially "Public Domain." I'll update our AppleWriter 4.1 disk—3WDP-01—to reflect this restriction. Unfortunately, that probably means we will not have access to the source code to update the program.

Tim says the Paul has placed restrictions on how his software may be distributed—meaning he does not want it sold for a profit. As Tim put it: "(the software)... may be given away, but not sold either by themselves or as part of a larger



package. User Groups and other services may charge nominal fees for the disks and postage, but that's not all.

That said, I wonder what this means for a company like Sun Remarketing, that still sells AppleWriter 2.0, the last officially released version of the program. Since Tim specifically mentioned Super AppleWriter (Versions 4.0 and 4.1) and not 2.0, there may not be a problem.

Beyond that, Tim says he has been "working to come up with a method" to persuade his "A2 Roundtable bosses that we should really branch out into support for the Apple III. We Apple II owners seem to share a kindred spirit with Apple III owners. If we do not support them, who will?"

He went on to suggest that it might be possible to set up a dedicated area to the Apple III within the A2 Roundtable if there was sufficient interest to warrant it.

It would be wonderful if that could happen because we need all the help and support we can get. BUT since most IIIers who go on-line these days use MAUG's Apple III forum on CompuServe (along with our own TCS), I don't know if there would be enough interest to sustain another forum on another on-line service. I'll continue to talk with Tim, however and will work with him aimed at improving support for our SARA.

More on Lost Classics

By the way, Tim also added some detail to exactly what his "Lost Classics" program is trying to do:

"We are merely an entity which is trying, in a semi-official capacity, to make sure that software which ceases to be commercially viable remains available. This would range from convincing companies to keep their programs available commer-

cially for a longer time all the way to getting them to release their software as public domain."

Other Apple II programs already released as PD, FreeWare or ShareWare include 3-D Graphics Tools, Electric Duet, GraFORTH, Raster Blaster, Space Album, Tranquillity Base, Trilogy of Games and WPL Expansion Kit.

I have discussed our efforts to get formerly commercial Apple III programs placed into the public domain. Unlike the II, the III is a complete orphan with no support except through WAP, ATUNC, On Three/Bob Consorti and Sun Remarketing. As such, I believe that once a good faith effort has been made to contact companies or individuals who at one time produced Apple III products, there is no reason NOT to place the products into the PD.

We have, in fact, been turned down by a few companies and will (of course) honor their desires. We also run into problems of 1) not having the software in the first place (which makes it hard to put into the library!), or 2) it is copy protected, making it difficult to impossible to make copies easily.

But we have also been successful with such programs as Programmers Power Tools, companies like DA Data Systems and others. There are more programs out there, and as I have time, will continue to pursue our efforts at adding them to our library.

Final Classic Thoughts

Tim also pointed up something we've been saying for awhile about the III-that:

"Online support is fast becoming the only game in town for Apple II support, as well as various other 'orphaned' computers. Besides the software that is available, the ability to ask an Apple II related question and often get a good, definitive answer within 24 to 48 hours is a godsend."

He finished by saying "I see no reason why we cannot do something similar for the Apple III."

Apple To Mac and Back

We've discussed this a number of times here along the Trail. Now that I have had some experience myself, having a Mac at work, I can tell you that things are never as easy as they seem, but with perseverance, you can succeed in making the transfer from III to Mac (and back!).

As things stand now, we actually have more ways to make the transfer than ever before. Macs can "see" ProDOS/SOS based disks either in 800 or 1.4 MB (super drive) formats-and we now have access to both drives thanks to On Three.

You can use Apple File Exchange on the Mac to make the transfer (it comes with all Macs) or better vet. you can use a great utility suggested to me by Rick Zeman and discussed in the March A+/InCider (see page 46 and 47 for a complete discussion).

To support its Mac LC and Color Classic line of computers (which, with a plug-in card can run any Apple II program)-Apple wrote its "II.SYSTEM" software. It includes a driver to let the Mac read from and write to ProDOS (and yes-SOS) disks. Now the good (undocumented) part: That driver can be used on ANY Mac. All you do is download the software with your Mac from the WAP TCS, unpack it, drag it into your System File and restart.

From that point on, any Apple II or III 3.5 disk will be available to you on your Mac desktop and can be handled like any other file. Beyond that, text files will remain format-



ted the way you saved them on your III with AppleWriter, 3EZPS, Word Juggler, etc.

As far as transferring Database files are concerned. I discovered that FileMaker Pro and (I presume other Mac DB Programs) can NOT bring in text files properly as saved by 3EZ Pieces. That's because 3EZPs saves its text files with a <RE-TURN> at the end of each line. FileMaker Pro needs Tab Delimited text-something that the 3.0 version of AppleWorks CAN do.

I really don't understand why Claris can't include an import option with text that has returns, but that's another story. In any case, IF you want to bring in a DB file into your Mac from a III, see if you can't find a friend who has the 3.0 version of AppleWorks to help (OK-I do!) and your life will be much easier.

By the Way, the GS (but not the IIe) has the ability to read Mac HFS files and from there, they can be saved to disk and then brought into your III. As you might remember, Bob Consorti had proposed a III utility to allow transfers using the III Superdrive. But Apple is refusing to share the technology needed to let the Superdrive read other operating systems-a problem that would prevent such a utility from being written easily.

Finally

Please join us on the TCS! If you haven't gotten a modem vet, 2400 baud versions are available by mail order for very little. We have some wonderful discussions and it really doesn't take that much time to come "on-line" and find out what's happening with your fellow SARAsaurs. If you need some help or suggestions, please feel free to give Paul Campbell or myself a call.

Profile LL Formats

by Tom Linders

ne of our III SIG member John Lomartire recently asked about how to complete a low level format of a Profile five or ten megabyte hard disk using an Apple III. Here's how you would go about it:

First of all you need:

- Apple III
- Profile (5 or 10)
- Masked ROM (5 or 10)
- Formatting Disk or Debugger Disk (5 or 10)
- Two pin jumper
- LED substitute
- Profile I/F card
- Profile test disk (5 or 10)

As you can tell from the list, each Profile that is tested will require a different set of materials. The five and ten megabyte Profile hard disk Assys, and Analog and Digital cards are not interchangeable.

The first thing that you have to do is assemble everything needed to do the formatting. This can be no mean task because there are only a few people in the USA that have everything needed. I have a set, and so do Bruce Leitz, Dale Warnke, Bob Consorti (On Three), and Bob Cook (Sun Remarketing). I'm sure there are more, but these are the ones that come to mind.

Turn Power Off and Disconnect Everything

You then take the cover off of the Profile; four screws on the back, and three on the front part of the bottom and it is all over sans disconnecting the LED that is on a long cable.

After you have taken the drive apart, verify whether it is a five or ten megabyte drive and remove the main Z8 processor and replace it with the proper masked ROM, making sure that it faces the correct way and that no pins are bent in the process. While you're at it, this is a good time to add the LED and the two pin jumper.

Make sure that the Apple III is turned off and put the Profile I/F card in slot one, and connect up the Profile to the Apple III. Turn on the Profile and after the LED comes on and remains steady, turn on the Apple III and follow the prompts of the disk you've inserted.

When you're done, you can run diagnostics, and I usually do so for a day or two. Be careful that you put everything back the correct way: the interface card in slot four, and the normal Z8 processor for the masked ROM. Then turn it on and do a high-level format with System Utilities and you should be all set.

I can't make any guarantees about your outcome, but I have formatted about 50 Profiles and have not had a problem.



Apple III SIG PD Library

by David Ottalini

We offer two more disks this month for your enjoyment and edification:

3UTL-48-Jeppson Codefile Utility-This is a Business Basic program that will allow you to change the file types of your Apple // files. All the necessary invocables and documentation are available on disk for you. Dr. Jeppson was an early supporter of the /// and wrote many of the most interesting programs we have. He was a mainstay in the old Softalk Magazine. I'll bet he's a pretty good dentist too...

Side One includes a tutorial in BASIC you can run using Menu.Maker. It will allow you to print out some of the material. Side Two includes the actual program (in BASIC) and necessary Invocables. The programs have been adapted to run with Menu.Maker.

The file types available using this program include:

File Ty	pe/#	Description
\$00	0	Typless File
\$0 1	1	Bad Block File
\$03	2	Pascal Code File
\$03	3	Pascal Text File
\$04	4	ASCII Text File
\$05	5	Pascal Data File
\$06	6	General Binary File
\$07	7	Font File
\$08	8	Graphics Screen File
\$09	9	Business Basic Program File
\$0A	10	Business Basic Data File
\$0B	11	Word Processor File
\$0C	1	SOS System File
\$0D-\$0	DE 13-14	SOS Reserved
\$0F	15	Directory File

These are the ones this particular program will not only read but allow you to change.

But there are additional types, which now include those taken by Apple and various other Apple II developers:

\$15	Screen Library File
\$10	RPS Data File
\$11	RPS Index File
\$12	AppleFile Discard File
\$13	AppleFile Model File
\$14	AppleFile Report Format File
\$16-\$18	SOS Reserved
\$19	AW/3EZP Data Base File
\$1A	AW/3EZP Word Processor File
\$1B	AW/3EZP Spreadsheet File
\$1C-\$1F	Reserved
\$20	Global File (Desktop Manager)
\$25	Desktop Manager
\$26	Desktop Manager Option
\$27	Note Pad File (Desktop Manager)
\$28	Subload File (Desktop Manager)
\$29-\$EE	Reserved
\$AB	GS Basic File
\$AD	GS Basic Data File
\$EF	Pascal Area
\$F0	ProDOS Added Comment File
\$F1-\$F8	ProDOS User Defined Files 1-4
\$F9	ProDOS Reserved
\$FA	Integer Basic Program File
\$FB	Integer Basic Variables File
\$FC	AppleSoft Program File
\$FD	AppleSoft Variable File
\$FE	Relocatable Code File (EDASM)
\$FF	ProDOS System File

On Three's Communications Manager includes a utility that will allow you to change any file type into any other.

Note, however, that you need to be VERY careful when changing file types because you can really make mash out of a file in moving it from one type to another (For example- you can't change a BASIC file to ASCII and expect AppleWriter to read it.) Make a copy and do the conversion on it just to be safe. And as noted above, since the demise of the ///, Apple II developers have, on occasion, taken a /// file type as their own, which could cause some problems if you're working with Apple II files.

3REP-11-Apple ///+ Diagnostics Disk/512K Memory Test - Two programs on this disk will help you determine the health of your ///+ and (if equipped) its 512K memory Both are written in AppleSoft BASIC under the old DOS 3.3 and are self-booting. The Apple ///+ Diagnostics is similar to, but a tad different from the Apple /// version in that the tests have been moved around a bit and it will check the health of your clock chip. The RAM test seems to be a bit better at identifying what chips may, in fact, be bad. Other than that, it's the same as its earlier version. You could, in fact, run this test on a ///just don't bother with the clock chip test.

The 512K memory test is the one supplied by On Three and is an expanded version of the older Apple /// memory test found on the Confidence disk (3REP-01). It will, in fact, work on any Apple ///—it simply checks to see what memory is available, forgets what isn't and proceeds with the test.

When checking your ///s memory, be sure to do it both from a cold boot and after its warmed up a bit. I've found that while problems occur while cold, they can go away after things have warmed up a bit. And don't be afraid to run this test overnight—problems can turn up over time that may not with just a few minutes of chip testing.

Thanks to /// SIGer Rick Gast for contributing the ///+ Diagnostics disk.



Macintosh Disketeria

by Dave Weikert

New Disks

There are ten new disks this month; two of the Anti-Virus Utilities series #1.XX, two of the Desk Accessories series #2.XX and six disks of the new Graphics series #8.XX. We also revised Mac Disk #00.01, the Mac Files Listing and Mac Disk #00.04, The Mac Disketeria Catalog. Descriptions of the files on the new and revised disks are included below.

Disketeria Catalog

The long promised Macintosh Disketeria Catalog was released last month. It is on disk instead of in printed form. The disk-based catalog includes descriptions of all folders or files in the current Disketeria collection. You can display the disk descriptions on screen and search for specific file titles or text strings using your own word processor or the text processor included on the disk. Now that the Disketeria Catalog is on disk, we will revise it monthly just as we do with the list of Disketeria files.

We provided the Disketeria Catalog as a text file that may be displayed using a text editor or word processor because it was the most expedient solution. The text file will run on most Macs and is relatively easy to update and keep current. You may print it out with your word processor or the included text editor.

Future plans include the creation of a separate disk containing a PostScript file of a printed Macintosh Disketeria Catalog. This will permit those of you with a PostScript printer to print your own Macintosh Disketeria Catalog if you prefer a printed catalog over a disk-based version. If time permits, we would expect to revise the PostScript Macintosh Disketeria Catalog on a quarterly schedule.

For PowerBooks Errata

I received some additional files and some updates to documented files after I completed the annotation of the Power Book disks. Since I had not completed the duplication, I added them to the disk series. The descriptions of these files are included as Mac Disks #10.01A Errata and #10.02A Errata.

Anti-Virus Utilities

Another new virus strain, another round of Anti-Virus Utility updates. The T4-C strain of the T4 virus and a new version of the CDEF virus were recently detected. The T4-C virus infects applications and system files. T4-C is destructive and infected applications must often be replaced. The CDEF virsus infects the invisible desktop files for System 6.0.8 and earlier; it does not infect Macs running System 7.0 and later. We created new master disks and copies for the Disketeria before the meeting on 27 February. If you bought any Anti-Virus Utility disk that has a letter H revision, you have the disk that counters T4-C and this CDEF variant as well as earlier ones.

Disinfectant (version 3.0) on Mac Disks #1.02H and #1.03H and Gatekeeper (version 1.2.7) on Mac Disk 1.03H are the latest revisions. Mac Disk #1.02H is a self starting (boot) disk. I have not tested whether they will self start with the newest Macs (LCIII, Centris, Performa, Quadra, PB 145 and up and Duos series) so cavaet emptor. Virus Detective and Disinfectant are both on Mac Disk #1.03H along with GateKeeper and other popular antivirus utilities for any of you who want to create your own boot disks. Note that the Disinfectant INIT must load first at startup so make sure that you modify your startup sequence if you are using InitPicker or another INIT management utility.

Desk Accessories

We added two disks of Desk Accessories, MacDisks #2.11D and #2.12D. Most of the programs are revisions of files previously in the Disketeria. However, one noteworthy exception is Vendor DA developed by Bill Baldridge, one of our members. This is a very useful DA for anybody who needs quick access to the telephone numbers of companies that provide Macintosh related products. Bill also recently developed a specialty startscreen given to Falcon Microsystems president for their support of our December garage sale. Thanks for both, Bill!

Desk Accessories (DAs) are usually small programs of limited functional scope that are nevertheless very useful or entertaining. Installation of DAs is relatively easy but depends on whether you are using System 7 and later or System 6.0.8 or earlier.

Installation of DAs is easiest with System 7. Just copy the DAs over to your hard disk. Double click the DA suitcase icon; the DA suitcase opens just like a folder and shows any included DAs in application (diamond shaped icon) form. Then just move the DA application icons into any



convenient folder. You may then run DAs at any time by opening the folder and double clicking the application icon. To access DAs from the (Apple) Menu as in earlier systems, just move the DA icons to the closed System folder icon; you will then be asked if it is OK to store the DAs in the Apple Menu Items folder. These DAs are immediately available under the Menu just as before.

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

There are also commercial Font and DA manager utilities such as Suitcase II and Master Juggler that may be used to install and manage desk accessories. If you use these, just follow the instructions in their respective manuals.

New Graphics Series

Graphics! Along with desktop publishing, the graphics capability provided by the Mac was the primary reason for the initial success of our beloved computers in the business place. Graphics and color first appeared in our Mac Disketeria in the Mac II series of disks, #20.XX. The Mac II was the first machine capable of performing color graphics, other color functions such as games and monochrome and color plotting routines that required more powerful CPUs. (It seems odd referring to a Mac II 68020 CPU as a powerful CPU after looking over the most recent crop of 68040 models.) As time has passed and color and more capable CPU have been added to a variety of Macintosh models other than the II series, the #20.XX Mac II series became something of an anachronism. More and more color-related files were placed in other disk series.

It became time to retire the venerable Mac II series.

The initial disks in the Graphics series are primarily applications and DAs that generate, modify or view graphics files in a variety of formats. The fractal applications that display Mandelbrot sets generate fantastic swirls of color for you with color Macs. Although the category of Graphics is a holdover from the Mac II series, the majority of the files are new or significant revisions to ones previously issued. We think that you will be interested in at least some of the files on these disks. Look them over and let us know what you think.

Cartridge Barter

Most of the programs in our Mac Disketeria are archived on five and 1/ 4 inch 20 Megabyte Bernoulli cartridges or on 45 Megabyte SyQuest cartridges. This includes material already issued as well as downloads waiting to be tested, annotated and assembled onto disks. Because of the expense, WAP has been able to purchase only a limited number of these cartridges. If anybody is interested, we will barter cartridges in exchange for copies of disks in the library. The barter deal is a two for one exchangewe receive three cartridges, return two of them filled with copies of library disks of your choice and keep the remaining one. Call me at (301) 948-9646 and leave a message. The Bernoulli cartridges may be from IOMEGA, Mountain Computer or Bering; the SyQuest cartridges may be from SyQuest, PLI, CMS, APS, ClubMac, MassMicro, LaCie or a number of other vendors.

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 #00.04 — C 4 DISKETERIA CATALOG

Read.me.first: The statement of copyright and conditions of use that apply to the Mac Disketeria Catalog on this disk.

MacDisketeriaIntro By Dave Weikert. A file introducing the Macintosh Disketeria Catalog, listing our Rules of the Road and describing the Disketeria organization.

MacDisketeriaCat: By Dave Weikert.

Descriptions of all of the Disks in our Disketeria along with program descriptions. The descriptions in the catalog are similar to the descriptions provided in this Disketeria column.

DISK #1.02H — AV 2 ANTI-VIRUS UTILITIES

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

Disinfectant 3.0: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT 29, INIT 1984, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace), MBDF, CODE 252, T4, T4-C and Frankie. Like Virus Detective, it operates under your control and can scan a succession of floppy disks and create a log file of the results. Check out the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE or later.

<u>ResTag 1.0d f:</u> By Raymond G. Maraza. Examines the System file and list resources and



types and evaluates them as possible viruses. This program is for more advanced users. ResTag.docs is the text format documentation.

system 6.0.5 f: Includes Apple System Software version 6.0.5 with System and Finder with Control Panel and SCSIProbe to provide a self starting disk. The System file has been stripped of all possible fonts and DAs to permit using this as your primary virus detection, eradication and prevention disk. We could not install System Software 6.0.8 because there was not enough disk space to install Disinfectant even after 6.0.8 was stripped of all possible fonts and

DISK #1.03H — AV 3 ANTI-VIRUS UTILITIES

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

Disinfectant 3.0.sea: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT 29, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEFA (Garfield), MDEFB (Top Cat), MDEF Cand MDEFD, MacMag (Drew, Brandow, Aldus or Peace), MBDF, CODE 252, T4, T4-C and Frankie. Like Virus Detective, it operates under your control and can scan a succession of floppy disks and create a log file of the results. Check out the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE or later.

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

GateKeeper 1.2.7.sea: By Chris Johnson. These INITs and associated Control Panel Device (cdev) are placed in your system folder (Systems earlier than 7.0) and are then accessible via the Control Panel after booting. For System 7.0 and later installation, see the documentation. GateKeeper monitors the types of action that viruses take and limits the system response to prevent infection. GateKeeper creates a log file for later analysis and diagnosis of virus attacks. GateKeeper Aid looks for certain viruses and their variants and eradicates them. GateKeeper Introduction and GateKeeper Aid Introduction, in MacWrite format, describe the use of the programs. For Mac 512KE and System 4.1 or later. Send a postcard.

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

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

VirusBlocade II Demo 2.0.3.sea: By Jeffrey S. Shulman. This INIT/cdev permits you to foil attempts by viruses to write to your disks. It works in conjunction with Virus Detective (even if Virus Detective is closed) to check out disks when they are inserted This demoversion is fully functional except the configuration changes cannot be saved. ShareWare — \$30 for fully functional version.

VirusDetective 5.0.6sea: By Jeffrey S. Shulman. This Desk Accessory scans a disk, folder or file to detect a virus. Viruses detected include Scores, nVIR (A & B), INIT 29, INIT 1984, ANTI (A&B), WDEF (A&B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF Cand MDEF D, MacMag (Drew, Brandow, Aldus or Peace), MBDF, CODE 252, T4 and Frankie. Virus Detective can search for operator entered strings and can write a log file to disk. This version has extended capabilities and permits you to easily check out an entire floppy disk library. The DA is installed in the System file and is available under the menu; a copy is not included in this folder due to lack of space on the disk. JSS Virus Article.Bkmn/Helv is the MacWrite II format documentation on the theory and use of Virus Detective. Search String Sets contains text files with search strings. ShareWare - \$35 for license, \$40 for license and disk with other demo programs.

Disk #2.11D --- DAs 11 DESK ACCESSORIES

Address Book DA 3.5.2 f.sea: Address Book DA 3.5.2 and Address Book 3.5.2: By Jim Leitch. This is a Address and phone list, dialer and envelope and label generator in DA and application formats. You may view an index of 66 names (length limited to 40 characters) per page in three columns per page. Select name and double click to open record and choose one of three telephone numbers to dial

automatically. Several pages of help and is System 6 MultiFinder and System 7 compatible. Files can be exported. Read me and What's new in 3.5.2 are in text format. Sample AdBk list is a sample address list. ShareWare - \$30.

AddressBook Utilities f: By Jim Leitch. H/C Addr to Text 1.5, SideKick Convertor V3.1 and Text to Address Book 3.2 permit you to convert data from HyperCard, Sidekick and Text files to the Address Book file format.

Area Codes f: A DA that looks up the region, locality and time zone for any area code you input. Requires you to use ResEdit to change path name to Area Code File; this is a major inconvenience. README is in text format.

AreaCodes/TimeZones1.2: By Michael Ross, DisplayDA shell by Bill Steinberg. A DA that lists area codes, time zones and states in area code order.

ASCII Chart 4.2 f: By Jon Wind. The chart shows all 256 ASCII characters and their decimal and hex equivalents. A menu selection permits changes to displayed font and size and you may also display sample text. You may also print samples, specification sheets and character charts as well as saving a chart as a PICT file. ASCII Chart 4.2 Docs is in Teach Text format. ShareWare - \$10.

Bugs Bunny: By Moore: A clock with the cartoon character on its face.

Calculator II f: By Edward Agoff. A scientific calculator designed with particular attention to operational precedence and display and internal accuracy of 13 and 18 digits respectively. Includes trigonomic and exponential functions. About Calculator II is in text format.

Easy Envelopes+ 2.6 f; By Andrew Welsh. Lets you print envelopes of different sizes with a return address, any of thousands of stored addresses, and an optional endorsement line. Also prints postal bar codes if selected and can handle graphics. EE+ 2.6 is the documentation in application format. ShareWare - \$15.

FarSideClock: A combined clock, calendar and Gary Larson cartoon character. This one is in System 7 application format. System 6 and earlier users will have to create a suitcase for it.

GIF Watcher 2.1.2 f: By Kerry Shetline. A DA for viewing GIF files; it is especially designed for viewing GIF files during download. Your may select display alternatives that range from best color for your system or a number of dithered color and black and white selections. GIFwatcher 2.1.2 doc is in MacWrite format and GIFwatcher 2.1.2 update info is in text



format. ShareWare - \$15.

Lawyer Jokes DA: By Chet Day, DisplayDA shell by Bill Steinberg. A collection of lawyer jokes from GEnie. Note! Inclusion of this DA in no way connotes content agreement by Washington Apple Pi, its officers or directors, staff, members or anybody else living or dead in this world or any other at this time, any time in the past or any time in the future.

DISK #2.12D — DAS 12 DESK ACCESSORIES

- Little Black Book 1.5.1 f: By Bill Oliver. A phone book and address book combined that allows you to add as many name and addresses as you like along with as many phone number you wish. It has a find function and auto-dial feature using the Mac speaker or modem. You may also export the information to any word processor or a text file. Little Black Book info is in text format. Share Ware \$20.
- NotePad++ v1.4 f.sea: By Alexander S. Colwell. A 34 page notepad with font face, style and size selection as well as left, center and right justification, time stamping and find and replace. NotePad++ v1.4 ReadMe and Comments about NotePad++ v1.4.s are in TeachText format. Requires System 6.0.5 or later. ShareWare \$20.
- PhoneBook DA 2.6.4 f: By Tim Herzog. It handles long lists of names and addresses usually managed by a Rolodex, HyperCard, or some other tool. It sports a slick interface, extensive phone dialing features, envelope printing, and a robust phone call timer. PhoneBook 2.6.4 Notes/ReadMe is in text format. Share Ware \$20.
- PowerPort Gold Ref Card: By Global Village Communication, DisplayDA by Bill Steinberg. An extensive summary of commands for the Global Village PowerPort Gold modem. In DA suitcase format.
- Register f: By William T. Bergen. A free form, easy to use, accountant free, simple, basic, check book register program. Register Information is in text format. ShareWare \$10.
- Scrapz 1.2 f: By Lars Sundström. A replacement for the Apple scrapbook that has features such as import/export, resizeable window, partial selection of text and pictures ,multiple scrapbooks and more. Scrapz Read Me is in text format.
- SmartCal 2.3.4 f: By Lee Ann Rucker. Smart Calendar is an INIT/DA combination. The Calendar DA allows you to save messages, and the INIT reminds you of them when you first start up your Macintosh. Smart Cal Converter

- produces a text file that may be used with Calendar Maker. For System 6.0.x or higher to see reminders, calendar should work with earlier systems. Read Me... Smart Cal is in text format.
- TattleTale 1.5.4 f.sea: By John Mancino. Provides very complete information about your computer and its system related software. Information can be viewed on screen by category, printed, written to a standard text file or output in database readable format. The record of your system configuration can be used for reporting problems to software and hardware manufacturers, to compare configurations across multiple computers, or to simply learn about your machine. Tattle Tale Docs.MWII and TattleTale Docs. Text are in MacWrite II and text formats respectively. For Mac Plus and later, System 4.2 and later. Helpware - "please give to an organization of your own choosing in an amount greater than you might normally."
- VendorDA 1.3 f.sea: By Bill Baldridge, one of Apple Pi's own. A very useful list of over 375 Macintosh computer product related vendors and their phone numbers. Two versions are provided, one in DisplayDA format by Bill Steinberg and one created with Print2Pict by Baudoin Raulot. Helpware \$10 to National Wildlife Federation, American Red Cross or Planned Parenthood.

DISK #10.01A — M 1 ERRATA—POWERBOOK 1

- <u>Cursor Fixer 1.0 f:</u> By Dennis Brothers. Dynamically replaces selected cursors with user-configurable substitutes. It was written because the thin "I-Beam" text entry cursor on the PowerBook "disappears" when moved. CursorFixer README is in text format.
- 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 Read Me is in MacWrite format. Blurbs f and Ordering f contain promotional and ordering information respectively. Share Ware \$10.
- PBGadget 0.4b1: For PowerBooks only! Runs in the background providing you with a teeny status box (upper right corner) of battery voltage and time of day. Additional options include: Battery Plot, Reset Plot, Spin Down Now, and Sleep.
- MacUpdate 3.0.1 f: By Richard E. Fiegle. Synchronize the files on your PB and other Mac. Compares modification dates of files in a local folder with another mounted volume and updates the local folder files to the same date. MacUpdate 3.0 ReadMe is in TeachText format. ShareWare \$5.

DISK #10.02A — M 2 ERRATA-POWERBOOK 2

- RAMDiskSaver 1.0 f.sea: By David Kreindler. Performs automatic backups of RAM disks in the background as you work. Read Me is in SuperViewer Classic format which is also included. ShareWare \$20.
- Shhh! and Shaddup! f: By Alex Benenson. Shhh! sets the speaker volume to 1 (lowest audible level) during system startup; Shaddup! turns it off. Shhh! Shhh! & Shaddup! doc is in text format.
- WindowFinder 1.3 f: By Edward Agoff. A most useful utility. Just Command click in the menu bar at any time to pop up a menu that lets you select any open window and bring it to the front. About WindowFinder is in text format.

Disk #8.01 — G 1 Graphics—Fractals 1

- This disk and the following one contain fractals. Fractals were "discovered" by the mathematician Benoit Mandelbrot. The Mandelbrot fractal (or set) is by far the most interesting fractal. The fractal itself is traditionally colored black; other points are given various colors depending on how "close" to the set they are. The best looking images lie along the border of the set. The Julia Set, unlike the Mandelbrot Set, actually consists of an infinite number of fractals. A particular Julia Set corresponds to a point in the Mandelbrot Set. If the point is in the Mandelbrot Set the Julia fractal will be a solid object. If the point is outside the Mandelbrot Set the Julia fractal will usually be nothing more than a few unconnected dots.
- *CptExpand 1.0 f: By Bill Goodman. A utility for extracting files from archives created by Compact Pro. CptExpand Doc is in text format.
- Ani-Mandel 1.2 f: Ani-Mandel 1.2: By Mark Lankton. An application for viewing the Mandelbrot set and its environs. Choose "Mandelbrot" from the File menu for a plot of the Mandelbrot set, an extremely odd-looking entity. When it's done, choose "Animate Colors" from the Twiddle menu and watch the fun. Ani-Mandel docs. is in MacWrite format. ShareWare \$5 for the documentation.
- C.M.S.E. v. 0/90 f: C.M.S.E. (Color Mandelbrot Set Explorer). Another approach to the Mandelbrot set, hampered a bit by the fact that the short documentation is *en français*. But you don't need it to open the application and wander around the small color window which zooms in and out of a Mandelbrot Set. Click



- either end of the color bar to cycle the colors through the illustration. C.M.S.E Docs is in text format. ShareWare - \$5.
- Fractal: By Richard Koch. A simple generator of various black and white fractal curves.
- Fractal Contours: By Jim Cathey. Another black and white program which generates a random landscape of mountains, foothills, or foothills and water. (The menu shows a "save as Paint" option, but it's always dimmed.)
- Fractal Islands 5.0: By Scott Berfield. Generates a random fractal landscape of islands in a sea. Can use QuickDraw colors when selected, and can be saved in several formats.
- Fractal Wizard 1.6.3 f.cpt: By Thomas Okken. One of the applications with more extensive feature set for viewing the Mandelbrot set and related complex images in color or gray scale. Includes a number of External Drawing Procedures. blurb is in text format.
- Mandelbrot Animator: By Harry Guiremand. Allows viewing of files created with Mandelbrot Microscope. Note: bombs (error -37) if it is opened within the same folder with Mandelbrot Microscope.
- Mandelbrot Microscope f: By Martin Sanders and William Hembree. A black and white or color Mandelbrot generator. Mandelbrot Microscope Info is in MacWrite format.
- Mandelscaping Demo 1.2 f.cpt: By Stuart Schechter. Create Mandelbrot and Julia sets, zoom in and out and convert between two and three dimensional views of the complex space. Read Me First! is in text format. Share Ware -
- MandelZot 3.0.4.cpt: By Dave Platt. Another very capable color, gray scale or monochrome fractal generator for the Mandelbrot set. There are a number of selectable options including drawing mode and calculation mode. You may also save the fractal image in a variety of formats.
- Super MANDELZOOM 1.07 f: Super MANDELZOOM 1.07: By Robert P. Munafro. An easily manipulated monochrome or color Mandelbrot set rendering program that draws very quickly particularly in the lower resolution views. The Super MZ doc (Read me first), Super MZ doc part 1 and ...part 2 is in text format. The extensive documentation will probably tell you more about Mandelbrot and Julia sets than most of you will ever want to know.

DISK #8.02 - G 2 GRAPHICS-FRACTALS 2

*CptExpand 1.0 f; By Bill Goodman. A utility

- for extracting files from archives created by Compact Pro. CptExpand Doc is in text
- Mandella 8.4 f.cpt: By Jesse Jones. This color or gray scale generator for the Mandelbrot and Julia sets and other fractals has even more features than MicroMandella (by the same author). Mandella Docs, in Word format, is required reading if you want to know more about fractals; it is even more comprehensive than the MicroMandell Docs. Requires System 6 or later, a Mac with an FPU and 32-bit QuickDraw if used with System 6. Share Ware
- MicroMandella 1.0 f.cpt: By Jesse Jones. A very comprehensive color, gray scale or monochrome fractal generator for the Mandelbrot and Julia sets. MicroMandella Docs, in MacWrite format, is highly recommended for your enlightenment and for references to other fractal articles. Requires System 6 or later, a Mac with an FPU and 32bit QuickDraw if used with System 6.

Disk #8.03 - G 3 GRAPHICS-VIEWERS

- *CptExpand 1.0 f: By Bill Goodman. A utility for extracting files from archives created by Compact Pro. CptExpand Doc is in text
- CyberGif 1.2 f.cpt: By Roger Allen. A Graphics Interchange Format (or GIF) viewer. This one has dithering that permits operation with black and white Macs, slide shows, resizeable windows and a fit to screen feature that preserves image proportions. CyberGif 1.2.README is in text format. Requires Color QuickDraw and System 6 and later. ShareWare - \$10.
- GIFConvertor 2.3b2 f.cpt: By Kevin Mitchell. Allows you to view, edit contrast, lightness and gamma and convert between various graphics formats, especially Graphics Interchange Format (GIF for short). You may view graphics images in GIF, RIFF, TIFF, JPG, JPEG (JFIF), MacPaint or PICT format. Save formats include GIF, RLE, scan, startup screen, RIFF TIFF and EPSN format. GIFConverter 2.3b2 Notes and GIFConverter 2.2 Notes are in text format. Requires Mac Plus or higher, System 6 or later. ShareWare - \$40.
- Giffer 1.12 f.cpt: By Steve Blackstock. Permits you to display and modify GIF, PICT, startup screen and Quantized DigiView (QDV) image files. Editing features include contrast and brightness changes, image scaling, and individual scan line shifting. Giffer 1.12 Doc.msw is in Word format. ShareWare -\$20 or a case of beer.

- GIF Watcher 2.0.3 f.cpt: By Kerry Shetline. A DA for viewing GIF files; it is especially designed for viewing GIF files during download. Your may select display alternatives that range from best color for your system or a number of dithered color and black and white selections. GIFwatcher doc is in MacWrite format and GIFwatcher 2.0.3 update info is in text format. ShareWare - \$15.
- JPEGView 2.0 f.cpt: By Aaron Giles. View JFIF(JPEG File Interchange Format), JPEG (Joint Photographic Experts Group), GIF and PICT format files. Converts between QuickTime JPEG and JFIF formats. Supports 24- and 16-bit JPEG images. Use drag and drop with JPEGView AutoTyper to change the file type. Read Me 2.0! is in TeachText format. Requires System 7 and later and QuickTime.
- PictureDecomPress 2.0.5 f.cpt: By Storm Technology. View JPEG files and decompress JPEG files and save them as PICT files. PictureDecomPress READ ME is in Word
- TIFF Show 2.01 f; By Tsutomu Tanno. View up to 8-bit gray scale and 24-bit color TIFF files and touch up the gray scale and color gamma . About TiffShowTM 2.01 is in text format.

DISK #8.04 — G 4 GRAPHICS-MISC

- *CptExpand 1.0 f; By Bill Goodman. A utility for extracting files from archives created by Compact Pro. CptExpand Doc is in text format.
- Designer Draw 4.4.1 f; By Paul Hyman. A drawing program for organization charts, flow charts, dataflow diagrams and other like diagrams. Very good for applications where there is a need for the interconnections between blocks to move as the block is moved. See the examples in sample diagrams.
- DigiGraf v1.4.3 f: By W. Simon Tortike. Use a digitizing tablet and this program to digitize graphical information. Easily sets axes and their scaling including non-linear scales. You may also easily select the data format and precision. DigiGraf docs.macwrite is as indicated and DigiGraf revisions is in text format.
- ImageCatalog 1.5 f.cpt: By Tom Bereiter. Create a catalog of dozens of images arranged on the same page much as a photographic contact sheet. ImageCatalog knows MacPaint, PICT, JPEG, JFIF, TIFF and GIF formats. ImageCatalog doc is in MacWrite format. Requires Color QuickDraw and System 7. QuickTime preferred, but not required.



Imagery 1.8 f.cpt: By Jeff Lewis. Converts Macintosh, Apple IIgs, Atari ST, Amiga, IBM PC and UNIX graphics files into Macintosh compatible monochrome or color TIFF, GIF and PICT2 files. The file formats that can be converted are too numerous to mention but seem to include many of the most popular and many obscure formats. You may also import raw image data and try to organize it in a way the Mac can display. Imagery 1.8 Docs.mw is in MacWrite format. Consider a donation to your local Society of Prevention of Cruelty to Animals.

QuickPaint 0.0 f.cpt: By Edward Agoff. A color or black and white painting program that has palettes of black and white and color patterns. QuickPaint 0.0 Info is in text format. Share Ware - \$5 for version with fully enabled

ScreenSnap™ 2.2 f.cpt: By Michael Hewett & Vaughan Johnson. Take a snapshot of any rectangular portion of the Macintosh screen and save it in a window for later use. The snapshot can be inverted, moved, saved as a PICT file or copied to the Clipboard for pasting into an application document. ScreenSnap™ 2.2 Fact Sheet is in text format. ShareWare - \$11.

DISK #8.05 — G 5 GRAPHICS-IMAGE

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

Image 1.47 Docs f.cpt: By Wayne Rasband.

About Image (Word) is an MS Word document describing Image. Inside Image 147, in Word format, describes some of the inner workings of Image and was 'organized' by Mark Vivino.

Image 1.47 Source f.cpt: By Wayne Rasband. Complete Pascal source code and the resources associated with Image 1.47 for those of you desirous and capable of making your own

Image 1.47 f.cpt: By Wayne Rasband. An image processing and analysis program for the Macintosh that can acquire, display, edit, enhance, analyze, print and animate images. It reads and writes TIFF, PICT, PICS and MacPaint files, providing compatibility with many other applications, including programs for scanning, processing, editing, publishing and analyzing images. It supports many standard image processing functions, including contrast enhancement, density profiling, smoothing, sharpening, edge detection, median filtering, and spatial convolution with user defined kernels. It also incorporates a Pascallike macro programming language, providing the ability to automate complex, and frequently repetitive, processing tasks. Change History (Word) is in MS Word format. Requires Mac with 8-bit video in color or gray scale and FPU.

DISK #8.06 — G 6 GRAPHICS-IMAGE

*CptExpand 1.0 f: By Bill Goodman. A utility for extracting files from archives created by Compact Pro. CptExpand Doc is in text ColorImage 1.31 f.cpt: By Joseph Ayers and Garth Fletcher. An enhancement of version 1.29 of the NIH Image Program. It is a development platform for evaluation of algorithms for segmenting and analyzing blobs from true color natural scenes. About ColorImage(Word) and AboutColor-Image(WriteNow) are in MS Word and WriteNow formats respectively.

GAUKER f: By Phil Toll. A set of Gaussian convolution kernels useful for MacPaint to gray scale PICT conversions; for use with the Image application. About Conversion Kernels is in text format.

Image 1.47 (Non-FPU) f.cpt: By Wayne Rasband. An image processing and analysis program for the Macintosh that can acquire, display, edit, enhance, analyze, print and animate images. It reads and writes TIFF, PICT, PICS and MacPaint files, providing compatibility with many other applications, including programs for scanning, processing, editing, publishing and analyzing images. It supports many standard image processing functions, including contrast enhancement, density profiling, smoothing, sharpening, edge detection, median filtering, and spatial convolution with user defined kernels up to 63x63. It also incorporates a Pascal-like macro programming language, providing the ability to automate complex, and frequently repetitive, processing tasks. Change History (Word) is in MS Word format. Kernels, Macros and Palettes contain supporting files. Requires Mac with 8bit video in color or gray scale.

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	Member		Name			
Disks	Price @	Extended				
Singles 4 or less @ 5 or more @	\$4.00= \$3.50=		Box Number, Apartment, Suite, e Street Address	tc.		
Sets (marked above) + postage \$1.00/disk, maximum \$5.00. Disk Catalogs	\$ (above)		City	State	Zip Code	
+ \$1.50 postage TOTAL AMOUNT DUE	\$4.50	\$	Day Telephone	Evening Tele	phone	



Macintosh Library Order Form



Pi Library 0.01 - C 01 Files	7.06 - TT 6 7.07 - TT 7	13.02B - T 2 13.03B - T 3	21.03 - HE 3 21.04 - HE 4
0.01 - C 01 Files 0.02 - C 02 Sampler		15.05B - 1 5	21.04 - HE 5
	7.08 - TT 9	Programmer/Hacker	
0.03 - C 03 MemDir		14.01A - PH 1	Best of Pi Series
0.04 - C 04 Catalog		14.02A - PH 2	10 disk complete set; \$2
Anti-Virus Utilities#	7.11 - TT 11		5 disk revised set; \$17.50
1.01G - AV 1	Graphics#	Miscellaneous Utils*	
1.02H - AV 2	6 disk set; \$18	9 disk set; \$27	System Software
	8.01 - G 1	15.01B - MU 1	6.0.3 - 4 disk set; \$12
1.03H - AV 3		15.02B - MU 2	6.0.5 - 4 disk set; \$12
Desk Accessories#	8.02 - G 2	15.03B - MU 3	6.0.7 - 4 disk set; \$12
12 disk set; \$36	8.03 - G 3	15.04B - MU 4	6.0.8 - 4 disk set; \$12
2.01D - DAs 1	8.04 - G 4	15.05B - MU 5	7.0 - 9 disk set; \$20
2.02D - DAs 2	8.05 - G 5	15.06B - MU 6	7.0.1 - 6 disk set; \$20 (‡
	8.06 - G 6	15.00B - MU 7	Sys 7/7.0.1 Tune-Up \$
2.03D - DAs 3	INITs & CDevs*	· · · · · · · · · · · · · · · · · · ·	
2.04D - DAs 4		15.08B - MU 8	QuickTime 1.0 - 2 disk
2.05D - DAs 5	17 disk set; \$51	15.09B - MU 9	set; \$6
2.06D - DAs 6	9.01B - I/C 1	System Utilities#	QuickTime 1.5 - 1 disk
2.07D - DAs 7	9.02B - I/C 2	19 disk set; \$57	\$3
2.08D - DAs 8	9.03B - I/C 3		TrueType - 2 disk set; \$
2.09D - DAs 9	9.04B - I/C 4	16.01D - SU 1	HumanCond Undate
2.10D - DAs 10	9.05B - I/C 5	16.02D - SU 2	HyperCard Update
2.11D - DAs 11	9.06B - I/C 6	16.03D - SU 3	1.2.5 - 3 disk set; \$9
2.12D - DAs 12	9.07B - I/C 7	16.04D - SU 4	2.0 - 5 disk set; \$15
	9.08B - I/C 8	16.05D - SU 5	10 1 At 180 At 180 At 180
F Keys (Function Keys)	9.09B - I/C 9	16.06D - SU 6	(‡) on 1.44 Meg diskette
4.01A - FKs 1	9.10B - I/C 10	16.07D - SU 7	# Revised disk series
4.02A - FKs 2	9.11B - I/C 11	16.08D - SU 8	
	9.12B - I/C 12	16.09D - SU 9	
mageWriter Fonts*		16.10D - SU 10	
5.01A - IW 1	9.13B - I/C 13	16.11D - SU 11	
5.02A - IW 2	9.14B - I/C 14	16.12D - SU 12	
5.03A - IW 3	9.15B - I/C 15	16.13D - SU 13	
5.04A - IW 4	9.16B - I/C 16	16.14D - SU 14	
	9.17B - I/C 17	16.15D - SU 15	
PostScript Fonts*	Miscellaneous#		
16 disk set; \$48		16.16D - SU 16	
6.01A - PS 1	10.01A - M 1	16.17D - SU 17	
6.02A - PS 2	10.02A - M 2	16.18D - SU 18	
6.03A - PS 3	Paintings (MacPnt)	16.19D - SU 19	
6.04A - PS 4		Word Processing Utils#	
6.05A - PS 5	5 disk set; \$15		
6.06A - PS 6	11.01 - P 1	5 disk set; \$15	
6.07A - PS 7	11.02 - P 2	17.01B - WP 1	
6.08A - PS 8	11.03 - P 3	17.02B - WP 2	
	11.04 - P 4	17.03B - WP 3	
6.09A - PS 9	11.05 - P 5	17.04B - WP 4	
6.10A - PS 10	D. W. 10 14	17.05B - WP 5	
6.11A - PS 11	Digitized Sounds#		
6.12A - PS 12	9 disk set; \$27	Adobe Screen Fonts*	
6.13A - PS 13	12.01B - S 1	18.01A - AF 1	
6.14A - PS 14	12.02B - S 2	18.02A - AF 2	
6.15A - PS 15	12.03B - S 3	F 0 0 0	
6.16A - PS 16	12.04B - S 4	Fun & Games Series	
- 7.	12.05B - S 5	22.01 - F/G 1	
TrueType Fonts	12.06B - S 6	22.02 - F/G 2	
11 disk set; \$33	12.07B - S 7	22.03 - F/G 3	
7.01 - TT 1	12.08B - S 8		
7.02 - TT 2	12.00B - S 9	HyperCard Externals	
7.03 - TT 3		5 disk set; \$15	
7.04 - TT 4	Telecommunications*	21.01 - HE 1	
		21.02 - HE 2	
7.05 - TT 5	13.01B - T 1		



Apple Disk Library

by John B. Ruffatto

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

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

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

GSDA-16 - /IIgs.DA's.16/ - DESK Accessories 16

The IIGS.DA.S.12 disk has three folders: CDAS, NDAS, and MISC. There are 1 CDAs within the CDAS folder; five NDAs in the NDAs folder and 16 misc. DA utilities, CDevs, Drivers and Inits in the MISC folder.

In the /IIgs.DA.s.16/CDAs/ folder:

/NiftyList3.4/ Nifty List CDA v3.4 by Dave Lyons is a programmer's debugging tool. Disassemble sections of memory, naming toolbox calls and operating system calls. Includes documentation for writing your own modules. Nifty List is ShareWare, \$15 fee.

In the /IIgs.DA.s.16/NDAs/ folder:

/Calc.NDA/ This is a full featured calculator NDA better than Apple's since it has a clear entry function along with other functions (memory, trig, exponential, hex/dec, square root, etc.) that the Apple System 6 one doesn't. FreeWare from Australia.

/FExt.NDA.v0.10/ Finder Extender NDA v0.10 is an update (still beta) of the Finder Extender NDA that extends the capability to use IR to other desktop applications supporting NDAs. Load DAs, INITs, CDevs, etc. from other programs than just finder. This NDA will send finderSaysBeforeOpen requests from any desktop program that supports NDA's. This allows Finder Extensions, like Matt Deatherage's IR v2.0.1, to operate from within any program as if you had double clicked on the file from the Finder. Requires System 6. This version fixes a

major bug that version 0.01 had in it that could cause it to crash under extreme circumstances.

/Font.Engineer/ Font Engineer is an NDA that lets you load fonts on the fly with the option to preview. Shouldn't work with TrueType fonts.

/IR.NDA.v1.0/ IRnda by Jay M. Krell. IRnda requires Matt Deatherage's IR 2.0 or later. IR 2 is a very useful init/Finder Extension that allows one to double click on CDAs, NDAs, inits, GS/OS drivers, and Finder Extensions from within Finder to install them. IRnda is a simple NDA that presents an open file dialog and then asks IR to install the selected file. One can also bring up IR's preferences dialog from IRnda. With IRnda, IR's features are available from any application that supports desk accessories, not just Finder. This is accomplished via System 6's inter-process communication feature.

/ScrapBook.v1.2/ Scrapbook v1.2 is an NDA from GyruS ShareWare in Australia (\$10 fee). Move clipboard items to scrapbook pages (up to 10), print scrapbook pages, save them as disk files or move them back to the clipboard. Resembles the Macintosh Scrapbook NDA but it has more functions!

In the /IIgs.DA.s.16/Misc/ folder:

/BRAM.Checker v1.2/ BRAM.Checker v1.2 by Bill Tudor is an Apple IIgs Temporary Initialization file (TIF) that checks the contents of the battery RAM present in an Apple IIgs for changes from an image that is saved to the disk. You will be notified at boot time of any changes

to the battery ram since the last time you booted the computer. The program will inform you of the battery RAM locations that were changed, and give you the opportunity to restore the old values or continue booting with the new values. BRAM Checker is FreeWare.

/CarpetBag.v2.41/ CarpetBag version 2.41 is a Permanent INIT which installs a menubar clock and allows you to install NDAs and CDAs. It will also let you remove NDAs (but not CDAs) that IT has installed. Docs are included. This version is more bug free, the author hopes. Use only with System 5.0.2 or latter – may crash unpredictably with older System Software.

/CDev.Alias/ CDev.Aliasv1.0 by Bill Tudor is an NDA to put whatever CDevs you want access to from ANY desktop program via the Apple Menu. Docs and some examples are included in this file from GEnie. ShareWare.

/Fndr.Blanker1.1/ This is v1.1 of Bill Tudor's FreeWare finder extension that will blank the screen in Finder after 5 minutes of inactivity. Very small (500 bytes) and just blanks - no fancy displays. This update fixes some bugs in the earlier version.

/FontDA.Inst2.0/ Version 2.0 of the wonderful Font/DA installer/deinstaller. This NDA allows you to install and remove Fonts and Desk Accessories (NDAs and CDAs) "on the fly" without rebooting. ShareWare.

/HotKeys.v1.1/ HotKeys v1.1 is a finder extension that adds hotkey capability to Finder



6.0 and later. It is ShareWare (\$10) by Bill Tudor. This version adds some capabilities to the original version: SHIFT-<key> is supported now and additional action items may be selected including program launching and arbitrary folder opening.

/Idol.v1.0/ IDOL version 1.0 is an temporary initization file (TIF) that allows you to install NDAs and CDAs during the boot process from disks other than your boot disk! It has been designed mostly for people that boot GS/ OS via a floppy or a small hard drive. IDOL will allow you to have Desk Accessories (NDAs or CDAs) on external sources, and then load them for you during the boot process! You can have an unlimited number of external sources. IDOL only needs 5 blocks of disk space! Please read the documentation that is included. IDOL v1.0 is FreeWare. By Bryan Pietrzak.

/InitMaster2.1.1/ This is Bill Tudor's InitMaster v2.1.1 - a permanent initialization finder extension that lets you select which of the many kinds of system files that can be turned ON/OFF you want active. Eliminates the need to access File Info for each file when you have many to do. ShareWare - \$10. This fixes several bugs in v2.1.

/Install.DA/ This program lets you install CDAs and NDAs without having to reboot. You can have your DAs on a separate disk and load them as needed. FreeWare.

/MoreInfo.v1.2/ This is v1.2 of Bill Tudor's MoreInfo finder extension. It provides an enhanced File Info display and permits editing many of the info items as well. It is ShareWare (\$10). This version fixes some bugs and makes a number of changes (cosmetic and performance enhancing) from the prior version.

/Piece.O.String/ Piece O' String is a Finder Extension that let you have the system memorize and later restore the currently selected icons in the Finder. To this end, it adds two items to the Extras menu: "Preserve Selection" and "Restore Selection." Piece O' String will remember your selections even if you launch another program and return to the Finder later. Selections are also preserved when you shutdown. Piece O'String saves your selections to disk in order to accomplish this. Piece O' String is FreeWare.

/Printer57600/ This is the HiSpeed (57.6Kbps) serial port driver that will allow GS users to use the HP DeskWriter with the Harmonie Deskjet printer driver. It is a standard GS port driver so it should work with other high speed printers that can operate at that speed. Created by Bill Heineman. FreeWare.

/Scarab/ Scarabaeidaev1.0 by Richard Bennett is a Finder extension for System 6.0 and above which will get rid of certain Finder. Data files. Scarabaeidae can be invoked by selecting it from the menu, or by pressing OA-Z. Scarabaeidae will delete any Finder data files which it finds amongst the currently selected files on the desktop. If any folders are selected, Scarabaeidae will dive into them. If you hold down option while selecting Scarabaeidae, you will get the about dialog.

/SynthInit.v1.0/ This is an entertaining Finder extension that plays MIDI Synth (synthLAB) songs in the background while you're working. FreeWare from Triad Ventures.

/TeachReader 1.01/ TeachReader v1.0.1 is a Finder Extra (requires System 6.0) that can open multiple modeless windows for Teach, Text, and SRC files just be double-clicking on the icon in the finder. It makes life a whole lot easier! Also works in other desktop applications if you have OpenAny or File Extender NDAs. There are a number of bugs fixed in this version. ShareWare from Jupiter Systems.

/ZipGS.CDA.Patch/ This folder contains a program to patch the ZipGS CDA. Versions of the ZipGSCDA after v1.0 have a bug which involves randomly blasting a byte of memory when you change the system speed using the CDA. This program will patch the CDA to remove this bug. If the patch is already in place, or if the CDA does not have the bug, the program will not change the CDA. By Greg Templeman.

GSDA-17 - /IIgs.DA.s.17/ - DESK Accessories 17

The /IIes.DA.s.17/ disk has 3 folders: CDAs, NDAs, and Misc. There are 2 CDAs within the CDAs folder; 2 NDAs in the NDAs folder and 13 misc. DA utilities, CDevs, Drivers and Inits in the Misc folder.

In the /IIgs.DA.s.17/CDAs/ folder:

/Disk.Witch2.2.3/ DiskWitch CDA v2.2.3 is a filer utilitiy in a CDA. It can be used with 8 and 16 bit programs. Includes a Finder Icon for Disk Witch and documentation. This CDA allows for the following file utilities to be performed from just about anywhere (while using GSOS or ProDOS 8): Volume Display; Directory Display; Attributes - Change Attributes of files/directories; Deleting of files/ directories; Renaming of files/directories/ volumes; Formatting/Erasing Disks; Copying files; Making subdirectories; Reading text/ AppleWorks files; Changing Prefix's. By Gary F. Desrochers. This program is now Share Ware,

\$10.00 fee.

/Quit.To.CDA2.01/ Quit-To CDA version 2.01 by Karl Bunker is a "program switcher" for the Apple IIgs. It is a Classic Desk Accessory which allows you to jump directly from any application (either ProDOS 8 or GS/OS) to any other application without going back to the Finder (or other launcher). That is, it lets you "quit to" another application, rather than quitting to the Finder and launching the other application from there. This update handles situations where it has to "find" applications that you've moved since they were added to the RunList. This lets you select the application to run when you quit from the current one. It also lets you create a RunList of frequent applications. Quit-To is ShareWare, \$15.00 fee.

In the /IIgs.DA.s.17/NDAs/ folder:

/Odom.NDA.v2.20/ Odometer Mouse v2.20 by Paul Meyers. This is a handy dandy NDA that tracks how far your mouse travels. It measures in pixels, inches, feet, miles, centimeters, meters, and shylars. Similar to MouseOdometeron the Mac. FreeWare.

/Super.Info.III/ Super Info III by Jim Lazar. This is a major revision of Super Info, now Super Info III. It's an NDA with plug-in modules which report all sorts of information about various system and environment settings. This NDA displays different information about the status, configuration, and setup of your Apple IIGS and also provides lists of useful information (such as, error messages, tool set calls, filetype lists and more). Very informative and mostly non-technical. ShareWare, \$15

In the /IIgs.DA.s.17/Misc/ folder:

/All.Except.Frnt/ Close All Except Front Finder Extension by Steve Bernacki. This is a real simple Finder Extension that'll close all open windows in the Finder except the currently active one. Customizable key equivilent. FreeWare.

/CarpetBag.v2.41/ CarpetBag version 2.41 is a Permanent INIT which installs a menubar clock and allows you to install NDAs and CDAs. It will also let you remove NDAs (but not CDAs) that IT has installed. Docs are included. This version is more bug free, the author hopes. Use only with System 5.0.2 or latter - may crash unpredictably with older System Software.

/DeskTracker1.0/ DeskTracker ver 1.0 (Finder Extension) by Richard Wifall and Ian Schmidt. DeskTracker is a Finder Extension



that plays SoundSmith songs. It is very easy to use. So how do we start a song playing you ask? To play a song, all that you need to do is insert a disk with soundsmith songs on it and double click on one of the songs. Requires system 6.0 or later. ShareWare, \$10.00 fee.

/FinderView.v3.0/ FinderView v3.0 is a Finder extension (place it in *:system:system.setup or *:system:finderextras and reboot). There's the INIT, an Icons file, and docs. It will let you double click on most graphics and some animation files and view them from the Finder - even in slide show mode. Requires System 6.0. ShareWare, \$10 fee.

/FolderJump/ FolderJump by Joseph F. Schober is a simple little Finder Extension. Wading through a series of nested folders in the Finder to get to a file you're looking for can get tedious and slow. Tunneling helps reduce the desktop clutter, but why waste time drawing and undrawing all the intermediate windows you're not interested in? FolderJump provides a better solution. When you double-click on the FolderJump icon, it opens up a Standard File dialog and invites you to show it the folder you want opened. When you've found the folder you're interested in, double-click on any file in that folder, and FolderJump will immediately ask Finder to open that folder for you, skipping any intermediate folders. ShareWare, \$?

/FontDA.Inst2.0/ Version 2.0 of the wonderful Font/DA installer/deinstaller. This NDA allows you to install and remove Fonts and Desk Accessories (NDAs and CDAs) "on the fly" without rebooting. ShareWare.

/Idol.v1.0/ IDOL version 1.0 is an temporary initization file (TIF) that allows you to install NDAs and CDAs during the boot process from disks other than your boot disk! It has been designed mostly for people that boot GS/OS via a floppy or a small hard drive. IDOL will allow you to have Desk Accessories (NDAs or CDAs) on external sources, and then load them for you during the boot process! You can have an unlimited number of external sources. IDOL only needs 5 blocks of disk space! Please read the documentation that is included. IDOL v1.0 is FreeWare. By Bryan Pietrzak.

/Install.DA/ This program lets you install CDAs and NDAs without having to reboot. You can have your DAs on a separate disk and load them as needed. FreeWare.

/Mailman.v1.0/ Mailman v1.0 is a Finder extension by Lunatic Johnathan Bruce E'Sex. This is an extremely simple demonstration Finder extension that simply tells the system to

play the "You Have Mail" (sbYouHaveMail) sound whenever a finderSaysHello code is received. Since the sbYouHaveMail sound is only really useful to people who are on networks, this sound is almost never used by most people, and is therefore the ideal sound for use by this extension. FreeWare.

/Nicon.v1.0/ NICON v1.0 by Jeff Dickson. Nicon lets you decide if the system startup icons for CDEVs and Finder-Extras will appear at boot time. This is very useful if you have a picture you like to show while booting without the icons' interference. FreeWare.

/ScrollIcons1.01/ ScrollIcons version 1.01 by Robert S. Claney. This 48-byte init patches the System 6 startup icon drawing routine to display more than a screen's length full of icons without erasing and starting over. Instead of just erasing them, this init scrolls the icons up, so that you may have up to 3 full lines of icons. FreeWare.

/Tlite2.Demo.D34/ Twilight II Demo version 1.0d34 by Jim R. Maricondo. Twilight JII is the ultimate screen saver. A DYA production coming in August 1992 from Digital Creations. Twilight II presents an elegant way to prevent screen burnin. Since this is a demo version of a delta edition, many features are disabled or not implemented. Only one dinky promotional module is included. System 6.0 is required.

/ZipCDevFix1.1.2/ ZipGS Control Panel Fix v1.1.2 is a patch program to fix a number of bugs including the infamous "you can't turn the ZipGS ON" bug in the original Control Panel. This utility will automatically patch a large number of bugs in the ZipGS Control Panel. Several bugs in the version (1.1.1) have been patched with this update. Docs included. By Greg Templeman.

GSDM-22 - /IIgs.Demos.22/ - Castle, Music Writer, Reddy, Twilight II

In the /IIgs.Demo.22/Castle/ folder:

Return to Castle Wolfenstein by Martin Hill. This is a half finished (and incomplete) game for the IIgs! It is only the first half of a project I started a long time ago. I no longer have the time to work on such an involved project as this, so it never got finished. I'd still like to see it finished, but I certainly can't and won't do it. I'm throwing it out to the public with the hope that someone will want to finish it.

In the /IIgs.Demo.22/MusicWriterDemo/ folder:

This is a limited demo version of Music Writer by Pyware. This program allows you to

score music. Songs can be played back through a MIDI interface or through the speaker in your GS. Includes several examples.

In the /IIgs.Demo.22/Reddy.Demo/ folder:

This is a working version of "Aaron Milstone's First Aid with Reddy" program which was written by Walker Archer of Quality Computers. "First Aid with Reddy" is available for \$29.95 from Quality Computers. You can reach Quality Computers by calling the 800 number on the closing screen of the demo. This program will help to teach youngsters first aid tips.

In the /IIgs.Demo.22/Tlite2.Demo.D34/ folder:

Twilight II cDEV demo by Jim R. Maricondo. TwilightJII - the ultimate screen saver. A DYA production coming in August 1992 from Digital Creations. Twilight II presents an elegant way to prevent screen burnin. Since this is a demo version of a delta edition, many features are disabled or not implemented. Also, only one dinky promotional module is included—in the final edition many modules will be included allowing may special effects to be enacted when it is time to blank the screen; many more modules will be provided than are provided with Phantasm. This demo and documentation were whipped up rather quickly.

GSDM-23 - /TIMELORD.DEMO/ - TIMELORD DEMO

This is a demo of a new game by Dream Grafix that's supposed to be on the market later this year. TimeLord is a graphic adventure game. It combines superb graphics and sound with smooth animation. This demo version is not complete. The comercial version will have additional features.

There is not enough free space on this disk to start a new game. You can use the Resume Game command to load one of three different saved games. To start a new game, you will have to delete the contents of the /TimeLord/ Saves/ folder. You should make a backup copy of the TimeLord disk before you delete the contents of the /TimeLord/Saves/ folder.

GSDV-12 - /IIGS.DEVELOP.12/ - MISC. DEVELOPER FILES 8

In the /IIgs.Develop.12/Misc.Dev.Files/coff/folder:

UNIX coff utility is an OMF disassembler designed for OMF 1.0 and 2.0 files. Output is similar to the Orca and APW utility 'dumpobj',



although OMF and 65816 disassemblies are much cleaner and more readable. This version presents a much more stable release of the coff utility. The manual is formatted with the Gutenberg 3.0 word processor. Coff is free software. By Albert Chin-A-Young.

In the /IIgs.Develop.12/Misc.Dev.Files/FMake/

FMake is a Unix style make. It supports dependencies and macros. It's not full-scaled, but yet I have to see a better implementation of make for the GS. Use with either ORCA/Shell or GNO. The utility make is a common tool under all UNIX operating systems and has, while keeping to all common structures, been implemented for the APW Shell (or ORCA Shell) by completely writing it from scratch by Blank Felix.

In the /IIgs.Develop.12/Misc.Dev.Files/ Freeze.v1.2/ folder:

Freeze v1.2 for GNO is a compression program similar to compress, but the results are usually much better than compress. Its algorithm is the modified Lempel-Ziv-SS method (LZSS), adaptive Huffman coding for literal symbols and length info and static Huffman coding for position info. Fixed a bug with overwriting that has been plaguing me for awhile. Also fixed the version flag (-V) so that it works as it is supposed to. By Mike Horwath.

In the /IIgs.Develop.12/Misc.Dev.Files/ gnugo.v1.0/ folder:

This is port v1.0 of gnugo for the Apple IIgs

and is a port of the latest version of gnugo. It has been tested briefly for gno and orca, and seems to work fine. This version (preliminary version) only has the executable, but the author is planning on complying with the gnu license and releasing the source. By James Brookes.

In the /IIgs.Develop.12/Misc.Dev.Files/ Machine.v1.0/ folder:

Machine v1.0 for GNO displays the machine type. This utility is for GNO, but works under ORCA.

In the /IIgs.Develop.12/Misc.Dev.Files/ Man.v1.5/ folder:

Man v1.5 for GNO is used for viewing the ONLINE manuals available with the GNO system. The files found in the man directory are files that need to be formatted using one of the standard file formatters available. The ones available right now are aroff for formatting AWGS type files, and nroff for formatting unix 'roff' type files. This version fixes an error made by the author in a previous version. The author left a reference to 'more' in the program for when it pages a formatted file. It should have been using \$PAGER. Also, removed some dead code from the main body. By Mike Horwath.

In the /IIgs.Develop.12/Misc.Dev.Files/ More.v1.4/ folder:

More v1.4 for GNO allows the user to view the specified file(s) screen by screen or line by line. If no files are specified, standard input is used. Every time more has displayed a screen of text, it displays a prompt indicating the

percentage of the file that has been viewed and it's filename. A number of key commands are available at the prompt. This requires GNO and will not work under any other shell. This version of more was written by Jawaid Bazyar and Derek Taubert. Recently updated by Mike Horwath.

In the /IIgs.Develop.12/Misc.Dev.Files/ ResLin.v0.25/ folder:

ResLin d0.25 is a Resource Manipulation Utility by Richard Bennett. ResLin is a utility that does what resource editors don't. That is, conversions and general resource manipulations, as well as editing a number of specific resources. You can create resources from standard data files, delete resource forks, show some resources (icons, PStrings, etc.) and edit some resources and their memory attributes. This one has the capability of supporting Extras (for additional editing capabilities, display capabilities, etc.). There is a sample extra source file (Merlin format) and docs for extras and ResLin. FreeWare.

In the /IIgs.Develop.12/Misc.Dev.Files/ Stevie.Editor/ folder:

Stevie Editor for GNO. This program requires GNO to operate, and will NOT work under any other shell. STEVIE used to stand for 'ST Editor for VI Enthusiasts,' however since this editor is used on more machines than just ST's, the acronym was changed. By Tony Andrews And G. R. (Fred) Walter. STEVIE may be freely distributed.

Mail this form with your Disketeria Washington Apple Pi 7910 Woodmont Avenue, Bethesda, Maryland 208	Suite 910 14		All payments must be in U.S. fun	n Apple Pi, Ltd? Y/N If Yes, Mads drawn against U.S. banking inst to listed prices for 3.5" and \$1.50	itutions.
Number of Disks	Member Price @	Extended	Name		
3.5" Singles 4 or less @ 5 or more @	\$4.00 \$3.50	\$	Box Number, Apartment, Suite	, etc.	
Sets (as marked) 5.25" Singles 4 or less @	\$(above) \$2.00	\$	Street Address		
5 or more @ Sets (as marked)	\$1.75 \$(above)	\$	City	State	Zip Code
+ postage \$1.00/disk, max. \$5.00.	, , ,	\$	Day Telephone	Evening Telepho	one
TOTAL AMOUNT DUE		<u>\$</u>	<u> </u>		

Please write disk numbers on a separate sheet of paper and include them with your order.



Apple II Disk Library Order Form



CALCE PROPER	EAMN-13 #4	GAME-13	NWPS-17 Graphics	UTIL-24
5-1/4" DISKS:	EAMN-14 #4	40	NWPS-18 Graphics	
	EAMN-15 #4	Logo	NWPS-19 Graphics	
ystem Software	EAMN-16 #4	LOGO-01	NWPS-20 Graphics	
APSD-01 #1	EAMN-17 #4	LOGO-02	NWPS-21 Graphics	3-1/2" DISKS: §
APSD-02 #2	EAMN-18 #4		NWPS-22 Graphics	
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pple Disk Catalog		MEMD-01	NWPS-23 Graphics	System Disk
4 disk set #3	EAMN-20 #4		NWPS-24 Graphics	2APS-01 (#5)
raisk set #5	EAMN-21 #4	Miscellaneous	NWPS-25 Graphics	
AppleWorks	EAMN-22 #4	25 disk set = \$37.50	NWPS-26 Graphics	Apple Disk Catalog
APWK-01	EAMN-23 #4	MISC-01	NWPS-27 Graphics	2ADC-01
APWK-02	EAMN-24 #4	MISC-02	NWPS-28 Graphics	
AF W K-02		MISC-02 MISC-03	NWPS-29 Borders	AppleWorks
Communications	Education		NWPS-30 Borders	2AWK-01
	20 disk set = \$30.00	MISC-04	NWPS-31 Fonts	
10 disk set = \$15.00	EDUC-01	MISC-05		Communications
COMM-01	EDUC-02	MISC-06	Pascal	2COM-01
COMM-02	EDUC-03	MISC-07	8 disk set \$12.00	2COM-02
COMM-03	EDUC-04	MISC-08	PASC-01	2COM-03
COMM-04		MISC-09		
COMM-05	EDUC-05	MISC-10	PASC-02	Education
COMM-06	EDUC-06	MISC-11	PASC-03	2EDU-01
COMM-07	EDUC-07	MISC-12	PASC-04	
COMM-08	EDUC-08	MISC-13	PASC-05	Membership Director
COMM-09	EDUC-09		PASC-06	2MRD-01
COMM-10	EDUC-10	MISC-14	PASC-07	ZWIKD-01
COIVINI-10	EDUC-11	MISC-15	PASC-08	Utilities
CP/M	EDUC-12	MISC-16		2UTL-01
11 disk set = \$16.50	EDUC-13	MISC-17	Pilot	
	EDUC-14	MISC-18	PILT-01	2UTL-02A
CP/M-01	EDUC-15	MISC-19	The state of the s	
CP/M-02		MISC-20	Utilities	
CP/M-03	EDUC-16	MISC-21	24 disk set = \$36.00	
CP/M-04	EDUC-17	MISC-22	UTIL-01	
CP/M-05	EDUC-18	MISC-23	UTIL-02	
CP/M-06	EDUC-19		4 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
CP/M-07	EDUC-20	MISC-24	UTIL-03	
CP/M-08	Accessed to	MISC-25	UTIL-04	
CP/M-09	Forth	New Print Chan	UTIL-05	
CP/M-09 CP/M-10	FRTH-01	New Print Shop	UTIL-06	
	FRTH-02	31 disk set = \$46.50	UTIL-07	
CP/M-11	FRTH-03	NWPS-01 Graphics	UTIL-08	
Fomon Advantures		NWPS-02 Graphics	UTIL-09	
Eamon Adventures	Games	NWPS-03 Graphics	UTIL-10	
24 disk set = \$36.00	13 disk set = \$ 19.50	NWPS-04 Graphics	UTIL-11	
EAMN-01	GAME-01	NWPS-05 Graphics	UTIL-12	
EAMN-02 #4		NWPS-06 Graphics		
EAMN-03 Eamon	GAME-02	NWPS-07 Graphics	UTIL-13	
Master	GAME-03		UTIL-14	
EAMN-04 #4	GAME-04	NWPS-08 Graphics	UTIL-15	
EAMN-05 #4	GAME-05	NWPS-09 Graphics	UTIL-16	
EAMN-06 #4	GAME-06	NWPS-10 Graphics	UTIL-17	
EAMN-07 #4	GAME-07	NWPS-11 Graphics	UTIL-18	
EAMN-08 #4	GAME-08	NWPS-12 Graphics	UTIL-19	
SERVICE SECURITION SHOWS	GAME-09	NWPS-13 Graphics	UTIL-20	
EAMN-09 #4	GAME-10	NWPS-14 Graphics	UTIL-21	
EAMN-10 #4	GAME-11	NWPS-15 Graphics	UTIL-22	
EAMN-11 #4	GAME-12	NWPS-16 Graphics		
EAMN-12 #4	G/HVIL-12		UTIL-23	
LAWIN-12 #4				

Please write disk numbers on a separate sheet of paper and include them with your order.

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



Apple IIGS Disk Library Order Form



System Software	Developer	GSGM-02A	GSGX-22	GSIC-08	GSMU-44
GSAS-01 (*1)	13 disk set, \$39	GSGM-03	GSGX-23	GSIC-09	GSMU-45
GSAS-02 (*2)	GSDV-01	GSGM-04	GSGX-24	GSIC-10	GSMU-46
GSAS-03 (*3)	GSDV-02	GSGM-05	GSGX-25	GSIC-11	GSMU-47
GSAS-04 (*4)	GSDV-03	GSGM-06	GSGX-26	GSIC-12	GSMU-48
0315-01(4)	GSDV-04	GSGM-07	GSGX-27	GSIC-13	GSMU-49
Communications	GSDV-05	GSGM-08	GSGX-28	4516-13	GSMU-50
GSCM-01C	GSDV-06	GSGM-09	GSGX-29	Membership Dir.	GSMU-51
GSCM-02B	GSDV-00 GSDV-07	GSGM-09 GSGM-10	GSGX-29 GSGX-30	GSMD-01	GSMU-51 GSMU-52
GSCM-02B GSCM-03				00.112-01	
GSCM-05 GSCM-04	GSDV-08	GSGM-11	GSGX-31	Miscellaneous	GSMU-53
G3CW-04	GSDV-09	GSGM-12	GSGX-32	GSMS-01	GSMU-54
Demos	GSDV-10	GSGM-13	GSGX-34	GSMS-02C (*6)	GSMU-55
23 disk set, \$23;	GSDV-11	GSGM-14	lh-mar/hand	GSMS-03C (*6)	GSMU-56
\$1@ disk	GSDV-12	GSGM-15	HyperCard	43/43-050 (0)	GSMU-57
	GSDV-13	GSGM-16	6 disk set, \$18	Music	GSMU-58
GSDM-01	-	GSGM-17	GSHC-01	61 disk set, \$183	GSMU-59
GSDM-02	Education	GSGM-18	GSHC-02	GSMU-01B	GSMU-60
GSDM-03	7 disk set, \$21	GSGM-19	GSHC-03	GSMU-01B GSMU-02	GSMU-61
GSDM-04	GSED-01 (*5)	GSGM-20	GSHC-04		
GSDM-05	GSED-02 (*5)	GSGM-21	GSHC-05	GSMU-03	Sounds
GSDM-06	GSED-03 (*5)	GSGM-22	GSHC-06	GSMU-04	21 disk set, \$63
GSDM-07	GSED-04 (*5)	GSGM-23	11	GSMU-05	GSSN-01A
GSDM-08	GSED-05 (*5)	GSGM-24	HyperStudio	GSMU-06	GSSN-02A
GSDM-09	GSED-06 (*5)	GSGM-25	Demos (1-10),	GSMU-07	GSSN-03
GSDM-10	GSED-07 (*5)	GSGM-26	\$30	GSMU-08	GSSN-04
GSDM-11		GSGM-27	Others (11-23),	GSMU-09	GSSN-05
GSDM-12	Fonts	GSGM-28	\$ 39	GSMU-10	GSSN-06
GSDM-13	27 disk set, \$81	GSGM-29	GSHS-01 Demo	GSMU-11	GSSN-07
GSDM-14	GSFT-01	GSGM-30	GSHS-02 Demo	GSMU-12	GSSN-08
GSDM-15	GSFT-02	GSGM-31	GSHS-03 Demo	GSMU-13	GSSN-09
GSDM-16	GSFT-03	GSGM-32	GSHS-04 Demo	GSMU-14	GSSN-10
GSDM-17	GSFT-04	GSGM-32 GSGM-33	GSHS-05 Demo	GSMU-15	GSSN-11
GSDM-18	GSFT-05	GSGM-34	GSHS-06 Demo	GSMU-16	GSSN-12
GSDM-19	GSFT-06	GSGM-35	GSHS-07 Demo	GSMU-17	GSSN-13
GSDM-20	GSFT-07	GSGM-36	GSHS-08 Demo	GSMU-18	GSSN-14
GSDM-21	GSFT-08	030141-30	GSHS-09 Demo	GSMU-19	GSSN-15
GSDM-22	GSFT-09	Graphics	GSHS-10 Demo	GSMU-20	GSSN-16
GSDM-23	GSFT-10	33 disk set, \$99	GSHS-11	GSMU-21	GSSN-17
	GSFT-11	GSGX-01	GSHS-12	GSMU-22	GSSN-18
Desk Accessories	GSFT-12	GSGX-02	GSHS-13	GSMU-23	GSSN-19
17 disk set, \$51	GSFT-13	GSGX-03	GSHS-14	GSMU-24	GSSN-20
GSDA-01	GSFT-14	GSGX-04	GSHS-15	GSMU-25	GSSN-21
GSDA-02	GSFT-15	GSGX-05	GSHS-16	GSMU-26	000.1 2.
GSDA-03	GSFT-16	GSGX-06	GSHS-17	GSMU-27	Utilities
GSDA-04	GSFT-17	GSGX-07	GSHS-18	GSMU-28	14 disk set, \$42
GSDA-05	GSFT-18	GSGX-07 GSGX-08	GSHS-19	GSMU-29	GSUT-01B
GSDA-06	GSFT-19	GSGX-09A	GSHS-20	GSMU-30	GSUT-02
GSDA-07	GSFT-20	GSGX-07A GSGX-10	GSHS-21	GSMU-31	GSUT-03A
GSDA-08	GSFT-21	GSGX-10 GSGX-11	GSHS-22	GSMU-32	GSUT-04A
GSDA-09	GSFT-22	GSGX-11 GSGX-12	GSHS-23	GSMU-33	GSUT-05A
GSDA-10	GSFT-23	GSGX-12 GSGX-13A		GSMU-34	GSUT-06A
GSDA-11	GSFT-24	GSGX-19A GSGX-14	Icons	GSMU-35	GSUT-07A
GSDA-12	GSFT-25		13 disk set, \$39	GSMU-36	GSUT-08D
GSDA-13	GSFT-26	GSGX-15	GSIC-01A	GSMU-37	GSUT-09
GSDA-14	GSFT-27	GSGX-16	GSIC-02A	GSMU-38	GSUT-10
GSDA-15	001 1-2/	GSGX-17	GSIC-03A	GSMU-39	GSUT-11B
GSDA-16	Games	GSGX-18	GSIC-04A	GSMU-40	GSUT-11B
GSDA-17	36 disk set, \$108	GSGX-19	GSIC-05A	GSMU-41	GSUT-13
	GSGM-01A	GSGX-20	GSIC-06A	GSMU-42	GSUT-14
		G\$GX-21	GSIC-07A	GSMU-43	6501-14
(*1) Surram 5.0.4. 2 Dial. San	_ \$6 00. (*2) U.mar }./	ul 1 2 Diale Can _ \$6.00. (42)			Diele Car _ \$19 00. (*5)
			GS Bug & Debug Tools v1.6		JISK JET = \$10.00; (*)
ASILOHOMICI - / CISK SCT (GSE)	D-01 (0 -0/); (0) G3 DISK L	iniary Catalog - 2 disk set (GS	SMS-02C & GSMS-03C) - \$6.	vv	
Note: Some disks may contain	ShareWare. Please send the	requested remittance to the au	ithor if you use the program		
	ir mor a reapt sound till		in you are the program.		

Please write disk numbers on a separate sheet of paper and include them with your order.



Apple III Disk Library Order Form



			45.01 A4	
Accounting	3GRX-14	3INF-22	3PCL-09	3UTL-14
3 disk set, \$4.50	3GRX-15	3INF-23C 3EZP	3PCL-10	3UTL-15
			3PCL-11	
3ACT-01A	3GRX-16	PD Catalog		3UTL-16
3ACT-02	3GRX-17	3INF-24	3PCL-12	3UTL-17
3ACT-03	3GRX-18	3INF-25	3PCL-13	3UTL-18
5/101-05	3GRX-19		3PCL-14	3UTL-19
		3INF-26	3PCL-15	
3 Easy Pieces Templates	3GRX-20	3INF-27		3UTL-20
11 disk set, \$16.50	3GRX-21	3INF-28	3PCL-16	3UTL-21
3AWZ-01	3GRX-22	3INF-29	3PCL-17	3UTL-22
			3PCL-18	
3AWZ-02	3GRX-23	3INF-30		3UTL-23
3AWZ-03	3GRX-24	3INF-31	3PCL-19	3UTL-24
3AWZ-04	3GRX-25	3INF-32	3PCL-20	3UTL-25
3AWZ-05	3GRX-26	3INF-33		3UTL-26
· · · · · · · · · · · · · · · · · · ·			Repairs	
3AWZ-06	3GRX-27	3INF-34	•	3UTL-27
3AWZ-07	3GRX-28	3INF-35	10 disk set, \$15	3UTL-28
3AWZ-08	3GRX-29A	3INF-36	3REP-01	3UTL-29
3AWZ-09	3GRX-30		3REP-02	3UTL-30
· · · · · · · · · · · · · · · · · · ·		3INF-38	3REP-03	
3AWZ-10	3GRX-31			3UTL-31
3AWZ-11	3GRX-32	Membership Directory	3REP-04	3UTL-32
	3GRX-33	3MRD-01 (Text)	3REP-05	3UTL-33
Business Basic	3GRX-34	3MRD-02 (3EZP-s)	3REP-06	3UTL-34
		JIVINID-02 (3EZP-3)	3REP-07	
9 disk set, \$13.50	3GRX-35			3UTL-35
3BSB-01	3GRX-36	Miscellaneous	3REP-08	3UTL-36
3BSB-02	3GRX-37	20 disk set, \$30	3REP-09	3UTL-37
3BSB-03	3GRX-38	3MSC-01	3REP-10	3UTL-38
		3MSC-02		
3BSB-04	3GRX-39		TeleCommunications	3UTL-39
3BSB-05	3GRX-40	3MSC-03		3UTL-40
3BSB-06	3GRX-41	3MSC-04	11 disk set, \$16.50	3UTL-41
3BSB-07	3GRX-42	3MSC-05	3TEL-01	3UTL-42
3BSB-08		3MSC-06	3TEL-02	3UTL-46
3BSB-09A	3GRX-43	3MSC-07	3TEL-03	
48\B_09A				
			STEL OV	3UTL-47
	Information	3MSC-08	3TEL-04	
Games			3TEL-04 3TEL-05	Word Processing
Games	37 disk set, \$55.50	3MSC-08 3MSC-09	3TEL-04 3TEL-05 3TEL-06	Word Processing
Games 5 disk set, \$7.50	37 disk set, \$55.50 3INF-01C WAP	3MSC-08 3MSC-09 3MSC-10	3TEL-04 3TEL-05 3TEL-06	Word Processing 6 disk set, \$9.00
Games 5 disk set, \$7.50 3GAM-01	37 disk set, \$55.503INF-01C WAPPD Catalog	3MSC-08 3MSC-09 3MSC-10 3MSC-11	3TEL-04 3TEL-05 3TEL-06 3TEL-07	Word Processing 6 disk set, \$9.00 3WDP-01A
Games 5 disk set, \$7.50 3GAM-01 3GAM-02	 37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 	3MSC-08 3MSC-09 3MSC-10 3MSC-11 3MSC-12	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02
Games 5 disk set, \$7.50 3GAM-01	37 disk set, \$55.503INF-01C WAPPD Catalog	3MSC-08 3MSC-09 3MSC-10 3MSC-11	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08 3TEL-09	Word Processing 6 disk set, \$9.00 3WDP-01A
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03	3MSC-08 3MSC-09 3MSC-10 3MSC-11 3MSC-12 3MSC-13	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04	3MSC-08 3MSC-09 3MSC-10 3MSC-11 3MSC-12 3MSC-13 3MSC-14	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08 3TEL-09	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05	3MSC-08 3MSC-09 3MSC-10 3MSC-11 3MSC-12 3MSC-13 3MSC-14 3MSC-15	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08 3TEL-10	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05 3INF-06	3MSC-08 3MSC-09 3MSC-10 3MSC-11 3MSC-13 3MSC-14 3MSC-15 3MSC-16	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08 3TEL-09 3TEL-10 3TEL-11	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05	3MSC-08 3MSC-09 3MSC-10 3MSC-11 3MSC-12 3MSC-13 3MSC-14 3MSC-15	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-09 3TEL-10 3TEL-11 Utilities	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05 3INF-06 3INF-07	3MSC-08 3MSC-09 3MSC-10 3MSC-11 3MSC-13 3MSC-14 3MSC-15 3MSC-16	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-09 3TEL-10 3TEL-11 Utilities 44 disk set, \$66	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05 3INF-06 3INF-07 3INF-08		3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-09 3TEL-10 3TEL-11 Utilities	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05 3INF-06 3INF-07 3INF-08 3INF-09		3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-09 3TEL-10 3TEL-11 Utilities 44 disk set, \$66	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-05 3INF-06 3INF-06 3INF-07 3INF-08 3INF-09 3INF-10		3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-09 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02 3GRX-03	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-05 3INF-06 3INF-06 3INF-07 3INF-08 3INF-09 3INF-10 3INF-10		3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02 3UTL-03	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-05 3INF-06 3INF-06 3INF-07 3INF-08 3INF-09 3INF-10	3MSC-08 3MSC-09 3MSC-10 3MSC-11 3MSC-12 3MSC-13 3MSC-14 3MSC-15 3MSC-16 3MSC-17 3MSC-18 3MSC-18 3MSC-19A 3MSC-20	3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02 3UTL-03 3UTL-04	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02 3GRX-03	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-05 3INF-06 3INF-06 3INF-07 3INF-08 3INF-09 3INF-10 3INF-10 3INF-11 3INF-12		3TEL-04 3TEL-05 3TEL-06 3TEL-08 3TEL-09 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02 3UTL-03 3UTL-04 3UTL-05	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02 3GRX-03 3GRX-04 3GRX-05	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05 3INF-06 3INF-07 3INF-08 3INF-09 3INF-10 3INF-11 3INF-12 3INF-12		3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-08 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02 3UTL-03 3UTL-04	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02 3GRX-03 3GRX-04 3GRX-05 3GRX-06	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-04 3INF-05 3INF-06 3INF-07 3INF-08 3INF-10 3INF-10 3INF-11 3INF-12 3INF-13 3INF-14		3TEL-04 3TEL-05 3TEL-06 3TEL-08 3TEL-09 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02 3UTL-03 3UTL-04 3UTL-05 3UTL-06	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02 3GRX-03 3GRX-04 3GRX-05 3GRX-06 3GRX-06 3GRX-07	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05 3INF-06 3INF-07 3INF-08 3INF-09 3INF-10 3INF-11 3INF-11 3INF-12 3INF-12 3INF-13 3INF-14 3INF-15		3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-09 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02 3UTL-04 3UTL-05 3UTL-06 3UTL-06 3UTL-07	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02 3GRX-03 3GRX-04 3GRX-05 3GRX-06 3GRX-07 3GRX-08	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-04 3INF-05 3INF-06 3INF-07 3INF-08 3INF-10 3INF-10 3INF-11 3INF-12 3INF-13 3INF-14		3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-09 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02 3UTL-04 3UTL-05 3UTL-06 3UTL-07 3UTL-07	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
Games 5 disk set, \$7.50 3GAM-01 3GAM-02 3GAM-03 3GAM-04 3GAM-05 Graphics 43 disk set, \$64.50 3GRX-01 3GRX-02 3GRX-03 3GRX-04 3GRX-05 3GRX-06 3GRX-06 3GRX-07	37 disk set, \$55.50 3INF-01C WAP PD Catalog 3INF-02D 3INF-03 3INF-04 3INF-05 3INF-06 3INF-07 3INF-08 3INF-09 3INF-10 3INF-11 3INF-11 3INF-12 3INF-12 3INF-13 3INF-14 3INF-15		3TEL-04 3TEL-05 3TEL-06 3TEL-07 3TEL-09 3TEL-10 3TEL-11 Utilities 44 disk set, \$66 3UTL-01 3UTL-02 3UTL-03 3UTL-05 3UTL-06 3UTL-07 3UTL-08 3UTL-09	Word Processing 6 disk set, \$9.00 3WDP-01A 3WDP-02 3WDP-03 3WDP-04 3WDP-05
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