•MacEKG™ 2.0.3

EKG

SYSTEM CONFIGURATIONS

6 Items	Model
#1—Startup 9/2/92 12:49 AM	Mac Classic
#6—Startup 9/4/92 12:10 AM	Mac Classic
#7—Startup 9/5/92 7:37 PM	Mac Classic
#10—Startup 9/24/92 1:16 AM	Mac Classic
#11—Startup 9/25/92 3:50 AM	Mac Classic
#12—Startup	Hardu

Washington Apple Pi
General Meeting

4th Saturday • 9:00 a.m. • Community & Cultural Center
Northern VA Community College • 8333 Little River Turnpike
Annadale, Virginia

Oct. 24

Mac: Major presentation by **Claris** on FileMaker Pro, MacWrite Pro, etc.
Apple II: GEnie & telecommunications.
Plus the usual gossip and enthusiastic Q & A sessions.

Nov. 21

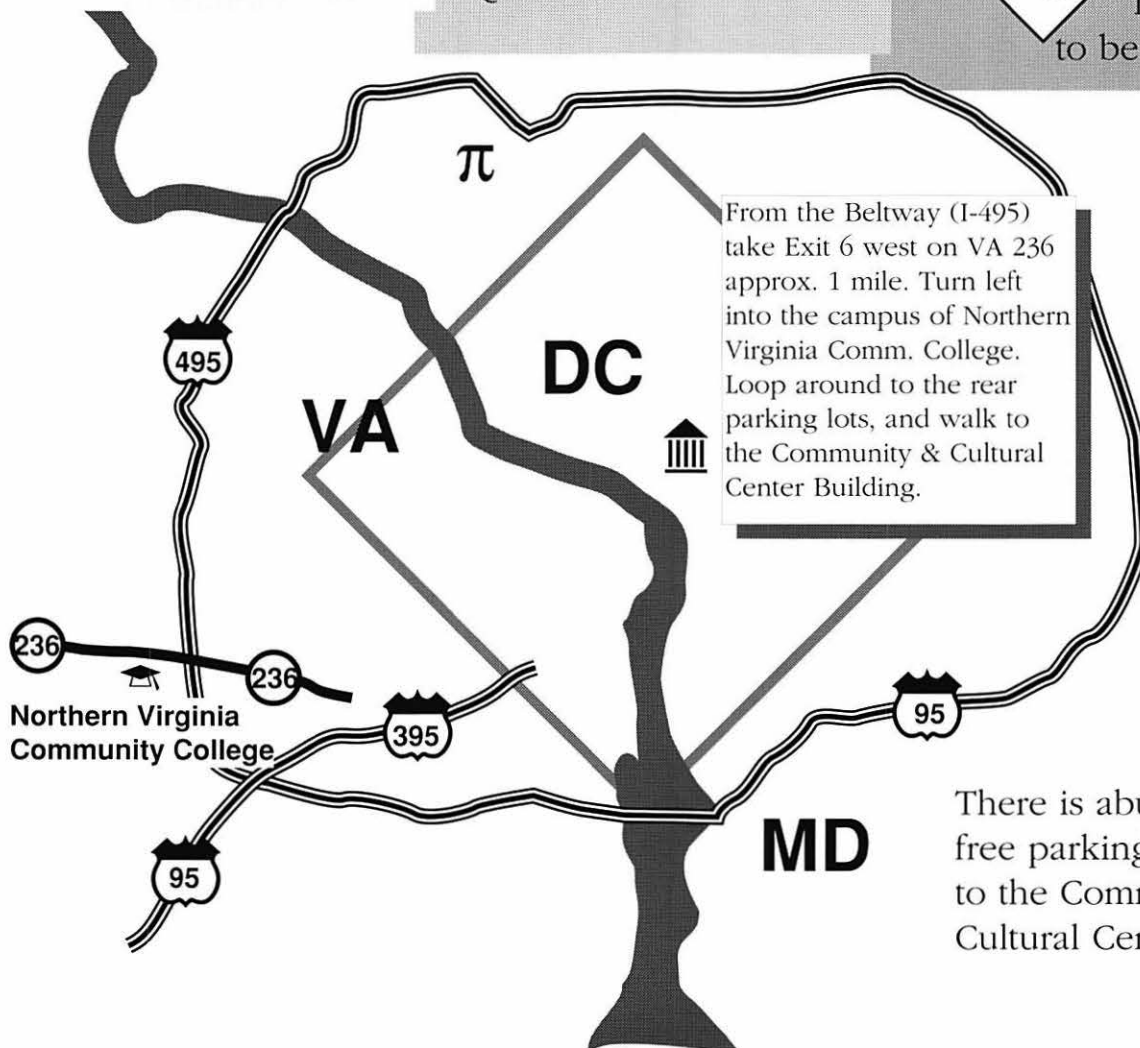**Mac:** Major presentation by **Hewlett-Packard** (and maybe a surprise).
Apple II: wonders of System 6.
Plus the usual gossip and enthusiastic Q & A sessions.

December 12

Computer Garage

SALE!

Time and location to be announced.

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

π

VA

DC

MD

495

236

236

395

95

95

Northern Virginia
Community College

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

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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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Deadlines

Writers' submissions
  Dec. .... Oct. 16
  Jan. .... Nov. 15
Editors' submissions
  Dec. .... Oct. 24
  Jan. .... Nov. 23
Ad space reservations
  Dec. .... Oct. 21
  Jan. .... Nov. 18
Camera-ready ad copy
  Dec. .... Oct. 29
  Jan. .... Nov. 27

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

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Telecomm. SIG	Allan Levy	(301) 340-7839
Three SIG	David Ottalini	(301) 681-6136
UltraMacros SIG	Gary Hayman	(301) 345-3230

In the Pi Pan...

by Debbie Hoyt

As hard to believe as it may be, fall is upon us and a whole new harvest of Apples will soon be hitting the markets. I'm, of course, referring to the Performa line of Macintoshes; two of which are already available: the Performa 200, which in build and performance is a revamped Classic II, and the Performa 400 a variation on the LC II theme.

But the big news is the Performa 600. It looks and is equipped a bit differently from the other earlier Macs. It sports a faster 68030 chip, giving it a speed of 32 MHz compared to the 25 MHz speed of the IIci. But its most interesting feature is likely to be the optional CD-ROM drive that buyers are going to be able to get with it. The Performas are the new mid-range Macintoshes for the 1993 model year.

And, as you may have heard, Apple is marketing them a bit more aggressively, too. You will be able to find Performas as well as other Macs in business supply stores, electronics stores and even some department stores. The Price Club is also carrying certain models of Macintoshes.

Our Apple II and Mac enthusiasts are just now back from Boston Apple Expo East and are eager to share the new goodies that they have picked up there with you. At the end of the General Interest section look for Lorin Evans' article describing some of the neat things that are in store for Pi members.

And while I'm on the topic of neat things in store, I'd like to call your attention to the Apple II disk library this month. Apple II head librarian John Ruffatto spent quite a few sleepless nights gathering the ReadMe files for the Apple II library, and he hopes to soon present you with an order form much like that of the Mac Disketeria.

At the end of John's disk library this month is an extra few pages listing all of the IIGS Games ReadMe files. What could be better timing? Now is the time to traditionally be thinking about your holiday shopping. So to help you make your software decisions, the November and December Journals will offer the descriptions of the two most popular Apple II disk library selections.

Don't overlook the Mac Disketeria! Dave Weikert's Disketeria reorganization is in full swing and Dave has added another sixteen new disks to the collection. He is dividing the Disketeria into two libraries: a current library that will be available at meetings and at the office and an archive library that members will be able to order from through the office. Keep watching the Journal for new releases and updates on both the Apple II and the Macintosh disk libraries.

π SIG's and Slices

EdSIG

by Phil Shapiro

An effervescent group of parents and teachers showed up for the September EdSIG meeting. Two teachers, Sue Racoosin and Suzanne Pickering, took early control of the meeting, fielding questions from the throngs of people packed into the club's office. In response to a question from a person way in the back, Sue explained about the best language arts vocabulary software available for the Apple II. High on her list of favorites are two programs: 1) *Word Attack Plus*, from Davidson and Associates, and, 2) *Vocabulary Challenge*, from Mindscape.

Vocabulary Challenge, the lesser known of the two programs, has four different vocabulary drill games. With simple text screen presentations, Sue says the drills captivate her middle school students' attention. The most interesting of the four drills is an amusing game called "Sticks and Stones," which gets children to categorize adjectives into complimentary and derogatory groupings. When we tried playing the game, the crowd of people in the room yelled out whether they thought the word was complimentary or not.

Some words were actually a little difficult to decide whether they were complimentary. For instance, would you consider the adjective "moderate" complimentary? It seems to me that in the political arena, being labeled a "moderate" could be complimentary or derogatory, depending on the setting and circumstance. But I suppose the general connotation of the word is positive. (As the program says it is.)

After Suzanne Pickering calmed down the boisterous crowd, she went on to tell us about how she's using educational software for therapeutic purposes with residents of St. Elizebeth's psychiatric hospital. The residents of the hospital have special needs in educational software. Their frustration tolerance is different from the average computer user. Suzanne related how her group of residents took well to a memory game program from Sunburst, principally because it had a simple, straightforward operation.

As the evening wore on we decided to break up into smaller discussion groups. One of the larger discussion groups focused on school copyright policies. One teacher in that group brought up a most interesting copyright question.

This particular teacher had purchased a copy of *SuperMunchers*–a very interesting and absorbing new Macintosh educational program–with her own money. This purchase was made with the intention of using the software on one of the Macintosh computers at her school.

When she asked the school's computer coordinator to copy the software onto one of the Mac's hard drives, the computer coordinator said that it would be a violation of copyright law to copy the teacher's "personal" software onto the school computer's hard drive. What adds an interesting dimension to this copyright situation is that this particular teacher does not own a Macintosh at home. Although purchased with her own money, she had no intention of ever using it on a home computer.

Actually, there would be no violation of copyright law if the software were copied onto the hard drive and the floppy disk original of the software stayed on school premises. The violation would occur if the floppy disk original were booted on another computer while the copy of the same software were still on the school computer's hard drive. Even if the floppy software were booted on an adjacent computer, there would still be a violation of copyright law if the hard drive copy of the software were not first deleted from the hard drive.

Such subtle, but important, copyright questions crop up more often than one might expect. That's why it's so important for each school (or school district) to develop a written policy for dealing with copyright issues. It would not be going too far for school districts to arrange with a copyright lawyer to be available to field the difficult and subtle questions that invariably develop.

In this particular case the computer coordinator seemed to be upholding a copyright policy that exceeded that actually required by law. The fact that a principled copyright policy was articulated and adhered to is itself an encouraging sign. But at the same time, the kids at the school had every right to use the software which the teacher had paid for with her own money. That is, as long as the teacher were not using the software on another school computer, or on her home computer, at the same time.

For those who might be interested in joining in on our meetings, the Education Special Interest Group (EdSIG) meetings are regularly held on the fourth Thursday of each month, from 7:30 to 10:00 PM at the club's office in Bethesda, Maryland. For more information, please feel free to contact me at my home/office: (202) 686-5465.

StockSIG

by Morris Pelham

Well, I know a lot more now than I did a month ago. At our August meeting Ann Meredyth brought in and showed *Managing Your Money* (MYM), and I wrote a little about it in last month's column.

At our September meeting, Chris

Kagy brought and showed *Quicken*, a competing "personal finance" software package. Chris also brought a nice multipage handout for us. Also at these two meetings, we had several other people in attendance who used one or both of these two programs and very kindly shared their knowledge and experience with the rest of us. Let me try to share with you what I learned.

First, all agreed that if what you have is one bank account or one stock brokerage account, using a simple highlighter and a shoebox is simpler and quicker than using either of these programs. But, if you have money in more than one mutual fund, or with more than one stockbroker or money manager, then you need to compare their records carefully and update your comparisons frequently. Now you need *Quicken* or *MYM*.

Second, if you have a complex financial life, perhaps run a small business from home, or need to separate tax-deductible checks into charitable, investment, and business categories, then *Quicken* or *MYM* can help you.

Third, if you need to file quarterly estimated tax returns one of these programs can help and both promise to transfer your records into a tax preparation package at year-end.

Fourth, either of these programs can help you automate your bill-paying and check-writing each month.

So, I am more impressed by both of these programs than I was last month. Each is available by mailorder for around $50 and our experts promised to return to future meetings in case anyone brings more questions. Thanks, Chris!

Speaking of future meetings, Mark Pankin has agreed to be our *Excel* expert, and he will try to bring in and demonstrate for us his extensive use of *Excel* in both the stock and futures markets. Marvin Hass has written software reviews for other publications, and I hope he will agree to bring in and show us some of the better ones.

If anyone is interested in tax preparation software, now is the time to come to the meeting and say so. If not, we will wait until next year and ask again.

As always, we welcome both novices and experts at our meetings at 7:30 PM in the office on the second Thursday.

IIGS SIG

by Paul Tarantino

Apparently undismayed by my report of their inaugural appearance at last month's meeting and by my

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dogged attempts to change Joan's name to Jean in the Pi Journal, David and _JOAN_ Jernigan were back again, this time at our Maryland meeting site at NIH, as star computer bringers and as presenters of some of the features of an old but treasured software friend, Broderbund's *Print Shop GS*. Before they began, however, Gary handled announcements which included his regular reminder that volunteers are still needed to make our meetings go! Help out by offering to bring your IIGS system to a meeting, and/or by presenting a demo or tutorial (long or short) on your favorite software or Handy Hint!

Gary, Neil Laubenthal, Lorin Evans and others will hopefully have lots of news at our next meeting from the Apple/Mac (but mostly Mac) Expo in Boston to be held the first weekend in October. Yes, there are still people out there producing new enhancements and programs for our machine.

Our first Handy Hint for the month was that Quality Computers has their new fall catalog/newsletter out; free copies may be obtained by calling 1-800-777-3642. The second Handy Hint is about what appears to be a very good deal on IIGS memory from Resource Central–their October 1992 order form offers a fully populated 4 MB IIGS RAM expansion board for only $149! Just the thing if System 6.0 has you feeling squeezed for memory capacity (on your computer, that is). Call 1-913-469-6502 for more information or to order.

As an elementary school teacher, Joan Jernigan is a heavy user of *Print Shop GS* in the classroom with her students and at home doing preparatory work (signs, handouts and such). She also uses *Print Shop Companion GS* for calendars, labels and envelopes. (It was noted by one of the members that *PSGS Companion*'s graphic cataloguer utility is better than the competing utility included in the Big Red Computer Club's PrintShop Lover's Utility System [PLUS]). There were a lot of *PSGS* users at the meeting, which made for a lively discussion. It was noted that the multi-color small graphics which Broderbund provides on the *PSGS* disk and on their supplemental disks don't print very vividly in black and white, unlike the graphics designed for use by the original Apple II program. A lot of our SIG members are into amassing vast collections of *Print Shop* graphics and had quite a few suggestions about sources (the Pi disketeria, TCS, BRCC, several of the Apple magazines-on-disk, etc.). What may be the mother of all *Print Shop* graphics collections has been organized by our own John Ruffato onto sixty (count 'em!) 3.5-inch disks; they include: old *Print Shop* graphics and others converted for *PSGS* use and organized alphabetically by title. Joan, Gary and others were emphatic about the need to do a bit of organizational work to make large graphics collections useful, and a couple of sample catalog binders of *PS* graphics images were passed about. BRCC's PLUS utility disk has a routine which will catalog *PS* graphics on a floppy (up to 80 of them, which is the maximum number which will fit on a 5.25" disk) and output a single index page which shows each image and

filename.

Some users of the program have had trouble getting it to run from a hard drive; the most recent versions of *PSGS* have no copy protection, but earlier releases have a "key disk" protection scheme, which calls for the insertion of the original floppy into a drive during boot-up. *Copy II+* has parameter files which will allow you to remove this "feature" when copying your program to a HD.

Someone pointed out an "Easter egg" in *PSGS Companion*; click your mouse once on any of the letters in the word "Companion" across the top of a *PSGS Companion* menu screen for a minor visual treat! (This bonus feature is described in the program's documentation, so maybe it doesn't literally qualify as an Easter egg.)

Moving on to other subjects, Neil Laubenthal had a Handy Hint for those IIGS owners who also have regular access to a Mac and need to move files back and forth between the machines. Under GS System 6, we can easily insert Mac-formatted 800K disks in our GS disk drives and read and write to them, but the Mac can't easily do the same with a ProDOS disk, without resorting to Apple File Exchange or another such utility. Neil's Hint is to download and unpack the Mac LC Installer disk from the TCS, which includes a ProDOS File Systems INIT, intended for use with the LC's Apple IIe card. Copy this INIT into the Extensions folder of any Mac and reboot; your Mac will now be able to read and write ProDOS-formatted disks directly! Also ProDOS-formatted hard drive partitions, SyQuest cartridges and such.

Gary provided a brief demo of *Floor Tiles*, a ShareWare GS game by Karl Bunker, creator of *Sneeze*, the handy 8-bit file reader/launcher utility. (Both are available on the TCS.) Neil mentioned another Karl Bunker creation, a CDA called FILE.A.TRIX

which enables you to perform various maintenance functions (create folder, format disk, catalog, rename, delete, copy, etc.) from within any 8-bit or 16-bit application launched from the Finder or any other 16-bit launcher (like *ProSel 16*). This CDA is also available on the TCS and on a disk (called BunkerWare) of Karl Bunker's ShareWare creations, which was replicated for several SIG members at the meeting.

Another popular item at our regular copyfest, which preceded and followed the formal presentations, was *VIAD* (Vocabulary In Any Direction), a Columns-like GS ShareWare game (from the author of *Columns*, Kendrick Mock) in which the colored blocks have been replaced with lettered blocks; the idea is to maneuver the falling blocks to spell words of three or more letters, reading left, right, up, down, etc. (hence the "In Any Direction"), thereby scoring points and advancing to more challenging game levels. *VIAD* has a 16,000-word dictionary, snappy opening graphics and excellent background music. Gary got his copy free from the author when he sent in the ShareWare fee for Columns, demonstrating once again that Good Things Happen to people who pay for ShareWare. *VIAD* should be available on the TCS by now; it fills two 800K floppy disks, but can be installed on a hard drive. *VIAD* requires System 6.

Robert Gurskey demonstrated *Basic Paint*, a new SHR paint program for the GS available from BRCC (at $45, or $30 for BRCC members). *Basic Paint* has some significant limitations (screen-sized graphics only, 320-mode only, one palette per graphic, a cursor which doesn't change to reflect tool selections) but runs on only 512K of memory, less than any other currently available GS paint program. The program claims 136 total colors available, but

this really means a 16-color palette plus checkerboard "patterns" which combine these colors two at a time. One neat *Basic Paint* feature is kind of an extended "undo" called "test." The test feature, when activated, "remembers" the current version of the graphic, which you can return to after any number of further actions (rather than just one mouse-click, as with a conventional undo. *Basic Paint* also offers ten levels of zoom (are they all really necessary?) with a split screen, variable brush sizes even in maximum zoom (fatbits) mode, variable eraser size, and lots of different gradient fill options. *Basic Paint*'s price and capabilities fall in between the ShareWare *Cheap Paint* and the more powerful commercial programs *Platinum Paint* and *Dream Graphics*.

Please join us in October in McLean!

Columbia Apple Slice

by Tom Cook,
Editor, Apple II

Bill Campbell announced at the September 1992 meeting of the Apple Columbia Slice that we have some Hayes Personal Modems (1200 baud) to sell. These modems are being sold for $20 each or $55 with a WAP membership to the TCS. If you wish to purchase one of these modems, please contact Bill at his home in Columbia, 498-6380.

Andy Wakshul, the Apple Columbia Slice disk librarian, presented many of the latest Apple GS disks available from WAP and the Columbia Slice. We looked at the latest graphics volumes (#31 and #32) as well as some of the older graphics disks. We also looked at some games disks. The games included Battleship, As the Link Turns, Chips & Dips, and Medieval War. If you are

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interested in purchasing any of the WAP library disks from the Columbia Slice, please contact Andy Wakshul or bring blank disks to our next meeting.

III SIG

**by Dave Ottalini,
III SIG co-Chair**

We had another good turnout of SARAsaurs for our meeting in September. Paul Campbell brought his III system again (not to mention his wife and two kids!), and we had a great time giving Bob Consorti's *Disk Directory/File Fixer III* a runthrough. It found and fixed all kinds of problems in Paul's Sider hard disk. The program is great because it can be used to check ANY disk you wish, from .D1 to .U1 to .Profile (SOS or ProDOSDisk).

This meeting was a little less structured that the last one in the sense that we all just worked our way through demonstrations, questions and fellowship. Then we adjourned for an excellent Thai lunch to continue our discussions.

One project that I asked everyone to take on was the transcribing of a portion of the System Utilities Tutorial book that Apple put out with it's "System Utilities, An Introduction" package. Once all the pieces are put together, I'll have another PD offering for you.

Beyond that, Paul donated a couple of excellent programs that will soon be finding their way into our PD. Both are word processing programs, including the powerful *StemWriter* program from Australia and *Write On! III,* one of the earliest word processors for the III.

Please note that we do *not* plan another meeting until early next year at this point. Check the "Trail" article in the Apple III section of the Journal next month for details.

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Apple and Macintosh Tutorials for November

by Keith Malkin

November is chock-full of holidays but still a good time to pick up some Mac or Apple II computing skills; so please call the WAP office to check the latest class schedule: (301) 654-8060. We're still scheduling classes as we go to press.

Fees for most class sessions are twenty-five ($25) dollars for members and thirty-five ($35) dollars for non-members. Special Interest Groups and Slices of the Pi may have different fees–check with the SIG/Slice chair or seminar coordinator. We advise you to register well in advance for classes by sending in the registration card (at the end of this feature in any issue of the Pi Journal) or BY phoning your registration into the office with a credit card. If you must cancel your registration, please do so two (2) business days before the class.Otherwise we cannot refund your fees.

The class schedule changes for a variety of reasons. Verify your registration and the class schedule with the WAP office to avoid the inconvenience associated with cancellations, etc. Call the office at least one business day before the class date to confirm your class will be held as scheduled.We sincerely regret any inconveniences that may arise from scheduling changes.

Volunteers and Instructors
Call or write me with your questions, requests, or suggestions (about the Pi training program or a particular class). I'm Keith Malkin and I can be reached at (703) 503-8591; 9505 Draycott Court, Burke, VA 22015-3253.

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. Call Craig Eastman at home (202) 234-1088 if you have a subject you'd like to teach.

Apple IIGS Tutorials
The Apple IIGS Introductory Tutorials are a three-part series designed for Apple IIGS novices. Classes will meet on the second, third, and fourth Tuesday evenings in November from 7–10 pm.

Introduction to the Apple IIGS, Part I (Course # GS101192)
Materials Required: Access to an Apple IIGS outside the classroom.
Course Date: November 10, 1992.

Intro to the Apple IIGS, Part II (Course # GS201192)
Materials Required: Access to an Apple IIGS outside the classroom.
Course Date: November 17, 1992.

Intro to the Apple IIGS, Part III (Course # GS301192)
Materials Required: Access to an Apple IIGS outside the classroom.
Course Date: November 24, 1992.

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 # M101192) 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; 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.
Course Date: Please call the WAP office.

Introduction to the Macintosh, Part II (Course # M201192)–Part

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II will continue the exploration of the basic components of your Macintosh system, hardware and software. You'll learn more of the do's 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, and 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.

Course Date: Please call the WAP office.

Introduction to the Macintosh, Part III (Course #M301192)–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.

Course Date: Please call the WAP office.

Maintaining Your Macintosh (Course # OS3011092)–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 INITs); avoiding conflicts and incompatibility;virus protection; memory management; upgrading or replacing the operating system; system enhancements; customizing software installation;cleaning your mouse; and Macintosh "housekeeping" philosophies.

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

Course Date: Please call the WAP office.

Other Educational Opportunities

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

There is one new entry this month–the very prestigious Technical and Education Center (T&E) of the Graphic Arts at the Rochester Institute of Technology–an excellent choice for the professional study of desktop publishing. From now on, we will only run new information or updates in this category, if it is warranted. If you are interested in college, graduate, or professional study involving the Macintosh in a field like graphic design, photography, filmmaking, animation, training design, etc., write to me at 9505 Draycott Court, Burke, VA 22015-3253, enclosing a SASE, and I'll get some options and info to you.

• **Rochester Institute of Technology, Technical and Education Center of the Graphic Arts** (Frank E. Gannett Memorial Building, PO Box 9887, Rochester,

NY 14623-0887) (716) 475-5000) The T&E offers graduate and professional-level study including seminars, credit courses, degree, and other programs in color prepress, digital photography, desktop publishing, and other fields of interest to the Macintosh communicator.

• **Personal Training Systems** (828 S. Bascom Avenue, Suite 100, San Jose, CA 95128): 1-(800)-TEACH-99. Personal Training Systems offers a pretty comprehensive set of 90-minute tutorial modules which consist of an audiocassette and computer disk. Most sets have four or more modules ranging from beginning to more advanced topics. At mail order prices of $60 or less per module ($99.95 list), these packages are relatively cheaper than other such training materials. Check them out.

• **Northern Virginia Community College**
Alexandria Campus, (3001 North 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 Macintosh classes are Computer Graphics I and II. Advanced projects and seminars are required for degree students.

• **AFI-Apple Computer Center for Film and Videomakers,** Los Angeles, CA: (213) 856-7664 or 1-(800) 999-4AFI. Courses in film, video, and multimedia—most involve Macintosh computing. Courses primarily at the Los Angeles campus.

• **Avid Education Services:** (617) 221-6789. The Avid Media Composer is the premiere off-line

editing system in video and film (cine as the insiders call it). It is Macintosh-based. If you are interested in video, film editing, or production, learning the Avid system is a good idea. Courses around the country.

- **The Corcoran School of Arts**: (202) 628-9484. Courses in Macintosh color computing, design, illustration, art, and electronic pre-press. Courses in Georgetown.

- **The Eastman Kodak Center for Creative Imaging,** Camden, Maine: 1-(800)-428-7400. State-of-the-art, Macintosh-based imaging, digital photography, and electronic pre-press. Courses on beautiful Maine campus in a building Kodak calls the Atelier.

- **The Sony Video Institute** (The Sony Institute of Applied Video Technology, 2021 North Western Avenue, PO Box 29906, Hollywood, CA 90029): (213) 462-1987, then #*. Film, video, and multimedia courses–many involving the

Macintosh. Courses in Hollywood and around the country.

- **Dynamic Graphics Educational Foundation**:1-(800) 255-8800. The "Step-by-Step Graphics" people offer courses on Mac-based graphic design, electronic publishing, color pre-press, etc., at a Peoria campus, at DC area hotels, and other locations around the country. Prices range from approximately $200-800.

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OPEN LETTER TO PI MEMBERS

Dear Pi Member,

One of the best benefits of belonging to Washington Apple Pi is that, for a small additional fee, you can get a password to use the TCS, WAP's 24-hour-a-day TeleCommunications System. We are very proud of the TCS, which is unique among electronic bulletin board systems in the number of simultaneous callers it supports and the depth and range of service it offers.

The TCS offers the latest and most popular Apple II and Macintosh public domain, freeware and shareware software. From virus protection programs to games, from high-quality PostScript and TrueType fonts to funny beep sounds, from useful utility programs to the latest System software from Apple (which the TCS is specially licensed to bring to you); you choose whatever you want, whenever you want it, from over a thousand selections.

The TCS also allows you to post messages for others to read. No technical question is too easy or too difficult for the many experts who use the TCS daily. If you want opinions or information on anything from software to ethnic restaurants, the answer is a phone call away. If you want to discuss WAP or world affairs,Claris products or current movies, they're all on the TCS.

And all of this costs only $9 per year. Period.

If you've ever thought about exploring telecomputing, the TCS is a great way to begin. By joining now, you will also see us unfold the biggest improvements to the TCS in the last six years. Your support now is very important to us, too.

To use the TCS, from home or from the office, you need a small device called a modem. If you don't already have one, we want to help. For $25 you may buy a 1200 baud Hayes brand modem, a cable to fit your Macintosh or Apple, and all the necessary software to use the TCS. (The modem can also be used with other on-line services, as well.) This special offer is only good while supplies last - place your order now! Use the order form included with this special notice.

If you need help getting started, the Pi offers tutorials on the TCS at the WAP office. Hotline volunteers also answer questions concerning the TCS.

We hope to see you on the TCS, WAP's 24-hour General Meeting!

Sincerely,

The WAP TeleCommunications Committee

Interactive Multimedia Seminar

November 4, 1992 • 8:30 am - 5:00 pm • Hyatt Regency, Crystal City

Text, Image, & Sound

Multimedia is coming to your organization. Your personal computer will manipulate color graphics, digital audio and full-motion video. Imagine the possibilities -- scientific simulations, electronic training manuals, marketing presentations -- applications for business, government, education and defense.

We invite you to attend an **Interactive Multimedia Seminar**, brought to you by the publishers of *Computer Digest*, the regional magazine for computer professionals. We have assembled an impressive group of experts to explain multimedia, and to help you incorporate it effectively into your organization's game plan. Here's your opportunity to get in on the ground floor of this revolution in communicating -- to discover the possibilities of *text, image & sound* . . .

What You'll Learn:

- What multimedia is, and why you are hearing so much about it.
- How other organizations are using multimedia to inform, train and persuade.
- How to determine whether multimedia has a role in your organization.
- How multimedia is designed and created.
- How to locate and select the tools and services needed to create multimedia.
- How to determine the multimedia return on investment within your organization.
- How to staff, schedule, budget and manage a multimedia project.

Who Should Attend:

This seminar is for managers and decision makers in all fields, who are involved with media and communications, whether for presentations, education, training, marketing or entertainment. This includes:

Public Relations
Education/Training
Marketing/Advertising
Computer Graphics
Trade Shows and Conventions
Human Resources Development
Engineering/Research Simulations
Consulting

Speakers Include:

Rockley Miller, Multimedia and Videodisc Monitor
Deborah E. Blank, Ph.D., Director, Interactive Systems Division, Electronic Learning Facilitators
Lori Gillespi, President, ICOM
Josh Bixler, Bixler and Associates
Bruce Waldack, President, Computer Services Group
Patricia Minton,Ph.D., MinTech

BONUS! Tabletop Exhibits

Be sure to visit the tabletop exhibits which will be presented in conjunction with the seminar. Find out from the leading multimedia companies how the latest products and applications can benefit you and your organization.

For information on being an exhibitor call
Karen Deda at (703)556-4424

Call 703-556-4424 to Register Today!

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Adapting the Hayes Personal Modem to the Apple IIC

by Lorin Evans

To help introduce people to the world of telecommunications, Washington Apple Pi is offering a special on the Hayes 1200 baud Personal Modem. Included with the modem is a telephone line cord with a modular connector and a modem cable with a mini-8 connector. The mini-8 works with all Apple IIc Plus, IIGS, and current Macintosh computers. In addition, there are two adaptors which convert the mini-8 to a female D-15 or female D-25. Owners of Macintosh 128 and 512 machines can use the D-15 adaptor with a gender change for their computers and Apple II+ and IIe owners the D-25 with a gender changer into a Super Serial card. The one combination missing is the Apple IIc.

This tutorial describes how to change the end of the modem cable from a mini-8 to a 5-pin DIN connector so that the Hayes will operate correctly with an Apple IIc computer. If you are uncomfortable doing this, the office can arrange for the conversion (i.e, they will get me to do it).

The following equipment is required: a low wattage soldering tool (around 30 watts), solder, small diagonal cutters, razor blade, paper clip, and a 5-pin DIN male connector (Radio Shack S/N 276-003) or equivalent.

(1) Disassemble the 5-pin DIN connector. There should be a plastic outer jacket, two half shells, and the connector itself. Notice how the connector is notched to fit into one of the half shells and the plastic jacket has a tab which aligns with a cutout in one of the half shells. Set the metal shell and outer jacket aside for now.

Figure 1.

5-DIN Connector Pin Number Wire
1 brown,
2 orange,
3 black / green,
4 yellow,
5 red

Note: You should have a blue wire left over. It is not used.

(2) Cut-off the mini-8 connector from the round gray modem cable.

(3) Slide the plastic outer jacket for the DIN connector down the modem cable thin end first. Use the razor blade to trim back one inch of the gray outer jacket (around the circumference) of the modem cable. Do not press hard or you will cut through the outer jacket. Underneath is a full braided shield which you do *not* want to cut through. Now, you can gently

pull this portion off or carefully make a cut from the one inch band you just made to the end of the cable and remove the outer jacket.

(4) Straighten out one end of the paper clip. Use the point to unbraid the shield. Fold the strands back away from the colored leads. Do not twist the strands together.

(5) Trim one-quarter inch of insulation from each of the wires inside the shield *except* for the blue and green wires. Tin (heat and apply some solder to the tips of) each of the bare leads.

(6) Look at Figure 1. You are looking at that part of the connector where you will insert and solder wires. Now, insert and solder in whichever order you prefer. Do not let any strands of the shield get near your soldering.

(7) Check you progress. Make sure there are no solder bridges between pins and no strands of the shield braid touching any pins. Take the half-shell that has the metal strain relief at one end. (The strain relief is the 'U' shaped metal tab on one of the half-shells). Notice that the gray outer jacket does not quite reach the strain relief. You now need to stretch the outer gray jacket over

the exposed wiring so that the gray jacket passes across the strain relief. With one hand, firmly grip the outer jacket of the modem cable near the modem itself and with the other hand held loosely around the rest of the cable, 'slide' the outer jacket down towards your new connector. There is sufficient flex in the jacket that it will creep forward to cover the wires passing across the strain relief.

(8) Make sure the ground braid is folded back over the outer jacket of the modem cable and that some of the braid will touch the metal strain relief when you attach that half of the metal shell to the cable. Align the connector into its cut-out and clamp the strain relief against the cable. You can now trim away any remaining braid.

(9) Attach the other half of the shell

Figure 2. Modem Cable Signals

Mini-8 pin Wire color Function
1 red handshake out
2 brown handshake in
3 yellow transmit data
4 black ground
5 orange receive data
6 black secondary transmit
7 blue general purpose input
8 green tied to 4

and slide the plastic outer cover over the assembled metal halves. Note: Align the plastic locking tab in the outer jacket and the notch in one-half of the metal shell so that the outer cover will

not slip off when you remove the connector from your Apple IIc.

(10) For those interested in the function of each lead, see Figure 2.

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Apple Expo East Disk Specials

by Lorin Evans

As you read this, we are recuperating from working the Pi booth at the Boston Apple Expo East. Lots of volunteer time went into creating the show specials that were produced for this event. John Ruffatto and Chris Hutmire devoted many a sleepless night to assembling the disks that were sold there. However, you are the backbone of everything that is Washington Apple Pi. It is only fair that the disk specials we offer to others be offered to you as well.

Five special disk packages were created for the Boston show: "TrueType" fonts, System 6 compatible add-ons, System 6 sounds, Ken Mock games, and on the Mac side, the best of the Mac Disk Library. They will be available during our October monthly meeting at Expo East show prices. If you are unable to attend, you may order these disk sets by mail; please add sufficient postage from the chart found on the disk order form to cover mailing costs.

TrueType (TT) Fonts Starter Set–Apple IIGS operators who use 16-bit word processor programs like BeagleWrite GS (reviewed elsewhere in this issue), *AppleWorks GS*, or *GraphicWriter III* can access TrueType fonts using a commercial add-on named *Pointless* by Westcode Software. Our starter set of TT fonts was

selected and assembled by Kim Brennan to represent the essentials one needs to have in any collection, and it complements the TT fonts found on the *Pointless* disk. Our three disk set contains four formal fonts, five headline/advertising fonts, and five fancy fonts. A tutorial is included which explains the different formats for fonts, a guide so you can know which fonts will work with your word processor, and installation instructions. The label on each disk has the name of the font printed in that typeface. Upgrade the output of your printer for only $7.50 (regularly $12.00).

System 6 Compatible Add-ons–Neil Laubenthal searched the electronic ether to find the best of the new ShareWare utilities written for the IIGS. We culled much from the list to create two disks full of neat goodies. From Memory Bar to the latest productivity tools from Bill Tudor, you get them all for $5.00 (regularly $8.00).

System 6 Sounds–How about some fine music pouring forth from your GS? Jon Thomason and Kim Brennan have collected 17 MB of enjoyable synthasized music in many styles. Buy pleasure for $3.00

per disk or 2 for $5.00 etc. (not $4.00ea).

Ken Mock's Gonzo Games–California's creative ShareWare games guru has produced four great GS games: Columns 2.0, LetterSlide.GS, Boggle.GS, and VIAD. Get the cool generation's Fab 4 for a pleasurable $12.50 (5 disks) not a painful $20.00. [Note: VIAD only works with System 6 (floppy or hard).]

The Best of the Mac Disk Library–Dave Weikert searched through our collection of Mac bargins and assembled 25 disks worth of winners. He persuaded Beth to let them go for the measly sum of $25.00. Cheap, cheap, especially when we normally sell them for $XX.XX! Please–an important message from us –if you buy and use any of these programs, send the ShareWare fee to the author. If you want more new programs like these, you *must* pay the small sum(s) requested!

Artists on exhibit

by Ann Aiken

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

Artist info: Carol O'Connor is a free-lance artist and illustrator. She does individual and corporate training in graphics software packages. Carol works 'on site' and at her home office and is active in the Desktop Publishing SIG.

Tools: MacIIci, Adobe *Illustrator*, *PhotoShop*, Wacom Tablet, *Satellite*

I learn from the experience.

"On the *Offshore Oil Rig* and in *Capital Buildings* I used perspective lines in the background for guide lines. There was no alternative! It was necessary to keep the colors very simple green, yellow, red and grey with two or three tones of each. It was also critical to keep objects systematically grouped and layered. When I group and layer with complex drawings, I name each layer and group, then group the name with the layer. To select a layer, I never touch the drawing—only the name of the layer. The advantage is I can hide or lock the various layers easily and ungroup only the ones I'm working on. Sometimes I'll copy a layer into a new document and work on it there to keep things sim-

pler.

"This *State Seal for the State of New Hampshire* was especially challenging while drawing the sunrise. The sky required a delicate blend of very soft color fading into white integrating rays from an orb on the horizon. The solution was to choose a light yellow and blend to white, followed by an overprint of long white graduated triangles. The wreath has some very subtle colors; small blends which do not use a lot of disk space, but bring out the contour of the berries and leaves in a deeper 3-D mode then flat color would accomplish. It's always challenging on the clip art to make a black and white drawing of each subject that is as effective as the color

3-D, and *Ray Dream Designer*.
Techniques: "I especially enjoy playing with the computer and using its special effects. I probably play too much, but it always pays off in what

version. In this case all worked quite well except for the light yellow sky which reproduces darker (in black and white) than I would prefer.

"For the *Colisseum* clip art drawing, I used separate horizontal and vertical reductions to render the curving away of the architectural elements from the center to the distant outer edge. It was a quick and easy job, surprisingly. First , I drew the four "stories" but only one unit wide. (I think of four arches stacked one over the other). Then I clicked on the left vanishing point, and used the resize tool with 93% horizontal and 89% vertical specifications in the dialog box. After the first resize, I hit the duplicate command 13 times. Then I copied and flipped the image to the right. The rest was a matter of removing arches, tinkering with center detail and adding a blended background.

I get an enormous amount of pleasure from using the Mac as an artist's tool. Some days, it is the software technology itself which delights me.

Other days it is the ability to create which gives me satisfaction. The Mac doesn't smell like turpentine or require that I shower with a stiff brush after each work session. In sum, I love my work and the people I meet in the business!"

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

Ann Aiken
9212 Cedarcrest Drive
Bethesda, MD 20814

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

The XYZ's of File Transfer

by Jon Thomason

One source of confusion for new modem owners is how to transfer programs and documents from one computer to another over the phone. There are many different available methods to perform this task. Each method, called a file transfer protocol, has several options for customizing the process to fit the situation.

Dozens of file transfer protocols have been developed over the years to accommodate changing technology. The WAP TCS supports the four most common file transfer protocols (text, XModem, YModem, and ZModem), so this article will focus on these four.

Text Transfer

The first method ever available for transferring files over a modem is an integral part of the way modems work. Data is sent one byte at a time from one computer to the other (and separately, from the other computer back to the first). Characters entered on one end would appear on the other end's output device. Originally the output device was a sort of smart typewriter called a Teletype. These days text appears on a video screen, perhaps in a "terminal window."

When the computer pioneers wanted to send their programs and data back and forth, they'd send it exactly as it's been entered: a character at a time. The problem with this method is that there's no guarantee that what was typed on one end would appear on the other. Telephone glitches, called "line noise," could easily corrupt the data in transit.

XModem

Some time in the 1970's, a gentleman named Ward Christensen recognized the need for more reliable data transfer. He developed a process called the Christensen Protocol which moved "packets" of 128 bytes at a time from one end to the other. By this point modems were beginning to enter the consumer market and they had reached the "blazing" speed of 300 bps (about 30 cps or 360 wpm for you typists). Each 128-byte packet took about four seconds to be sent, received and "acknowledged" by the receiving system.

Popularly named XModem after the name of the program Christensen wrote to implement this process on his CP/M computer, Christensen's protocol became a nearly immediate success. The real genius behind his scheme was the concept of a "checksum" value that both systems could calculate on the data and then compare between themselves. The sending system would include the checksum for each packet with the data itself. The receiving system would collect the data, calculate its own checksum and compare it to the one reported by the sending system. If the values matched up, the packet would be written to disk and the packet would be "acknowledged" by a special character returned to the sending system. If the values didn't match, on the other hand (perhaps line noise had made its mark, the packet would be "non-acknowledged" by a different character and the sending system would respond by resending the same packet until it got acknowledged or until too many consecutive errors caused both computers and both operators to give up.

As Technology pressed on and people started buying 1200 bps modems, the XModem protocol started showing some weaknesses. With its checksum data and the lag time between packets, each 128-byte packet carried a lot of "overhead" which kept it from being tremendously efficient. Also without knowing anything about the file besides its contents, the receiving system had to choose a name for the file, and to expand its length to a multiple of 128 bytes. Many variants were developed on the original XModem, including larger packet sizes to reduce the total lag time, and the introduction of a more robust error correcting checksum called a "cyclic redundancy check" (CRC).

YModem

As these experimental XModem variants were floating around, a group of people took the best features and implemented them into

the next generation protocol which they called YModem. YModem collectively employs 1024-byte (1K) packet sizes, a two-byte (16 bit) CRC, and "batch transfers."

Computer programmers recognize that a file on disk is more than just a series of data bytes. Each file these days also retains its name, its exact length, the dates and times it was created and last modified, and often a special type distinction describing its contents. An ideal file transfer protocol, then, needed to transfer this information with the file's data itself. As a part of the YModem protocol, the sending system, first sends out a special packet describing the file to come before sending its contents. It can send many files in succession ("a batch") by merely repeating the process, then sending a special terminating packet to tell the receiving system all the files have been sent.

As I'm sure you've guessed by now, the YModem protocol has weaknesses of its own. Modems have become even faster, now often topping 38,400 bps, and the lag time between even 1K packets has become significant. New, more sophisticated operating systems like the Apple II's ProDOS and the Macintosh's HFS maintain more information ("attributes") about each file than the YModem protocol addresses. Several variants have been developed adding larger packet sizes (the TCS supports 4K packets) and a break-neck adaptation named YModem-g which eliminates lag time at the expense of completely stopping at the first error. File attributes have become independent of the file transfer protocol for various computers, as described in the sidebar.

ZModem

The next step above YModem is an attempt to address its weaknesses. Developed by a gentleman named Chuck Forsberg, the ZModem protocol is a radical departure from the traditional protocols of its day. ZModem retains the 1K packet size while reducing lag time with a process call "streaming." Packets are sent in rapid succession without waiting for individual acknowledgment, the sender queries the receiver for its status. If an error is found at any point, the receiver can ask the sender to "retrain," or back up to an earlier location in the file.

ZModem can handle batches of files like YModem, and it can support a more capable four-byte (32 bit) CRC for nearly complete accuracy. The ZModem specification provides for several special commands

File Attributes

In these days of cheap storage, modern operating systems have gotten more complex and more individualized than ever before. And with multiple forks, files are no longer the same "shape" they used to be. In order to shoehorn these new capabilities into old standards, an additional protocol layer is required for successful file transfers.

MacBinary

The MacBinary standard has been around almost as long as Macs have had modems. Every popular Mac terminal program supports it by default for transferring files with their appropriate attributes. The MacBinary-capable sender encapsulates the file attributes, data fork and resource fork in a sequential stream of data which can be sent and stored in any operating system. When it comes back to the Mac via modem, the terminal program decodes this file into its component parts. If the file comes on disk or over a network, a separate utility or translator may be required.

Binary II

Modeled after the MacBinary standard, Apple II users have their own method for retaining file attributes. Unfortunately it's not been around very long and it's largely misunderstood. Modern Apple II terminal software should transparently handle Binary II encoding and decoding. There are still programs around which do not.

Machine Independence

When using MacBinary or Binary II transparently, one must be careful not to accidentally change files which don't need it. Text files and GIF or JPEG graphics, for example, which are intended for use on non-Apple machines should never have MacBinary or Binary II wrapping or our neighbors will not be able to use them. Be sure to turn these features off when uploading machine-independent files, and to turn them back on for all machine-dependent ones.

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to be sent requesting certain file operations take place, but these are rarely implemented in personal computers.

Two very interesting features of ZModem are automatic starting of transfers and resuming of failed transfers. Automatic starting allows the receiving computer's terminal software to recognize the beginning of a file transfer session, where the older traditional methods required the operator to start the transfer manually. Resuming allows a failed file transfer to actually start again at the point that it had left off. even days or weeks after the original transfer failed.

So What?

No one of these protocols is better than the others in all circumstances. YModem-g is much faster than ZModem, but it sacrifices control of bad line conditions., It should really only be used with new modems with special functions which cor-rect errors themselves without need for software intervention. And many old terminal programs only support XModem in one of more variations. Of course, if you transfers consistently fail while using one protocol, try again using another. There may be a glitch in your terminal software or on the other end which causes an incompatibility between the two.

In general, and on the TCS, it's easiest to use the ZModem protocol because of its auto-receive capability. If your terminal program supports ZModem, use that. More auspicious users will use different protocols for different data in different conditions. This can sometimes be more efficient than ZModem, but only marginally. Don't worry about choosing the "wrong" protocol for a file transfer because at least in this case, the end really does justify the means.

Correction and Apology

In the September issue of the Journal, the article *Telecommunications and Modems, Part 2* written by Allan Levy, was run and credited to Jon Thomason and Allan Levy. The article was mistakenly confused with the article *The XYZ's of Modem Transfer* that Mr. Thomason had written. The editor apologizes to both Mr Levy and Mr. Thomason for any misunderstanding that this may have created.

How To Use The File Transfer System

by The Crew

The File Transfer System is the means by which TCS members can exchange software. The latest Apple System Software is available there and so is a growing collection of freely distributable FreeWare, ShareWare, and Public Domain programs and data for Apple computers. You can "download" these files from the TCS to your computer. The available files are typically stored in a compressed format, requiring a special utility to expand them to a usable format.

File Lists

Files in the File Transfer System are spread out among several areas by computer model and category, e.g., Macintosh Fonts or Apple II Utilities. When you enter F, File Transfer, from the TCS's Main Menu, you are presented with a numbered list of these files. Type the number of the file area which interests you, and you will see a list of files available in that area. This list contains each file's name, its size, the number of times it has been downloaded, and a brief description of its contents. You can wait for the end of the listing or abort it by pressing a key.

From time to time you might wish to list only recent files, those which have been uploaded since a certain date. The NewScan function does this for you. Press N for NewScan and you will be prompted for a date in MM/DD/YY format. By simply

pressing the Return key you can accept the default date which is the date that you last called the TCS. At the next prompt, select an area or group of areas to be scanned. Press M for Macintosh, A for Apple II, G for Apple IIGS, O for Other, or * for all available areas, or you can type a file area's number to scan that one area. Press Q to Quit from NewScan.

If you know the name of a particular file but you don't know its number you may need to use the Find function. Select the appropriate category and press F for Find. If you know the complete filename as displayed in the list, enter it. If not, you can use "wildcards" to represent any combination of missing

characters. For example, you can search for any file beginning with the letter P by entering the filename P*. Similarly, you can search for any filename containing the word FIX by entering the filename *FIX*. Wildcards can be used at the beginning and/or the end of filenames, but never in the middle.

More information about each file is available for the asking. Press B to Browse through file descriptions and then enter the number of a file. When its description is listed on your screen you have several options. Press the Return key to see the next file in the list, enter the number of another file to skip to it directly, or press Q to Quit from the Browse function. You can also press D to Download the listed file or M to Mark it for batch downloading as explained below.

Downloading

Having the TCS send a copy of a file to your computer is a relatively simple task once you've done it a few times. Unfortunately, the rules are slightly different from one computer to the next. If your terminal software supports the ZModem file transfer protocol, you are in luck. Just press D for Download and enter a file's number. The TCS will present you with the file's description. Press Z to request the ZModem method of transferring and sit back and watch. If all goes well, the file will be copied to a disk, directory or

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folder on your computer.

If your terminal software does not support ZModem, it may still support YModem or XModem. The difference is that a transfer won't start by itself. When the TCS reports that it has started the transfer, you will need to manually tell your terminal software to begin receiving. This is usually done by selecting Receive File(s) from a pull-down menu or by pressing a command key sequence. Refer to your terminal software's documentation for more details.

Working With Multiple Files
If your terminal software sup-ports the ZModem or YModem batch file transfer protocols, you can download more than one file in a single transfer. This is a two-step process on the TCS: first, mark the files you wish to download, and then start the transfer.

To Mark a file, press M and enter the file's number. If you are in Browse mode (see above), you can press M to mark the currently dsplayed file. When you have selected several files, press T for Transfer Batch. The selected files will be listed, and you will be given the opportunity to C, Clear the list; R, Remove individual items from the list; Q, Quit to mark more files; or D, Download the listed items. Press D to Download, and then select Z for ZModem. If your terminal software doesn't support ZModem, try YModem. You will then be asked if you want the TCS to sign you off automatically when the transfer is finished; if you will be walking away from the machine press Y for Yes. This will conserve your online time and will allow other people to use the system when you are finished.

It is Better to Look Good

by Debbie Hoyt

The Macintosh has made gaining entry into the world of desktop publishing very easy. Unfortunately, there are many who are under the misguided impression that just because they can use a page layout package, a word processing package or two, and possibly even proficiently use some graphics packages that they are ready to open shop as desktop publishers. Nothing could be further from the truth. Desktop publishing requires all the skills mentioned, yes, but it is much more than that. It is also design; and design does not just come to most of us.

Design is quite often a learned skill that is enhanced to a greater or lesser degree by natural talent. For those who are novice desktop publishers there are guides that can help in acquiring design knowledge. There are numerous classes and seminars, but often time and money are factors which prevent many from investing in these. Fortunately, there are also self-help resources that are both equally instructive and inexpensive. One such resource is the book *Looking Good in Print* published by Ventana Press. *Looking Good* comes to the rescue of would-be desktop publishers managing on a shoe string budget. It is written for those who have little or no design background but who want to make the most of their desktop publishing investment. It outlines the skills necessary to create attractive, effective printed materials, whether these be newsletters, advertisements, brochures, manuals, or even books. It encourages more than adherence to strict rules of design; it encourages users to incorporate their taste in their projects. The book reminds us that with tens of thousands of different printed materials vying for the attention of those that we consider our target market, it is a matter of utmost importance to be the one that makes the difference by being inviting to the eye as well as informative.

Written for retailers, entrepreneurs, managers, writers, and educators–in short, anyone experiencing the challenges of desktop publishing–*Looking Good* is not platform specific; the rules and guidelines of design are equally applicable to those using an Apple IIGS, an Apple III, a Macintosh, or an IBM PC. And, as might be expected, the author incorporates the design principles that he eschews in the publication itself, making it a highly readable, visually appealing work. The book is divided into three sections, with the latter two building on the guidelines set out in the first. These sections, "The Elements of Graphic Design," "Makeovers: Putting Your Knowledge to Work" and "Getting Down to Business," lead you progressively through what might easily be described as a mini design course in a book.

Observing the Elements

Section One is largely about planning, organizing, evaluating, incorporating and avoiding. What? For instance, planning a desktop published project is more than just the initial idea. It involves experimenting with the way that you want the finished work to look. It also means that you will need to spend time looking at other such projects with an analytic eye. It is helpful to have files of other samples on hand that can inspire your own creativity. Look through or subscribe to various design publications that display quality work. The TCS or other bulletin boards can also be helpful. Care-

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Evaluation Checklist

Brochures

1. Have you chosen an appropriat size and format?

2. Does the front cover invite readers inside?

3. Have you maintain page-to-page consistency throughout?

4. Have you supplied all the information prospective buyers need to make favorable buying decisions?

π

fully judge the relative size of any and all graphics included, proportioning their dimension as a measure of their importance to the surrounding information. Use the data in your publication to guide the reader through in a coherent fashion. Be consistent with margins, typeface, type size, styles and graphics. But here's the catch: while you are being consistent, be sure to use contrast so that your publication is not boring. And remember to design two-page spreads in such a way that the pages complement each other.

To be effective your work must be organized and there are tools which enable a desktop publisher to do just that. Page layout programs usually offer most or all of the following tools: grids, columns, gutters, and margins. These are the physical tools which you use to effectively organize the look of your publication. *Looking Good* explains what each of these tools does and how it can best be used to produce desired effects. In addition to these native devices,

there are those that you create yourself, which are visual guides for your reader to help him decide whether to continue on with an article or move on to another. These are the text organizers that writers use—headlines, subheads, captions,

etc.–and their appearance, length, and content will often make or break your work.

The overall look of a publication is the end result of much decision making and style evaluation. What typeface will you use? What about

Copy-filled Slides and Overheads
Use as few words as possible in your presentation visuals. Slides and overheads should support your oral presentation, not replace it.

How to Get Started
- Set all your objectives clearly
- Outline your concepts in a detailed format
- Sketch all your concepts before you begin

Getting Started
- Set Objectives
- Outline Concepts
- Visualize Content

Advertisements
Simple graphic accents create a cohesive, appealing advertisement. Notice the use of screens of different values in the lightning image and the similar type size and style linking the headline with the phone number.

LIGHTNING PROTECTION
U.L. approved materials
Over 20 years experience.
FREE ESTIMATES
Call today:
1-768-6455

Lightning Protection
UC approved materials
Over 20 years experience
FREE ESTIMATES
1/768-6455

Original   Makeover

column alignment and width? Then, what size, leading and weight of type is most appropriate? Although these matters may, on the surface seem unimportant, they are not. They have the power to help or hinder your publication, to lead a reader progressively through to the end or distract him to the point of putting the publication away–indefinitely. Learning to effectively evaluate the tone and feel of your work and to successfully incorporate that into the finished product

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Presentation Graphics

Which Chart Should I Use?

• Line Charts: Illustrates trends.

• Pie Charts: Illustrate part to whole relationships, translating percentages into proportional sections.

• Bar and Column Charts: Compare information categories side by side.

• Area Diagrams: Show trends using special comparisons. Introduce management levels one by one.

• Stacked Bar or Column Charts: Display the parts that contribute to the totals.

• Combination Charts: Compare two different categories of information, using a different data symbol for each category.

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is a skill that *Looking Good* introduces you to and then helps you to understand and employ.

However, there are devices that are best used infrequently or avoided altogether by the desktop publisher. *Looking Good* dedicates an entire chapter to such common pitfalls as overly detailed charts, floating subheads, overuse of boxes and rules, unequal spacing and cramped logos and graphics. More importantly, *Looking Good* tells you why these devices are undesirable and then shows you how to improve or replace them.

Makeovers: How Do I?

You might think that after you have read through the last chapter of the first section that you now have a better idea of how to precede with designing your printed material, but you're still a little vague regarding some of the examples shown and the techniques that the book discussed. Not to worry. The following two sections are like a mini design course waiting for your eager perusal. Section Two features 22 examples of flawed graphic designs and their makeovers; each complete with accompanying text that explains what the flaw is and what as well as why changes have been made in the makeover.

Section three covers successful ways to work with various types of printed media: be they newsletters, newspapers, advertisements, sales materials, books, manuals, presentation graphics, business communications, forms or surveys. In brief, all of the most frequently created means of expressing your message in written form are covered in enough detail to enable the novice desktop publisher to produce professional looking pieces. Even the sage veteran of the desktop publishing field will walk away with a fresh outlook on design and its imple-

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mentation.

Like Ventana Press' other desktop publishing aid *The Makeover Book*, I found *Looking Good* to be highly enjoyable and informative. The book's non-platform specific approach makes it accessible to all those who want to be, well, "looking good in print." And the numerous examples and makeovers are invaluable aids in progressively improving one's skill as a desktop publisher. I recommend the book for persons with any level of expertise in the desktop publishing field.

[Ventana Press also publishes several other books that are very helpful to desktop publishers who would like to increase their knowledge of and skill with using design. Among these are: The Makeover Book; *Harvard Graphics* Design Companion; *PageMaker* Design Companion; Inside Xerox *Ventura Publisher*; Newsletters from the Desktop; Type from the Desktop; The Gray Book: Designing in Black and White on Your Computer; The Presentation Design Book; *and* Desktop Publishing with *WordPerfect*.]*

Copies of actual makeovers taken from the book Looking Good in Print *were reprinted in this article with permission from Ventana Press.*

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MacEKG

· by Rick Zeman

MacEKG is a rather nice product, mainly appealing to MIS personnel, repair techs and serious Mac technoids. It also, strangely enough, has serious value to the MacNovice. It is a diagnostic program masquerading as a control panel. *MacEKG* functions both as an "early warning system" for your Mac and also as benchmarking utility.

MacEKG comes on two 800K disks along with a 126 page manual. Rather hefty size for a control panel, don't you think? *MacEKG* totes 1.2 MB of digitized sounds to accompany the Control Panel, gives a verbal accompaniment to its testing, and will also verbalize any "System Warnings." After the initial 'gee whiz' effect wore off, I turned off all voices except those that alert me if something serious has happened.

How it Works

After *MacEKG* is installed in the Control Panels folder (or System folder for the System 6 stalwarts) it is ready to run at the first reboot. *MacEKG* is named so that it will be the last control panel loaded; after all of the extensions and control panels have loaded, *MacEKG* kicks in and performs its "Maiden Launch." What it does during the maiden launch is test the whole Mac and attached hard drives and then establish a benchmark (a semi-arbitrary number which is the sum of the tests) to which all subsequent tests are com-

pared. An "MPR," MicroMat Performance Rating, is assigned to this benchmark. It can be configured to run at every boot, one boot per day (my preference), or at shutdown. Interestingly, after having *MacEKG* working during the boot process for a few weeks, I switched it to work at the Mac's shutdown and it then proceeded with a "Maiden Launch" thus ignoring the weeks of data it had stored. Luckily, when I switched back the stored data was still there.

Because one of the functions of *MacEKG* is to monitor system degradation (i.e., INIT's eating up too many clock cycles and slowing the Mac down), I was rather amazed that they didn't suggest booting for the "Maiden Launch". with all extensions and control panels deactivated *except MacEKG*; doing so ensures the most accurate baseline.

MacEKG performs the following tests in great visual style. It gives a visual representation of what it's doing at all times–it's quite easy to follow what the program is doing. Plus, at the end of a test, it shows your current MPR in a bar chart with previous MPR's. Nice.

Logic–eight high-level mathematical formulae:
- Direct floating point addition, subtraction and multiplication
- Floating point addition, multiplication and division through complex function calls
- Floating point addition, subtraction

and multiplication through an if/else loop.
- Direct integer addition, subtraction and multiplication
- Trigonometric function loop
- Array indexing loop
- Log, exponent and square root loop.

Components
- Parameter Ram (PRAM)
- Random Access Memory (Ram)
- Versatile Interface Adaptor (VIA)– handles mouse and keyboard input
- Serial Communications Chip (SCC)–serial port controller
- SCSI circuitry
- Apple Sound Chip (ASC)
- Hard drive media
- Video–both Quickdraw-based and direct-addressing tests.

If the Mac fails any of these tests, the user is informed what the error is and where it is located; it is then entered into *MacEKG*'s log–that is, if it's only a minor error. Serious errors–ones that cause the Mac to crash–are handled differently. The error code is stored internally and the next time the Mac is booted *MacEKG* won't run. It will display the error code and a message saying to look up the error in the manual or call Tech Support. I was troubleshooting an SE with *MacEKG* and had a crash during the test and was presented with an "Error 2300."

How it Doesn't Work

Err, okay, I'll look that up in the manual. Wrongo boyo. Quoting the manual:

Figure 1

drops below a certain user-definable percentage. If you stick an INIT in your system that robs your Mac's clock cycles terribly, *MacEKG* will notice and inform you. This is one of the reasons that I mentioned performing the Maiden Launch with no other extensions. Otherwise the baseline won't be too accurate.

By and large, *MacEKG* was quite helpful. It tracked down a random crash that I'd been having due to a bad ADB register. I never would have found that out on my own.

Conclusion

MacEKG is a worthwhile product to own. While I vehemently disagree with MicroMat's philosophy regarding supplying the error codes, their manual does cover some of the lesser errors and what significance they have to the Mac owner so that one's not left totally floundering in the dark. And the product is really capable of catching problems that are too subtle for the Mac's self-test to catch. MicroMat says that they're working on a lower-level diagnostic more geared to computer tech professionals with more advanced options. It is hoped that the new program will address some of the limitations of this version.

Rick Zeman is the Macintosh Editor for the WAP Journal and a member of the TCS Crew.

Name: *MacEKG*

Publisher: MicroMat Computer Systems

Address: 7075 Redwood Blvd. Novato, CA 94945

Retail Price: $150

Discount Price: $99

"Where are the codes? *MacEKG*'s fatal error code table is not included in this manual due to the sheer amount of manual space it would occupy and the complexity of the information each code represents. If you would like any error code interpreted for you *[most people can interpret the written word easier than listening over the phone]*, MicroMat Technical Support will provide you with this information free of charge *[hah!–no 1-800 #]* and help find out why it's occurring."

I'll mention here that the package includes two technical additions: Dr. Pete Corless' *wonderful* System Errors 7.01 application and a MicroMat-assembled DA listing 'Sad Mac' error codes and what they mean. Neither one of these is for the neophyte so I can't understand why MicroMat couldn't have included their codes in one of these formats since they apparently thought that these weren't beyond the user's skill levels.

At 12:01 pm EST (they don't open 'til 9 am Pacific time) I called MicroMat's cryptographers to decipher my error code and I was told that it was a NuBus error. Whoops...I thought that I was working on an SE–my mistake. The gent at the other end then mentioned that they don't use that numbering system any more (version 2.03 (dated June 3, 1992) had been supplanted with 2.05 and that he'd be more than happy to mail me the new version free of charge.

MicroMat promptly sent me the updated package–quite surprising–the product hadn't been registered and he made no attempt to verify that I was an owner of MacEKG. The ReadMe file had this to say about the problem that I had:"Changes have been made in EKG's nuBus slot lookup routine which previously could cause 2300 errors on machines utilizing pseudo nuBus cards in PDS slots." I've installed version 2.05 and all seems to be well at this point.

After the Battle

Assuming that you've made it all the way through the boot/test process, you can open the Control Panel and using the numerous pop-ups (see Figure 1), see every facet of your system's features, performance and other configuration information. This is *very* informative for those with a technical bent.

One particularly nice feature that *MacEKG* offers is an 'alarm' that alerts you if your system performance

PowerBook Bundle: A Good Value?

by Lawrence I. Charters, © 1992

Apple's PowerBook is a hit. Not only does it open the world of notebook computing to the electronic fruit company, it also gives current Mac owners and users a portable "extension" to their desktop machines. T/Maker's PowerBook Bundle is intended for both kinds of PowerBook owners.

Included in the Bundle are:
- a carrying case sized for the PowerBook featuring the T/Maker logo;
- a copy of *WriteNow 2.2a* by T/Maker;
- a copy of *Address Book Plus 2.01* from Power Up Software Corp.;
- a copy of *if-X Business Expense Reports* by Softview (now owned by ChipSoft, the TurboTax people);
- a trial subscription to America OnLine, with their 1.0 software package;
- and a copy of *ClickArt for Faxes* by T/Maker.

These are complete software packages, with full manuals (unlike Apple's recent student promotions which lacked printed manuals), and T/Maker also tosses in a large collection of coupons for various things. Unfortunately, many of the coupons had short expiration dates, and are no longer valid.

For most people, the "flagship" product in the Bundle will be the word processor. Word processing is

the single most important personal computer task, and the PowerBook–any model–is a surprisingly good computer for doing word processing. The integrated trackball, palm rest and decent keyboard layout make it an excellent machine for writing, including writing on the go. Most of this review, for example, was written while riding the Metro. Significantly, it was written in *WriteNow*.

While not the most popular Macintosh word processor (that honor falls to Microsoft *Word*, which is also the most popular Macintosh program of all time), *WriteNow* is a great choice for any model of PowerBook. *WriteNow 2.2a*, the version included in the Bundle, will run on any Macintosh made, from the original 128K Macintosh of 1984 to a Macintosh Quadra. Running on a PowerBook under System 7, it has a Get Info suggested RAM size of 475K, but actually uses just 145K after launching. The updated version, *WriteNow 3.0*, has a Get Info suggested size of 490K, and actually uses 197K of RAM after launching. This means that a minimal PowerBook, a model 100 with just two megabytes of RAM and a 20 megabyte hard disk, has *plenty* of room to run *WriteNow*.

In fact, it is possible to have both *WriteNow 2.2a* and *WriteNow 3.0* running simultaneously on a PowerBook 100 with two megabytes of RAM. *WriteNow* is *tiny*. It is also

quite fast and, as long as the PowerBook's drive hasn't turned itself off to save power, virtually all actions, from scrolling to spell checking, are quick. *WriteNow 2.2a* is not as full-featured as Microsoft *Word 5.0*, but it only insists on just a fraction of *Word's* RAM or disk requirements.

About the only potential problem with using *WriteNow 2.2a* on a PowerBook is the thesaurus. Rather than rewrite the thesaurus to work with System 7, T/Maker has included a small piece of paper with rather spare instructions on how to use the Font/DA Mover to embed the thesaurus desk accessory into the application. While this isn't difficult, it is an annoying extra step and probably too intimidating for most novices.

WriteNow 2.2a is not 32-bit clean, and it won't run on a machine with more than 8 megabytes of RAM. Because none of the current PowerBook modems (100, 140, 145, 170) allow more than eight megabytes, this isn't a real problem, but for those who have more robust desktop machines, they may wish to use the fully System 7 compatible *WriteNow 3.0*. Upgrading from 2.2a to 3.0 is either $49.95 or $69.95 (T/Maker's literature is unclear on the subject).

Address Book Plus 2.0 has been my "name and address" manager of choice for the past year and is a good choice for the PowerBook. It works

flawlessly on all models of Macintosh and is System 7 compatible. On the other hand, *Address Book Plus* does require more memory to operate than *WriteNow*, and you can't open both at the same time in just two megabytes of RAM. On the other hand, the Copy Address option will copy just the address information to the clipboard, where it can then be retrieved to paste into *WriteNow*, or any other application.

Aside from just listing and sorting names and addresses, *Address Book Plus* can also dial the phone via the modem port, and it has options to transparently change dialing prefixes and area codes if you move to a different location. As you might expect, it prints labels in a huge variety of styles, including any custom style you might create. Unlike some address managers, all formats are displayed on the screen, so you don't have to guess how things will look.

Address Book Plus will also print envelopes with both the From and To addresses in the proper places, complete to the Postnet codes at the bottom of the envelopes for speedy delivery. For those who prefer to have printed address books, it can print single- and double-sided address listings to fit virtually every commercial personal organizer binder, and allows almost limitless customization.

if-X Business Expense Reports is probably a good idea for a PowerBook—outside of the Washington metropolitan area. The name might be kind of strange, but the application is very businesslike. It allows you to enter and keep track of business expenses using a broad range of pre-designed forms covering travel, lodging, meals and incidental expenses. The forms print out nicely on an ImageWriter, DeskWriter or LaserWriter, and look quite professional.

On the down side, all the forms are geared to corporations and small businesses; none translates to anything resembling a government form. So, if you work for Uncle Sam, about the best you can do is give it to someone in the private sector.

America OnLine is a good choice for a commercial telecommunications service. The graphical interface is ideal for novices because it is far less threatening than the usual CLI (command line interface). On the other hand, the software included in the PowerBundle, version 1.0, isn't really System 7 compatible and will fail if you have Zapf Dingbats installed. The Power-Bundle package even comes with a note telling you this, but the note doesn't say what you are supposed to do about this failing. An experienced user will probably stick the AOL disk in a disk drive, select Erase, and turn it into a blank floppy, then call up AOL and ask for the current software. A novice user, on the other hand, will probably decide it all sounds vaguely threatening—which means AOL will lose a potential customer.

ClickArt for Faxes was likely included in the belief that most PowerBook owners would use their machines as portable fax machines. In fact, most PowerBook owners do nothing of the sort. Just the same, the collection is very well done, with very professional and businesslike cover sheets for virtually any kind of business or situation, and in several different formats: *WriteNow* (art embedded in a *WriteNow* document), *MacPaint*, PICT, and PowerBook Fax (designed for use with the fax cover application included with Apple's unlamented PowerBook modem). The PICT collection is the largest, and about the only criticism would be a lack of fax covers for government agencies. I'd like to see one that said something like, "Sorry for the delayed response, but our appropriation was cut." Included is a slim manual with excellent advice on sending faxes, plus a visual index of all images.

The PowerBundle carrying case is strongly built, with pockets and places for spare batteries, AC adapters, diskettes and other goodies. Like most computer carrying cases, it is available in any color you want, so long as it is black. With a PowerBook and all the necessities, it makes for a compact package, everything snuggly in place.

But it is not padded. In this regard, the Targus Universal notebook case seems a better choice for protecting a computer from the casual bumps and shocks of mobile computing, plus it has even more pockets and places to put things. On the other hand, the Targus is also far bulkier, so there is the usual trade-off between security and convenience. I vote for security.

As a whole, the PowerBundle really is a good deal—provided you can find anyone willing to sell you one. This was supposedly a "limited time special," and many mail order outfits and dealers say they are out of stock. There are some annoyances, such as the hassles involved in replacing older versions of software with current versions, but these are minor. It would be nice if T/Maker and other vendors would reconsider this policy in the future, but the PowerBundle would be a good value in any case.

Thanks to Lou Pastura for carting in about 20 cubic feet of carrying cases to compare and contrast with T/Maker's PowerBundle case. For those who want a closer look, the PowerBundle carrying case is the regular home of the Pi's PowerBook 140, and can be seen at most General Meetings or during a visit to the office.

Macs, Pc's, *Excel* and Speed

by Richard J. Byrd

Every time new and better computers are added to an existing line-up, the computer magazines carry articles comparing processing speeds of the old and the new machines. Speed differences are also compared when testing accelerators, cache cards and other devices to increase speed. However, these test results are usually given in terms of some esoteric and theoretical calculations such as the number of "whetstones" calculated per second, or how fast the machine can solve the Sieve of Eratosthenes. The problem is that this may not relate all that well to how fast the computer works on the applications which you normally use. Whereas many of the Macintosh magazine articles have compared the difference in speeds between the various Macintoshes, and the PC magazines have compared the various IBM Clone computers, not too often do you see direct comparisons between PC's and Macs.

Excel is an ideal application to make such a comparison between the two platforms. Microsoft has endeavored to make *Excel* look and feel the same on both platforms, and it probably is the best example of a cross-platform application. Of course, this does not mean that the source code for the two applications is necessarily alike, or that the PC version and the Mac version are equally as efficient in the use of the respective computing platform, but then nei-

ther is there any guarantee that all is equal when comparing drystones, whetstones, or sieves. When using these standard tests, even if the test source code is the same for each platform, still the compiler which generates the object code for one platform may generate a more efficient code for the one platform than for the other. One could design very simple repetitive code to test a certain basic operation of the CPU and perform that same operation on the other platform, but this test would be so unrealistic compared to real-world applications that it may not be a good predictor of the actual performance of an application either. However, if you are choosing a platform on which to run *Excel*, for example, none of this makes any difference. Needing to run your heavy-duty spreadsheet as fast as you can, and being able to choose your platform, you may simply be more interested in which machine does it faster, not how the computer world arrived at that state of affairs.

I recently bought a 33 megahertz Powercache accelerator from Daystar Digital for my Mac IIsi. Wanting to know just how big an improvement I was going to make in my own applications, I decided to make some timing comparisons. Microsoft *Excel* is my "power user" application, so naturally I needed to run an *Excel* comparison test. We have developed an *Excel* template application in which the user is rapidly and constantly

changing the input figures. Each input change causes hundreds of cells to recalculate, and the users really hate to see that recalc indicator freezing their screens for every value they input. The basic worksheet is about 4,000 cells and contains approximately 400 formulas. To make a comparison test, I wrote a short *Excel* macro which exercised this spreadsheet by iterating the one figure which causes the most cells to recalculate and then letting the computer determine the time required to do eight such recalculations of the spreadsheet.

Below is shown the macro code used to perform the speed tests:

```
1 =ECHO(FALSE)
2 =FORMULA(250000,!AV16)
3 =SET.NAME("Timer",NOW())
4 =FOR("i",1,8,1)
5 = FORMULA(25000*i,!AV16))
6 =NEXT()
7 =(NOW()-Timer)*1000
8 =ALERT("elapsed time =
    "&TEXT((A7,"00.0")&" sec-
    onds",1)
9 =RETURN()
```

If you have an *Excel* application or template which you use frequently, it would be very easy to adapt these instructions to test your own spreadsheet. The first instruction prevents screen refreshing. Next the number 250,000 is put into the target cell of the worksheet in order to ensure that all tests begin with the same initial conditions. Then the macro sets a timer to NOW(), the current com-

puter time, and begins a For-Next loop, which iterates the numerical value of a single cell (AV16) eight times with eight different values. After the eight recalculations are completed, the timer value which was first established is subtracted from the computer's clock value at the finish, and the difference is displayed in seconds in an Alert box on the screen. It would be easy to adapt this macro to your own speed test by substituting for cell AV16 the designation of the cell in your worksheet which you want to change. In the FOR() instruction, the count of eight can be set to whatever number of iterations works best for your worksheet and the machines you are testing.

Now for some results. Figure 1 shows a table of the results obtained on a variety of both Macintosh and IBM-clone computers. All Macs were using System 7 and all PC's were using Windows 3.1. The venerable, but ancient, Mac Plus labored for 85.5 seconds to do the eight recalculations, whereas the Quadra 950 blasted through them in 4.6 seconds, making the Quadra some eighteen times as fast as a Mac Plus in *Excel* recalculation. Most of the Mac II series machines, from the original Mac II to the IIsi did the recalculations in the 18-23 second range, however the Mac IIci (with cache card) took only 10.4 seconds. Tests with the Mac II LC with and without a math co-processor or floating point unit (FPU), indicates that this extra processor does not really help *Excel* recalculation all that much, at least for the worksheet used in this test. A Mac II LC without a co-processor took 34.7 seconds and with the co-processor it took 33.6 seconds, not a very large difference. I confirmed this result on a Mac IIsi and on a Classic II; each machine was only about three percent faster with the FPU. Most of the formulas in the spreadsheet used in

these tests were dollar figures not exceeding sixteen bits in length which are probably handled by the integer unit in the CPU, rather than being sent to the co-processor. If your application uses very large numbers or transcendental functions (sine, cosine, etc.), then you may make better use of an FPU, otherwise the FPU is probably a wasted expenditure.

Of much more significance is the poor performance of the Macintoshes which use the "crippled" memory bus. Both the Classic II and the LC use a 32-bit processor but have only a 16-bit path to memory. I don't know how much money Apple saves with this nasty little trick, but it sure has a devastating effect on performance. For example, the new Classic II and the old SE/30 both use a 16 MHz 68030 in the same basic computer package using the 9 inch black and white screen. However, the SE/30 uses a 32-bit bus, whereas the Classic II uses a bus bandwidth of only 16 bits to memory. The SE/30 does my *Excel* test in 20.8 seconds, whereas the Classic II is 75% slower at 35.2 seconds. Obviously, the ability to read and write from memory on a 32-bit path is a significant performance factor. It should be noted just how much more important is the bus bandwidth than is the use of an FPU.

I installed the 33 MHz Powercache in my Mac IIsi, thereby increasing the processor speed of the Motorola 68030 from 20 MHz to 33 MHz. I bought the Powercache without the FPU (saving $200!). In addition to the faster speed, this board also added 32 KBytes of static RAM cache. This board really did wonders to the speed of the Mac IIsi. The calculation time went from 18.2 seconds on the Mac IIsi (with an FPU) to only 10.4 seconds when using the Powercache (without FPU), an improvement of 80%. This degree of improvement was not only significant in the test results, but it is also manifest when

actually using *Excel;* the machine responds more crisply and quickly with each new entry recalculated.

However, the most startling results are seen in the comparison of the Macintosh computers to the PC-clones. My own off-brand clone (well, it is called Practical Computer Technologies) using the AMD 40 megahertz 80386 chip (a clone of the Intel unit, supplied at a speed Intel doesn't make), blows away all Macintoshes tested, taking only 3.5 seconds to do the recalculations. This performance even puts the expensive Quadra 950 to shame! Because my locally assembled PC only cost $1,900 (and now is only $1600) with a 14 inch color monitor, S-VGA driver, 150 MB hard disk and 4 MB of RAM, and because a similarly equipped Quadra 950 would cost about $6,000, Apple obviously has its work cut out for it in the computer marketplace! Even an ancient (1987) IBM PS-2 Model 80, using only a 16 MHz 386 was as fast as my 33 MHz Mac IIsi with the accelerator.

I am not sure why the PC-clones are so much faster than the Macintosh computers in *Excel* recalculation, but the results were consistent It could be that Microsoft has done a masterful job of optimizing the recalculation engine for the PC (perhaps using some of those recently discovered undocumented Windows system calls!) or that they have done a terrible job of optimizing it for the Mac, or it could be that the Intel chip is simply a better design for spreadsheet recalculation than the Motorola units powering the Macintoshes we have come to know and love. For any given clock speed, it appears that a 386 PC is about twice as fast as the Macintosh in *Excel* recalculation. The fastest machine tested was another garage-born PC clone, a TAG 486 machine running at 33MHz, which zipped through the recalculations as fast as you could hit the enter key,

2.31 seconds, making this $2,000 bargain twice as fast as the Quadra. I wasn't able to put my hands on a really hot PC with the just released 486DX2/66 speed-doubler CPU, but you can bet the results would make a Mac enthusiast cry. OK, OK, I know all the great hyperbole about the superb Mac interface versus that piece of bytecrap called Windows, but really, do we have to pay this high a penalty in price-versus-speed?

I designed the *Excel* spreadsheet test purposely not to use the monitor of the computer in any way, that is, there are no screen refreshes done during the test. If there were, speed differences between machines would result, depending on the screen size and whether the screen was black and white, gray scale or color, and on the bit-depth of the video driver. This is especially true in the many Macintosh models which carry the video driver on the motherboard. On my Mac IIsi, the scrolling time in Microsoft *Word* can be speeded up by easily 100% by changing the screen

to black and white. My old Mac II, which has a separate video board, does not exhibit this behavior. Be aware of this if you are designing any speed tests.

I was curious as to whether the new *Excel 4.0* is slower than the previous version of Microsoft's spreadsheet, *Excel 3.0*. To determine this, I ran the same test spreadsheet and macro in *Excel* 3.0 on my Mac IIsi with the Powercache. *Excel 3.0* was less than one second faster, which does not seem to be too significant given the many new features in *Excel 4.0*.

During the course of running these tests, I made another remarkable discovery. If another application is open while the test is being done, there is a drastic slowdown in recalculation. On my accelerated Mac IIsi, using System 7.0 and Tuneup 1.1.1, when *Word* was open with a blank page, the time for the *Excel* test slipped from 10.4 seconds to 15.7 seconds, a 50% reduction in speed! Surprisingly, it made no more differ-

ence in speed when *MacDraw II, MacPaint, HyperCard, FilemakerPro* and *MicroPhone II* were also all open simultaneously. (Ahh, the beauty of 17 MB of RAM). Apparently, when the finder has to keep track of another open application this steals time slots from the CPU, but once the system is in this mode, it doesn't make any difference how many applications it is overseeing. Keep this in mind when doing heavy-duty *Excel* work–don't have any other applications open.

If you are shopping for a computer and, as most users, you use only one or two applications most of the time, you would be wise to compare the speed of the different models you are considering when using the application you regularly employ, and do it using your own files and data. As seen from the tests I ran, the results in the speed at which different computer models and different platforms use a given application can differ greatly.

FIGURE 1. EXCEL RECALCULATION TEST RESULTS

COMPUTER	FPU?	PROCESSOR	SPEED	BANDWIDTH*	RESULTS
MAC Plus	NO	Mot. 68000	8 Mhz	16/16	85.5 Sec.
Mac Classic II	NO	Mot. 68030	16Mhz	32/16	35.2 Sec.
Mac LC	NO	Mot. 68020	16Mhz	32/16	34.7 Sec.
Mac LC	YES	Mot. 68020	16Mhz	32/16	33.6 Sec.
Mac II	YES	Mot. 68020	16Mhz	32/32	24.3 Sec.
Mac IIx	YES	Mot. 68030	16Mhz	32/32	20.8 Sec.
Mac SE/30	YES	Mot. 68030	16Mhz	32/32	20.8 Sec.
Mac Powerbook 140	NO	Mot. 68030	16Mhz	32/32	20.8 Sec.
Mac IIsi	YES	Mot. 68030	20Mhz	32/32	18.2 Sec.
Mac Powerbook 170	YES	Mot. 68030	25Mhz	32/32	15.1 Sec.
Mac IIci	YES	Mot. 68030	25Mhz	32/32	10.4 Sec.
Mac IIsi w/ 33Mhz Powercachce	NO	Mot. 68030	33Mhz	32/32	10.4 Sec.
Mac Quadra 950	YES*	Mot. 68040	33Mhz	32/32	4.6 Sec.
IBM PS-2 Mod 80	NO	Intel 80386	16Mhz	32/32	10.4 Sec.
ALR 386-33	NO	Intel 80386	33Mhz	32/32	5.9 Sec.
PCP 386-40	NO	AMD 80386	40Mhz	32/32	3.5 Sec.
TAG 486-33	NO	Intel 80486	33Mhz	32/32	2.3 Sec.

*- On CPU chip   * - CPU/Memory Bus

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

Apple II/III

Apple II*

GENERAL
Dave Harvey (days only)	(703) 578-4621
Leon Raesly (days; 9-5)	(301) 220-3111

ACCOUNTING PACKAGES
BPI Programs	
Jaxon Brown	(301) 350-3283
BPI & Howardsoft (Tax)	
Otis Greever	(615) 638-1525
Dollars & $ense	
Barry Fox	(717) 566-6709
Home Accountant	
Leon Raesly (days; 9-5)	(301) 220-3111
Quicken	
Gary Hayman	(301) 345-3230
Apple SSC	
Bernie Benson	(301) 951-5294
AppleWorks	
Ken DeVito	(703) 960-0786
Ray Settle	(301) 647-9192
Harry Erwin (before 10 pm)	(703) 758-9660
Gary Hayman	(301) 345-3230
Leon Raesly (days; 9-5)	(301) 220-3111
AppleWorks Database	
Roger Burt	(301) 424-6927
Morgan Jopling	1 (301) 721-7874
Milt Goldsamt	(301) 649-2768

COMMUNICATIONS
ProTerm	
Allan Levy	(301) 340-7839
Ray Settle	(301) 647-9192
Talk is Cheap/Pt. to Pt.	
Barry Fox	(717) 566-6709
DataBases	
DBMaster, Pro IIe	
Bob Sherman	1 (305) 944-2111
dBase II	
John Staples	(703) 255-6955
dBase II&III,Data Perfect. Db Master-PRO	
Leon Raesly (days; 9-5)	(301) 220-3111
Profiler 3.0	
Barry Fox	(717) 566-6709

HARD DISKS
CMC (not CMS)	
Barry Fox	(717) 566-6709
Corvus & Omninet	
Tom Vier (12N-6PM)	(703) 860-4810
Corvus	
Leon Raesly (days; 9-5)	(301) 220-3111
Sider	
Otis Greever	(615) 638-1525

LANGUAGES
AppleSoft	
Louis Biggie	(301) 967-3977
Peter Combes	(301) 251-6369
Leon Raesly (days; 9-5)	(301) 220-3111
Pascal	
Michael Hartman	(301) 445-1583

C and TML Pascal	
Harry Erwin (before 10 pm)	(703) 758-9660

OPERATING SYSTEMS
CP/M	
Art Wilson	(301) 774-8043
ProDOS 8 and 16	
Barry Fox	(717) 566-6709
Prlnt Shop	
Thomas O'Hagan	(301) 593-9683

SPREADSHEETS
General	
Walt Francis	(202) 966-5742
MagicCalc/SuperCalc2.0	
Leon Raesly (days; 9-5)	(301) 220-3111
Telecommunications	
Dale Smith	(301) 762-5158
Allan Levy	(301) 340-7839
TimeOut Series	
Morgan Jopling	1(301) 721-7874
Utilities:ProSel	
Barry Fox	(717) 566-6709

WORD PROCESSORS
General	
Walt Francis	(202) 966-5742
Apple Writer II	
Dianne Lorenz	(301) 530-7881
Leon Raesly (days; 9-5)	(301) 220-3111
AppleWorks GS	
Roger Burt	(301) 424-6927
A.D. (Bill) Geiger	(703) 237-3614
Andy Gavin	(703) 734-3049
Letter & Simply Perf	
Leon Raesly (days; 9-5)	(301) 220-3111
Mouse Write	
Barry Fox	(717) 566-6709
Publish-It!	
Gary Hayman	(301) 345-3230
Ray Settle	(301) 647-9192
ScreenWriter II	
Peter Combes	(301) 251-6369
Gene Carter	(202) 363-2342
Word Perfect	
James Edwards	(301) 585-3002
Henry Donahoe	(202) 298-9107
Word Star	
Art Wilson	(301) 774-8043

Apple IIGS*
Neil Laubenthal	(703) 691-1360
A.D. (Bill) Geiger	(703) 237-3614

GENERAL
Barry Fox	(717) 566-6709
IIe Upgrade	
Morgan Jopling	(301) 721-7874
APW	
Andy Gavin	(703) 734-3049
Leon Raesly (days; 9-5)	(301) 220-3111
Deluxe Paint II	
Rich Sanders	(703) 450-4371
GS BASIC	
Barry Fox	(717) 566-6709

Multiscribe GS	
Ray Settle	(301) 647-9192

TELECOMMUNICATIONS
Dale Smith	(301) 762-5158
Allan Levy	(301) 340-7839
Bob Sherman	(305) 944-2111
TCS Help	
Dale Smith	(301) 762-5158
Nancy Seferian	(202) 333-0126
Paul Schlosser	(301) 831-9166
MouseTalk	
Dale Smith	(301) 762-5158
Ray Settle	(301) 647-9192
TimeOut Series & Utilities: ProSel	
Ray Settle	(301) 647-9192
Barry Fox	(717) 566-6709
816 Paint/Writ'rs Ch.El	
Andy Gavin	(703) 734-3049
Apple II Hardware Epson printers, hard drives,	
Guy Durant	(202) 363-0366
Apple II laser printing	
Bob Sherman	1(305) 944-2111

Apple III*
General	
Jim Jutzin	(703) 790-1509
Dave Ottalini (9:00-10:30 pm)	(301) 681-6136
3 Easy Pieces	
Robert Howe	(916) 626-8198
David/Joan Jernigan (before 9 pm)	(703) 822-5137
Steve Truax	(304)-267-6429
Word Juggler	
Tom Linders	(408) 741-1001
J. Carey McGleish evenings	(313) 332-8836
Pascal	
Dr. Al Bloom	(703) 951-2025
Apple Speller	
Robert Howe	(916) 626-8198
AppleWriter	
Eric Sheard	(908) 782-6492
Stemspeller	
Steve Truax	(304)-267-6429

Beagle Buddies

MARYLAND
Ray Settle (Annapolis)	(301) 647-9192
Scott Galbraith (Frederick)	(301) 865-3035
W. T. Cook (Columbia)	(301) 995-0352
Gary Hayman (Greenbelt)	(301) 345-3230
Lee Raesly (Adelphi)	(301) 220-3113
Dan White	(301) 540-1070
Don Avery (Bethesda/DC)	(202) 362-1783

VIRGINIA
Kenneth De Vito (Alexandria)	(703) 960-0786
Neil Laubenthal	(703) 691-1360

NOVEMBER

2 Monday
7:00 PM   PI SIG .... Office

4 Wednesday
7:30 PM   Desktop Publishing SIG .... call
7:30 PM   Mac Programmers .... Office

5 Thursday
7:00 PM   Columbia Slice .... call
7:30 PM   GameSIG .... Office

9 Monday
7:00 PM   Intro to the Mac, Part 1 .... Office

11 Wednesday
7:00 PM   Telecomm SIG .... Office
7:15 PM   Databases (Mac) SIG .... CSC (Merrifield)
7:30 PM   Board of Directors Meeting .... Office

12 Thursday
7:30 PM   Stock SIG .... Office

14 Saturday
10:00 AM   Frederick Slice .... Frederick
10:00 AM   /// SIG .... Office

15 Sunday
✿   Writers' Deadline—December Issue

16 Monday
7:00 PM   Intro to the Mac, Part 2 .... Office

17 Tuesday
7 -10 PM   Intro to the Apple II GS, Part. 1

18 Wednesday
7:30 PM   *Excel* SIG .... Office
7:30 PM   Fed SIG .... call
7:30 PM   *HyperTalk* SIG .... Arlington
✿   Ad Space Deadline—December Issue

19 Thursday
7:30 PM   Ed SIG (1 week early) .... Office

21 Saturday
8:00 AM   *AppleWorks* SIG–Same as WAP meeting
9:30 AM   Annapolis Slice .... Severna Park Library
9:00 AM   WAP General Meeting–NOVA Annandale Campus

23 Monday
7:00 PM   Intro to the Mac, Part 3 .... Office
7:00 PM   IIGS SIG-NIH (Bldg 31, C Wing, 6th Fl, Conf
Rm 9)
✿   Editors' Deadline—December Issue

25 Wednesday
7:00 PM   Maintaining Your Mac .... Office

27 Friday
✿   Camera-ready Ads—December Issue

30 Monday
7:00 PM   Apple IIGS SIG–Dolly Madison Lib., McLean
7:00 PM   *QuickTime* SIG .... Office

Meeting Notices

Annapolis Slice—2nd Saturday, 9:30 AM, Severna Park Library on McKinsey Rd (off Rt. 2) in Severna Park, MD.

Apple IIGS SIG—normally the Monday after the regular WAP meeting; alternates between Dolley Madison Library in McLean (even months) and (NEW) NIH (Building 31, C Wing, 6th Floor, Conference Room 9) in Bethesda at 7:00 PM (odd months). Call Gary Hayman, (301) 345-3230, for information.

Apple III SIG—call SIG Chair for details.

AppleWorks SIG—at 8:15 AM, just prior to the regular WAP meeting and at the WAP meeting site. Call Gary Hayman (301) 345-3230.

Columbia Slice—1st Thursday, 7 PM. Call.

Databases (Macintosh) SIG—2nd Wednesday of each month (runs from 7:15 PM to about 9:45 PM); Computer Sciences Corporation, 3160 Fairview Park Drive, Merrifield, VA. Just inside the Beltway at the junction of US 50 (VA) and the Beltway.

Desktop Publishing SIG—1st Wednesday; call SIG Chair for details.

Ed SIG (Educational programs)—4th Thursday at the WAP office, 7:30 PM.

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

Fed SIG (Federal)—3rd Wednesday; alternates between Falcon Training Center, 1745 Jefferson Davis Hwy., Suite 502, Crystal City, and Apple Fed. Sys. Office, 1892 Preston White Dr., Reston, VA, 7:30 PM. Call Jim Manley, (703) 490-1034, to confirm location.

Frederick Slice—2nd Saturday; at the library at 110 East Patrick Street, Frederick, MD, 10:00 AM.

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

November

SU	M	TU	W	TH	F	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Meeting Notices

HyperCard SIG—currently dormant.

HyperTalk SIG—3rd Wednesday; at the Fairlington Community Center, 3300 South Stafford Street, Arlington, VA, 7:30 PM.

Mac Programmers—1st Wednesday; WAP office, 7:30 PM.

PI SIG (Programmer's Interface)—1st Monday, 7:00 PM (except for Monday holidays). Call Ted Meyer (703) 893-6845, for date, time and location.

QuickTime SIG—call SIG Chair for details.

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

Telecomm SIG—2nd Wednesday, WAP office, 7 PM.

ThreeSIG—Generally meets quarterly on 2nd Saturday, WAP Office, 10 AM. For exact date and time, contact SIG co-Chair Dave Ottalini at (301) 681-6136.

UltraMacros SIG—(Newly formed SIG) monthly meetings at various locations and on various dates. Call Gary Hayman (301) 345-3230 for meeting details.

WAP Garage Sale—This year's final Garage Sale will be held on December 12, 1992. Call the Pi office for time and location.

WAP General Meetings—Meetings are held the fourth Saturday of the month. We are looking for a regular meeting place with two meeting rooms; one holding around 50 people and the other around 250 people. Contact Beth Medlin at (301) 654-8060 if you know of a suitable location.

Notice: Anyone having information on changes to the WAP Calendar is requested to call the Managing Editor, Debbie Hoyt (703) 450-0714 or Beth Medlin at the WAP office, (301) 654-8060.

December

SU	M	TU	W	TH	F	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

DECEMBER

2 Wednesday
7:30 PM   Desktop Publishing SIG ....call
7:30 PM   Mac Programmers ....Office

3 Thursday
7:00 PM   Columbia Slice ....call
7:30 PM   GameSIG ....Office

7 Monday
7:00 PM   PI SIG ....Office

9 Wednesday
7:00 PM   Telecomm SIG ....Office
7:15 PM   Databases (Mac) SIG ....CSC (Merrifield)
7:30 PM   Board of Directors Meeting ....Office

10 Thursday
7:30 PM   Stock SIG ....Office

12 Saturday
✿✿   WAP Semi-Annual Garage Sale
10:00 AM   Frederick Slice ....Frederick

14 Monday
✿   Writers' Deadline—November Issue

15 Tuesday
7:30 PM   Intro to the Apple II GS, Part 1 ....Office

16 Wednesday
7:30 PM   *Excel* SIG ....Office
7:30 PM   Fed SIG ....call
7:30 PM   *HyperTalk* SIG ....Arlington

17 Thursday
7:30 PM   Ed SIG (1 week early) ....Office

19 Saturday
9:30 AM   Annapolis Slice ....Severna Park Library

21 Monday
7:30 PM   Intro to the Mac, Part 2 ....Office

22 Tuesday
7:30 PM   Intro to the Apple II GS, Part 2 ....Office
✿   Editors' Deadline—December Issue

23 Wednesday
7:30 PM   *Excel* SIG ....Office
7:30 PM   Fed SIG ....call
7:30 PM   *HyperTalk* SIG ....Arlington
✿   Ad Space Deadline—November Issue

26 Saturday
8:00 AM   *AppleWorks* SIG—No General Meeting this month

28 Monday
7:00 PM   Apple IIGS SIG Dolley Madison Library, McLean

31 Thursday
✿   Camera-ready Ads—December Issue

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

Macintosh

GENERAL
Art & Video
Nancy Seferian	(202) 333-0126

Borland Products
Doug Ferris day only	(800) 826-4768

DATABASE PROGRAMS
Fourth Dimension
Bob Pulgino	(301) 474-0634
Peter Yared	(301) 564-1560

FileMaker Pro
Tom Parrish	(301) 654-8784
Mort Greene	(703) 522-8743

Helix
Jim Barry to midnight	(703) 662-0640
Harvey Levine	(301) 299-9380

MS-File
John Spencer	(301) 730-1084
Mort Greene	(703) 522-8743

Omnis 7
Jeff Alpher to midnight	(301) 630-2036

OverVue
J.T.Tom DeMay, Jr.	(301) 461-1798
Tom Parrish	(301) 654-8784

Pro-Cite
Elizabeth Mangan	(703) 750-2710

DESKTOP PUBLISHING
General
Jay Rohr	(301) 655-0875
Freddi Galloway (V/TTY)	(410) 268-5793

ReadySetGo
Jim Graham	(301) 933-6873
Marty Milrod	(301) 464-5981
Freddi Galloway (V/TTY)	(410) 268-5793

PageMaker
Mort Greene	(703) 522-8743

Quark Xpress
Ron Mann	(202) 333-3409

GRAPHICS
General
Bill Baldridge	(301) 779-8271
Jay Rohr	(301) 655-0875

Adobe Illustrator
Ling Wong	(703) 803-9109

Canvas
Bill Baldridge	(301) 779-8271
Tom Parrish	(301) 654-8784

MacDraw
Tom Berilla	(301) 434-3256
Tom Parrish	(301) 654-8784
John Spencer	(301) 730-1084

ImageStudio
Mort Greene	(703) 522-8743

Studio/1
Jamie Kirschenbaum evenings	(703) 437-3921

SuperPaint 2.0
Mort Greene	(703) 522-8743

VideoWorks
Mort Greene	(703) 522-8743

PROGRAMMING
Ada
Harry Erwin (before 10 p.m.)	(703) 758-9660

C
Harry Erwin (before 10 p.m.)	(703) 758-9660

Fortran
Harry Erwin (before 10 p.m.)	(703) 758-9660

Inside Mac

Jon Hardis	(301) 330-1422
John Love	(703) 569-2294

Pascal
Harry Erwin (before 10 p.m.)	(703) 758-9660
Michael Hartman	(301) 445-1583

SMALLTALK-80
Harry Erwin (before 10 p.m.)	(703) 758-9660

SPREADSHEETS & CHARTS
General
David Morganstein	(301) 972-4263
Bob Pulgino	(301) 474-0634
Tom Cavanaugh	(301) 627-8889

Excel
David Morganstein	(301) 972-4263
Mark Pankin	(703) 524-0937
Jim Graham	(301) 933-6873
Dick Byrd	(703) 978-3440
Bob Pulgino	(301) 474-0634
Tom Cavanaugh	(301) 627-8889
Paula Shuck before 10pm	(301) 740-5255
Kirsten Sitnick	(301) 750-7206
Mort Greene	(703) 522-8743

WingZ
Kirsten Sitnick	(301) 750-7206

TELECOMMUNICATIONS
General
Allan Levy	(301) 340-7839

CompuServe
Michael Subelsky	(301) 949-0203

WORD PROCESSORS
Microsoft Word
Marty Milrod	(301) 464-5981
Harris Silverstone	(301) 435-3582
Tom Cavanaugh	(301) 627-8889
Freddi Galloway (V/TTY)	(410) 268-5793
Kirsten Sitnick	(301) 750-7206

ThinkTank-More
Jim Graham	(301) 933-6873
Tom Parrish	(301) 654-8784

Hebrew Word Processing
Tim Childers	(301) 997-9317
Curt Harpold	(202) 547-8272

Microsoft Works
Amy Billingsley	(301) 622-2203

WordPerfect—Mac
Curt Harpold	(202) 547-8272

MISCELLANEOUS
MacProject
Jay Lucas	(703) 751-3332
Norbert Pink	(703) 759-9243

HyperCard
Rick Chapman	(301) 989-9708

HyperTalk
John O'Reilly	(703) 204-9332

File Transfer
Mort Greene	(703) 522-8743

Backfax
Mort Greene	(703) 522-8743

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

SoundEdit
Jamie Kirschenbaum evenings	(703) 437-3921

General

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

IBM
Leon Raesly	(301) 220-3113

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

Modems-General
Allan Levy	(301) 340-7839

Hayes Smartmodem
Bernie Benson	(301) 951-5294

Practical Peripherals
Allan Levy	(301) 340-7839

Printers-General
Walt Francis	(202) 966-5742
Leon Raesly	(301) 220-3111

MX-80
Jeff Dillon	(301) 662-2070

Stat Packages
David Morganstein	(301) 972-4263

Stock Market
Robert Wood	(703) 893-9591

MS/DOS
Tom Cavanaugh	(703) 627-8889

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

Frederick Apple Core Help Line

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

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

Annapolis Slice Help Line

Area Code 410 Call in the PM unless you have an emergency.

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

Bill Waring (Severna Park)	410-647-5605	Mac,Excel

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

New Files on the TCS

by Lawrence I. Charters

The following are some of the files uploaded to the Macintosh File Transfer areas of the TeleCommunications System (TCS) during the last 30 days. This listing represent only a small portion of the constantly changing library of files available for downloading. Call the Pi Office at 301-654-8060 for information on signing on to the TCS, the Pi's "24 hour General Meeting."

File Area 13: Macintosh Fonts
STAR.TREK.FONTS: four Type 1 PostScript fonts based on the fonts used in the original Star Trek, the Star Trek movies, and Star Trek: The Next Generation.

BRAILLE.CPT: Type 1 PostScript font showing the Braille "character set." This is, obviously, of more value writing about Braille than actually writing IN Braille.

RUSSIAN.SIT: Type 1 PostScript Cyrillic font, the perfect font for writing letters to St. Cyril, or for writing resumes for former KGB informers.

File Area 14: Macintosh Games
TETRIS.MAX.1.1: yet another Tetris game, it has several interesting variations, the biggest being that you don't rotate the pieces, you "rotate" their patterns.

PHRAZECRAZE.SIT: guess the phrase one letter at a time.

GLIDER.3.0.SIT: fly a paper glider through the house and avoid all the dangers.

POPEDIT.CPT: for frustrated Prince of Persia players, this "utility" allows you to edit (and create) saved game files for any level in the dungeon, along with basically unlimited potions and maximum time of 99 minutes.

3DTICTACTOE.SIT: just what it says. Far more challenging than the regular kind.

BILLARDS.SIT: classic Macintosh program, designed to teach physics but one heck of a game.

BLACKJACK.SIT: a card game with a smart Mouth.

BLOBMGRDEMO.SIT: a small program with a large number of different games and puzzles. Despite the age (this is an *old* program) it runs fine under System 7.

BANZAI.SIT: a classic Macintosh game, it was designed as an advertisement for Silicon Beach's software.

CANFEILD.SIT: a version of solitaire.

MACLUFF.SIT: an extremely complex version of tic-tac-toe.

MISSILE.SIT: a clear, crisp, and neat adaptation of an arcade classic.

WEBSTER.SIT: Webster's revenge; match your word finding skill against the computer's.

TEXTMANGLER211: a 'nonsense processor' - input one or more text files and TM will output a mangled version of the text. Especially appropriate for the political campaign season. Written by a WAP member; shareware, $10.

FLTSIM4.EXCEL: a demonstration that shows how, using System 7 Apple Events, Microsoft Flight Simulator can be flown from Microsoft Excel. (It's nice to see these projects that span MS "business" groups.)

SIM.CITY.CPT: update your copy of Sim City to version 1.4, update the Sim City graphics (both of these files update the Sim City application), and update the Sim City Terrain Editor.

FS4FILES.CPT: several Flight Simulator 4.0 scenario files. Includes So. California airports and terrain, take-off from a bridge, flight around a hangar(?), and an inverted flight scenario.

MST3K.SIT: listing of all the Mystery Science Theatre 3000 shows from inception to present day.

File Area 15: Macintosh Graphics
QT.ARCHITECT.CP: short QuickTime movie showing plan for

a house, and then a walk-through of the plan. Has accompanying Microsoft Word document that can "play" the movie via MS Word 5.0 and the QuickTime PIM.

QT.MEMO.CPT: QuickTime movie showing an animated profit/loss chart, generic enough for use in business, government, home finance, political popularity polls. Has accompanying Microsoft Word document that can "play" the movie via MS Word 5.0 and the QuickTime PIM.

QT.SCIENCE.CPT: QuickTime movie showing an animated 3-D scientific plot of something, generic enough that you can lie and say it is anything. Has accompanying Microsoft Word document that can "play" the movie via MS Word 5.0 and the QuickTime PIM.

QT.SPACE.CPT: QuickTime movie showing space launch, Mission Control, with commentary by an astronaut. Can be played from within the included Word document using Microsoft Word 5.0 and the QuickTime PIM.

DESKTOPPPATS.CP: some really outstanding desktop patterns. To install, you must have ResEdit.

CAT.FALL.SIT: a clip of a classic motion study trying to figure out how cats land on their feet. A cat is dropped on its back from inches above a surface — and lands on its feet. Classic cat magic.

EARTHSET.JPG: 24-bit image compressed with JPEG, a space shot of the sun hitting the top of clouds at sunset — fabulous.

NASA1.JPG: 24-bit photo from NASA, compressed using JPEG. This particular photo shows an "astronaut on a stick;" a space-suited astronaut perched on the robot arm of the shuttle.

MILK.DROP.SIT: QuickTime movie showing a drop of milk falling into a pool of red liquid (red for contrast, probably). Simple, yet quite startling, due to the "slow motion" nature of the video and the sharpness of the image.

QUAYLE.GOOD.DEF: in this episode, our hero relates to us some fascinating insight imparted to him

by Bobby Knight.

QUAYLE.PAST.TO: another Quayle QuickTime movie. This one showcases a stirring speech given in 1988 (at the convention perhaps?): "Let me tell you how exciting it is, and what a thrill it is, because in 1988 we're going to decide whether to go forward to the future or past to...the...back."

EARTH.ORBITAL: QuickTime movie showing the Earth rotating "down there," obviously taken from space and accelerated a bit. I *really* like the part where the sun reflects off the ocean way, way down there.

File Area 16: HyperCard

BICYCLEGEARS: this stack lets cyclists examine existing gearing configurations and helps in designing new ones for multi-speed bicycles (up to 21 gears).

BIKINGLOG.SIT: this stack allows bikers to track their miles and other factors in HyperCard. It requires some type of bike computer to make the measurement (like an Avocet or Cateye).

GENEALOGY: this stack offers method for linking pictures and text on your family tree.

SUN.MOON.POSITI: provides sun and moon rise and set times, covering 100 years. Has a world map to show the sun and moon locations in real-time (slow) or at a fast pace.

THEFRING.CPT: this proves that *yes* ,you *can* make games that work in HyperCard.

SKIPPY20.CPT: it keeps you busy on the phone.

VOTING.CPT: comparable to Hermes' Democracy, this program was designed to cast votes over a LAN from remote machines. It keeps a log and a separate file of users.

File Area 17: Technical Notes

TIDBITS138.CPT to *TIDBITS142.SIT*: the popular on-line magazine, issues from Aug. 17, 1992 to Sept. 14, 1992.

PRIC0817.CPT: Apple Price List as of August 17, 1992.

MACQUARIUM.SIT: the ultimate upgrade for compact Macs. While this detailed set of instructions is aimed mostly at the 128K and 512K Macs, it should work fine with the Plus, SE, SE/30, Classic and Classic II.

DCBB0992.ZIP: Mike Focke's Compilation of Washington Area BBS's.

NOSTRADAMOUSE.B: Text document; recently discovered Dead Sea scroll talks about life in the CP/M, MS-DOS, Apple II, Macintosh, UNIX world. A really different use of the English language.

TIMELINE.TXT: timeline of Apple's development, from Job's & Wozniak starting out in a garage with the Apple I to January '92 product rollouts. Interesting reading for the true Apple fanatic.

STTNGLISTS.SIT: Star Trek: The Next Generation List of Lists. Word 5 file of *everything* and more that you wanted to know about ST:TNG. Episode lists, YATIs, Season 6 previews, character guide and *more*! A must have for any Trekkie!

File Area 18: Macintosh Utilities

EASY.VIEW.2.1.C: application that helps reading text files. First developed to read "Inside Macintosh. Later extended to other formats including setext (TidBITS), Info Mac and similar digests, text in "simple" format, dictionaries, and plain text Easy View will index any number of text files and give you an interface that lets you easily select files and sections of files.

UPTODATE.CPT: utility to keep multiple copies of a file on different machines updated to the most , recent version of the file. You create links between files and folders, so that UpToDate knows which files to compare and update.

WHITENOI.CPT: another wacky beep sound — this one from the movie "The Man in the White Suit" — thus the name "WhiteNoise."

DESKTOP.TEXTURE: a color (only — well, who knows if it works in b&w? It wouldn't be very interesting) utility which changes the desktop pattern to a large, complex pattern.

ARA.CCLS.SIT: AppleTalk Remote Access ships with only a limited number of modem drivers. This archive contains quite a few more. These were not written by Apple, so are not officially supported.

MINSYS.CPT: installer script to pare System 7 down to minimum.

DOS.SIT: overcome the crippling limitations of the Mac graphic interface with a command line

interface! Bring back the days of Apple DOS, TRS-DOS, CP/M, and MS-DOS! System 7 only.

SAVER1.4.CPT: tiny modular-based screen saver application. Because it is an application, it makes most sense to use this with either MultiFinder or System 7. Includes a PowerBook "wipe everything off the screen" module.

SPSVER1.0.1.SIT: update Stuffit SpaceSaver to version 1.01.

STFIT.3.02.SIT: upgrades Stuffit Deluxe 3.01 to 3.02 and Stuffit SpaceSaver 1.0 to 1.01.

PRO.PREDICT.SIT: Pro Predictor, version 2.1, a very nice shareware program for predicting the outcome of National Football League games. Tracks past years results, and other statistics.

MOVINGAVERAGES: a moving average example in Excel 3.0 format.

KIRK.YELLING: three sounds from the "This Side of Paradise" Star Trek episode in which Kirk, in an attempt to anger Spock, screams some pseudo-insulting lines. Out of context, these are quite funny.

APRCALC.SIT: an extension of the spreadsheet template described in the August WAP Journal. It attempts to calculate the APR of a series of investments.

BUSH.S.SELF.SLA: some things that Bush said in his Barbara Walters interview, though not necessarily in this order.

QUARK311.CPT: update Quark XPress 3.1 to 3.11. Includes extensive documentation (written in Quark XPress) which you *must read* before running the patch.

DAS.BLINKEN.LIG: completely worthless application does nothing but blink lights and make it look like the Mac is doing something useful. Works best in the background under System 7 or MultiFinder, especially if you are a fan of bad science fiction movies.

MACLOAD1.4.CPT: a small application used to tell you what is putting a load on your CPU time.

TELEPHONE.BOOK: clever FileMaker Pro template for creating name and address books, almost identical to the ones that normally cost $100 or so to buy.

COMET.211.SIT: Cornell University's Telnet, TN3270, Sytek or modem terminal emulator/comm program.

WINSCENSF171.CP: an SF-171 (standard government form for applying for a U.S. civil service job) done in FileMaker Pro format.

THC5.0.2TCL1.1: updates Think C 5.0 to 5.0.2 and Think Class Library 1.1 to 1.1.2.

THINK.C.5.0.3: updates the Think C compiler/editor to version 5.03.

DKSIDE3.2.SIT: latest version of modular Apple's screen saver application.

File Area 19: Apple System Software

DOCVIEWER.SIT: Apple's new Presentation vehicle for developer/other voluminous information instead of HyperCard.

EXTMANAGER1.7.S: latest version of Apple's Extension Manager.

File Area 20: Macintosh DA/INIT/CDEV

DEEP.THOUGHT.CP: puts up a neatly framed, usually hilarious, quotation every time you boot up, from a selection of 4,000 some odd quotations.

INITCDV2.SIT: control panel device allows you to selectively turn control panels and extensions (INIT's) on and off.

HLPLS1.CPT: an INIT which removes the balloon help icon from the menu bar. I find it very helpful.

CALCULATOR.II.1: really, REALLY nice replacement calculator for the Macintosh.

YACRONYMS.DA.1: handy reference guide of bulletin board acronyms and typographic conventions in desk accessory form.

SUPERCLOCK391.C: a superb menu bar clock/timer/date utility, compatible with System 6, System 7, etc. The latest version even has a special PowerBook and Portable feature: it shows an icon of a battery in the menu bar, and as the power drains, the battery drains.

USTIMEZONES.SIT: shows a map of the US with the time zones drawn, and a clock at the bottom.

KINGS.CROSS.COK: a Coke sign in Australia famous throughout the world. This AfterDark module emulates that Coke sign.

FLIPPY.CPT: After Dark screen saver module: it flips portions of the screen.

INTCALC1.1.SIT: programmable HP 16C-like calculator.

INIT.SCOPE.SIT: low-level extension/control panel diagnostic. Displays calls, traps, resource info, etc.

METBEEP.NEW.CPT: new version of Bill Baldridge's MetroBeep1 sound, as edited by Jon Slobins. This version (in both SoundEdit and System 7 formats) is akin to hearing the Metrorail bell while standing on an open Metro platform

SPDFNDER153.SIT: Speedy Finder 7 v1.5.3 is a CDEV which installs code at startup to enhance and/or customize System 7.0, 7.0.1, and 7.1 Finder. Does not modify the Finder file itself, so you can restore the original Finder by removing the CDEV and rebooting.

PRIN2PIC3.4.SIT: printer driver that previews and saves printed pages to PICT, Paint, PICS, text, scrapbook or clipboard files, or as stand-alone applications called "postcards."

File Area 27: Music and MIDI

ARCTRIV.LZH, AXK8.LZH, BARBRIAN.LZH, DECEMBER.LZH, HANGER18.LHA, HARDROCK.LZH, MOD.AXELF.LZH (from Beverly Hills Cop), MOD.COLD.LZH, MOD.INTHEAIR.LZ, MOD.MAGNETICFIE, MOD.TUBULARBELL, EXODUS.LZH (beautiful romantic theme from the movie), BITRDREG.LZH, DANCREED.LZH (from the Nutcracker ballet), HOLLIW2.LZH, JUSTADAY.LZH, KLEINE.LZH, MYSTIC.LZH, TWINPKS.LZH (theme from Twin Peaks), TAXI.LZH (theme from Taxi),

PIANOMAN.LZH (Billy Joel), MAGNUM.LZH (theme from Magnum PI), RENSTMPY.LZH (Ren & Stimpy), RRATFUZ.LZH, BOLDING.LZH (variation on the Axel F theme), FORGETYR.LZH, BARTMAN.LZH, SILLY.LZH, MAXALIVE.LZH (from Max Headroom): MOD files. MOD files are digitized music files, often containing voices and other surprises, usually created on Amiga computers, playable on the Macintosh through Sound-Trecker. Most of these files are LZH and LHA archives, so they can be decompressed by both Macs (using MacLHA) and Apple IIgs users.

File Area 28: GIF Images

JELLYFISH.GIF: nice color photograph of a jellyfish.

GIRLINGRID.GIF: unusual photo of a woman heavily modified via Photoshop, done as a demonstration of what Photoshop can do.

WORLD1.GIF: dramatic, electronic looking view of the northern hemisphere with bands of light forming the image against a dark blue/black background.

ANDREW.GIF: Andrew heads for Florida, a color photo from space.

CRANES.GIF: Beautiful picture of Japanese cranes.

ICEBERG.GIF: breathtaking photo of an iceberg.

HR.GIF: image from the weather radar system in use today.

HR1.GIF: another radar weather map image of the US.

FC1.GIF: a forecast map image from the National Weather Service.

SE1.GIF: satellite image of the Southeastern US weather.

APPLE II
BYTS AND PYCES

by Gary Hayman

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

Press Releases

This month I am going to begin with three press releases that have been hanging around my hard drive for a couple of months. They all originated at the KansasFest held in Kansas City, MO this past July. Although posted by various people, they were all furnished by our own Dale Smith.

Apple Publicly Announces Ms-DOSFst For Apple IIGS–A2 Central Summer Conference 1992 ("kansasfest"), Kansas City, MO, USA, 1992 JUL 23 (A2 ON GENIE)– Apple publicly announced today that they are working on an MS-DOS File System Translator (FST) for the Apple IIGS. Currently the FST is read-only, and the writing ability is being worked on. It is not expected

that the writing ability will be ready in time for its initial release. The MS-DOS FST is expected to ship with Apple IIGS System Software version 6.0.1.

Apple IIGS System Software 6.0.1 is a maintenance release made necessary by the Apple II Ethernet Card. When the Apple II Ethernet Card ships, expected by the end of the year, System 6.0.1 will be made available. Besides bug fixes to System 6.0, the only other major change announced in System 6.0.1 is the addition of keyboard navigation to the Apple IIGS Finder.

The MS-DOS FST will work on any MS-DOS volume that can be accessed by the Apple IIGS. Currently, the access of MS-DOS 3.5" disks is limited to 720K and 1.44M MS-DOS 3.5" disks read via an Apple SuperDrive or equivalent, connected to the Apple II SuperDrive Card (formerly known as the Apple II 3.5 Drive Card). Other known methods to access MS-DOS data on an Apple IIGS include MS-DOS formatted Syquest cartridges and MS-DOS 5.25" and 3.5" floppy disks read via an Applied Engineering Transdrive, connected to an Applied Engineering PC Transporter card.–[Posted earlier this year by LUNATIC on GEnie and supplied by Dale Smith.]

Complete Drive Management Software Now Available For The Apple IIGS!–Winter Springs, FL– Econ Technologies, Inc., announced today the upcoming release of *Uni-*

verse Master, a drive management package that is sure to become the standard for hard drive owners. *Universe Master* combines a seamless, integrated, user-friendly graphical interface with a highly sophisticated group of drive management functions, all at an attractive price. The drive management functions include: batch file copy, batch deletion, scripted file backup and restoration, file attribute modification, deleted file recovery, hierarchical and linear volume printouts, file erase and zero, damaged file system repair and recovery, bad media detection and correction, and a block level hex editor.

Universe Master breaks new ground by becoming the first major application developed exclusively for System 6.0, Apple's latest system software for the Apple IIGS. By making *Universe Master* System 6.0 specific, many new state-of-the-art enhancements were exploited to make *Universe Master* a more robust, user friendly and capable package. Such enhancements include smooth launching, increased execution speed, full support for sound events, modernized interface controls, transparent network compatibility, access to foreign file systems, and Finder extensibility allowing many *Universe Master* functions to be integrated with the Finder in future releases.

Econ Technologies will begin selling *Universe Master* on July 25 at the Apple Central Expo in Kansas City. *Universe Master* will also be available from authorized Econ dealers on

August 1, 1992. The list price for *Universe Master* is $149 with dealer pricing expected in the $90 range.

Econ Technologies came on the scene last year when it released Pegasus, the only internal SCSI hard drive available for the Apple IIGS. *Universe Master* represents the first of many exciting new software products that will be released in the following months. Econ plans on becoming a major player in the Apple II enhancement market by providing Apple II users with the type of hardware and software products that they want and need. By pumping life into the Apple II market with a proliferation of new products, Econ hopes to make the phrase "Apple II Forever!" harder to go away...–[Press Release posted by D. Paroni on GEnie and furnished by Dale Smith.]

Coming Soon!!! *AutoArc*– *AutoArc*–The transparent file compression utility for the Apple IIGS.

AutoArc works in conjunction with Apple's System software 6.0 to provide an automatic and seamless method to store data files and applications in compressed format. Compressed files and applications can be decompressed 'on-the-fly' when you are ready to use them. Utilizing state-of-the-art compression techniques, *AutoArc* achieves an average reduction ratio of 50% which means disk storage can effectively be doubled!

The *AutoArc* package consists of four components: a system INIT, a new desk accessory, a classic desk accessory and a Finder extension. These four components ensure that compressed data is accessible from within virtually all GSOS applications. Applications and/or data files can be 'manually' compressed/decompressed within the Finder simply by selecting the file's icon and choosing 'Compress' or 'Decompress' from the menu bar. Compressed applications and documents can also be launched

by double clicking their icon, just as you would launch uncompressed files.

While *AutoArc*'s compression/decompression on-the-fly capabilities are impressive, they don't end there. Any file that can be compressed can also be password protected and encrypted. This can prevent sensitive data from falling into the wrong hands or can simply keep unauthorized individuals from using applications or viewing documents. Best of all, *AutoArc* is completely compatible with the *Universe Master* (also available from Econ) backup file format so backup data can be automatically accessed within any application!

AutoArc will be available from Econ in mid-September and will list for $59.95. It will also be available from dealers at a considerable savings. Projected dealer pricing is not available at this time.–[Posted on GEnie by D. Paroni and furnished by Dale Smith.]

ProTerm Logon Macro

Helen Wallace was receiving some help from Dale Smith [GH–this seems to be Dale Smith Month] with her new communications program, *ProTerm*. She had another question which she addressed to Dale on the TCS.

[Helen] Dale, thanks for all your help with *ProTerm*. I have it up and working and now I am trying to get really sharp and use the Autolearn function to create a macro. I have been having trouble trying to automatically logon to the host system. I followed the instructions carefully. To logon to the host at CUA, I have to first get the # sign by hitting return a few times. when I try to access the logon macro, I just get the # sign repeated over and over. Can you help?

[Dale] I suspect that your logon macro needs some editing to handle the beginning when you were hitting <Return> a number of times. There is a SYnc command in the macro

language that has the primary purpose of repeatedly, at 1-second (default) or longer user specified intervals, sending a text string which may consist of just Control-M (represented by "^M"). So hit Dial to show the system list, select the CUA system to open the Edit System Parms window, then hit the [Macros] button to show the Macro window [with the system name in the title bar]. Check the beginning of macro line #1. You're looking for something that looks like : WT "..#" (where the dots may be any printable character or control characters ... generally the last three characters including the "#" as the final one). You want to find the particular command of this form that precedes a PR "text that you enter at the '#' sign^M" statement. Once you've spotted that, you can edit the macro preceding that so that it will automatically log you on. What I suspect is happening is that you hit Return a number of times to get the "#" sign, but the CUA system doesn't always respond to the same number of <Returns>, and you're supposed to keep trying until it shows but no longer than that. When you automate that process with a macro the macro has to do the same thing. Sometimes the AutoLearn just can't compute all that variability into the macro it creates, so the user has to tweak it a bit with editing–also a noisy line can make some very weird macros ;)–definite fodder for editing, too.

There are several ways you might start the macro, but maybe the easiest is to replace everything that preceded that PR "text that you enter at the '#' sign^M" statement with: PR "^M" WT 1,~1, '#' PR "text that you enter at the '#' sign^M."

This will send a <Return>, wait for either one second to elapse or the "#" sign to appear. If the one second passes, it returns to the beginning of macro line 1; if the "#" sign appears, it continues with PR "text that you

enter at the '#' sign^m" and beyond.

The SYnc command could be used here too, but I think the macro might in fact end up more complicated than necessary, so I'll leave that for your playful experimental inquisitiveness to deal with later...;) One point about my suggested macro—where I have entered just "#" in the WT statement, you might want to put whatever three-character-string the AutoLearn process stored there—it may be more unique and reduce false positive responses; but only deal with this if you find that you are in fact getting false positive responses (i.e., the macro proceeds to execute: PR "text that you enter at the '#' sign^M" when it should be returning to try to send another <Return>.) You'll have to watch the logon process to detect this if it happens; if it doesn't, you're home free ...

Unidisk And GS

Dave Harvey was inquiring about a Unidisk drive used on the IIGS.

[Dave] I have a Unidisk 3.5" drive that I want to hook up to an Apple IIGS. Can I just plug it into the back of the GS or must I use a controller card?

[Jon Thomason] You can use a Uni directly in the SmartPort with the following restrictions:
1) if an AppleDisk is used, it must come before the Uni;
2) I don't think you can follow such a mix with 5.25" drives, but I'm less sure about this. [SP–I think you can];
3) the Uni won't be as fast;
4) some copy protection and FTA stuff will fail.

Kim Sounds Off

Kim Brennen told us how he had discovered something which, if he knew it a long time ago, would have saved him some frustrating hours. He was willing to share his experiences.

[Kim] Recently I started converting some digitized sounds into rSounds (for use with the Sound Control Panel under GS System 6.0). I was using rSounder to make the conversions, but frequently the sounds I converted would not appear in the Sound Control Panel. This was very annoying because I have the Finder Sounder Extension which allows me to double click a sound and each of my conversions worked fine there.

The solution was not obvious. It turns out that my converted sounds had the same name...not the same file name, but rather the same Resource name. Editing the resource name fixed my problem.

The easiest solution for those without a resource editor is to be sure that you name the converted sound to something other than the automatic default of RawSound in rSounder.

[Thanks Kim]

That's One For The Beaver

Phil Shapiro, the Education SIG Chairman writes us, "If any WAP members need the services of an affordable, professional printing service they might want to consider Beaver Press, Inc., in the District of Columbia. I was referred to them by a friend and found their work prompt, courteous, and professional.

"When shopping around for a printer to do some work for my business, I was surprised to find that different printers could give vastly different price quotes for the same printing job. The price differential is as much as 100% from printer to printer. One of the problems is that metro area printers get a lot of business from high-flying law firms, lobbying companies, and other human automated-teller machines. So unless you track down a printer that is hungry for your business, you may end up paying the same as the big-money spenders.

"Beaver Press is located at 11

Oglethorpe St., NW, Washington, DC 20011. Phone: (202) 882-6690. Contact: Mary Burley. They print résumés, letterheads, newsletters, booklets and other similar print jobs. They also do folding, collating, stapling and everything else you'd expect from a print service. The company has a delivery van should you wish your printing to be delivered to your front door."

UN-SHRINK, UN-SHRINKING, UN-SHRUNK

The following is usually asked once a month, but it has been a while since I posted the question and response here. This time Terry Hill wants to know, and guess who answers—Dale Smith.

[Terry] Will someone please post the procedure for un-shrinking files with *Shrinkit 3.4*. I've never used compression software before and haven't the foggiest clue as to how to un-shrink. Yes, I've read the TCS Help Files but unless there's something I missed, I saw nothing there that would help. Have TCS download procedure down, but I just cannot figure out *Shrinkit*. Thanks in advance for your help.

[Dale] If you have *ShrinkIt 3.4*, the primary procedure is to follow the menus.
1 Open the file;
2 You'll see a dialog window showing a list of files. Use the buttons to navigate to the disk and directory where the file is located;
3 Select the file—with the highlight bar;
4 Hit <Return> [as the button indicates];
5 You will see another window listing the contents of the archive;
6 Select the ones you want to extract;
7 Hit Return—again as on the button;

8 Another window opens seeking where you want the files to go. Use the buttons to move into the directory where you want the files (you'll see the list of files already in it in the window) and hit <Return> to do it;

9 You're done.

PS: all the keyboard keystrokes are presented in the buttons–this is not mouse-driven.

Ronald Evry offered his help too by stating, "If *Shrinkit 3.4* is like the earlier versions, you may occasionally run into this problem: You look in your Directory for the file you've download and find nothing to unshrink! If that's the case, press Open-Apple-S to show all files and, bingo! there they are."

Ultra 4.0 Is Here

It arrived yesterday. What? Why, the long awaited Upgrade for TimeOut *UltraMacros 3.X-Ultra 4.0*.

Now don't go rushing to your local Beagle Buddy to receive this upgrade because this time Randy Brandt, its author, is offering it through his own company, JEM Software. This is fine with me because Beagle Bros has transferred the *AppleWorks* associated TimeOut series to Quality Software, and Randy deserves the profits for this new program.

Yes, I did say "new program," for *Ultra 4.0 (U4)* will not run your old *UltraMacros 3.1* (UM unless they are re-compiled in the *U4* environment and in certain instances, altered, either manually or with a convenient Converter macro program.)

Now this may cause a problem if *U4* doesn't gain wide acceptance among *UM 3.1* users or they find the program too difficult for them to use to write macros themselves. Some have offered that the program may have appeared too late in the Apple II's declining environment to gain wide-spread acceptance. Schools may not have the "trained" personnel to incorporate the program in their hundreds of thousands of platforms and use it effectively. NAUG, the National *AppleWorks* User Group, writing in their September 1992 edition of *The AppleWorks Forum*, recognizes the power of *U4* but states that it will, "...continue publishing *UltraMacros 3.X* compatible macros until January 1993, by which time we will be able to judge the impact of *Ultra 4.0*." They are not ignoring *U4* and have promised that they will be devoting much space to articles about *U4*. Many popular macro programs (in their current format) will not run under *U4* unless they are changed. Fortunately, *U4* does allow you to launch either your old ULTRA.SYSTEM and run *UltraMacros 3.X*, or launch UM4.0.SYSTEM to run *U4*–on the same *AppleWorks* disk.

Do you need *U4*? If you are an UltraMacro writer, then I would say –Yes! If you are planning to use some of the new and exciting macros written by others, I would say–Yes! Yes! However, if other writers continue to use *UM 3.1* then what you currently have would be sufficient.

In order to run *U4* you must have a IIGS, IIc, IIc+, enhanced IIe, a Laser computer, compatible with any of the above, and have at least 256K of memory. You must also have *AppleWorks* 3.0 and TimeOut *UltraMacros* 3.0 or 3.1. Warning– you can't just purchase *U4* without having all of the above. *U4* will change *AppleWorks 3.0* and *UM 3.X.*, so you must have them.

I am going to skip the installation technique, but do invite your attention to a related "woe-is-me" article from a person who has had problems. Others have also expressed problems, but most people with difficulties did not follow the published directions (which may be slightly confusing). I personally feel that installing a fresh *AppleWorks*, patched with Patcher 1.6, processed with TimeOut *UltraMacros 3.1* and then processed with *U4* will be the preferred technique. This way "small" patches that you may have been using, which originated in *AppleWorks* Companion, Companion +, and/or SuperPatch will not cause any problems.

U4 eliminates some old commands such as; <elseoff>, <id#>, <findpo>, <cls>, <call>, <clear>, ampersand commands, <getvar>, <putvar>–but replaces them with alternate commands or techniques. So if your existing macros contain these commands, they will have to be changed either by hand or with the supplied Converter macro before they can be used by *U4*. <ba-ctrl> is not supported and the <call> and <clear> command cause different actions than before. Also <dec> and <ifkey> are not supported. This is not a complete list, but it does give you some idea of the changes and the reason that many former macros can't be used "as is."

U4 now has "Compiler Labels" which allow you to define a series of commands by name and then use that name throughout the macro file. Also a macro set can be assigned a label and actually called and used from the disk. What this means is, in effect, that you can now define a short series of token actions with a label and just reference the label and the tokens will activate. Further you can call an individual macro, that you may have written, that is contained in another macro "collection" file on your disk, have it executed and then be returned to the active macros. This way, you might possibly have graphic macros in a macro file and call them when needed, without having to use up space in your current macro file.

"Dot Commands," the new feature added to *U4*, includes 45 out of a possible projected 500 macros (why that limit? I don't know) are included with *U4* and there are some 40 more expected with the upcoming Ultra

Extras disk which will be released at a later time. These are considered "external" commands that are stored in a special AW.INITS subdirectory on your *AppleWorks*. Dot commands are like little programs that are activated when you mention them. For example ".column" will give you the number of a particular column, while ".colwidth" will give you the current width of the column. ".eof" will give you the value for the last AWP line, last ADB record or last ASP row. In these particular instances, where you had to do some PEEKing with the former UM, you now only reference words.

A new feature, which will have great use, is the introduction of For-Next Loops with all the AppleSoft variables such as for X to Y, next X, and by steps–either forward or backward. And these loops can now be nested.

I mentioned before that you can now call a macro from another macro set and return to the current macro, but you can also link a macro in another set and stay there, if you desire–and even return (unlink) at a later time to the first macro set.

You can now save a current screen in memory, do some other things with later screens, and then recall the saved screen. Also, the find command allows you to do matches in either the "exact," "at the start," or "at the end."

A great time macro code saver is the new way that repeated operations are handled. Before, if you would want 67 <down>'s, you would either write "down" 67 times or create a loop with a counter that would progress 67 times. Now all you have to do is to write, "(down)67" and it is done automatically.

Annotation of your macros can be accomplished by a new technique which allows you to place "//" in the file and everything that follows on that line and that line only will be ignored.

One of the giant improvements is that you are now permitted to have 260 numerical variables (vice 26) and 100 string variables (vice 9). Further, the numerical variables can be defined in 10 arrays.

There is an automatic "caching" of your task files, which can add increased speed for your macro operations and DEBUG can be accessed and utilized by a more appropriate technique to match the permitted increase of string and numeric variables. DEBUG will show Numeric and String variables, Dot Commands, Macro Names, display Peek Values, set Trace Options, current Onerr Status, Sleep macro, pr#, number of macros defined and total macro table size. Stepping through the display is easy.
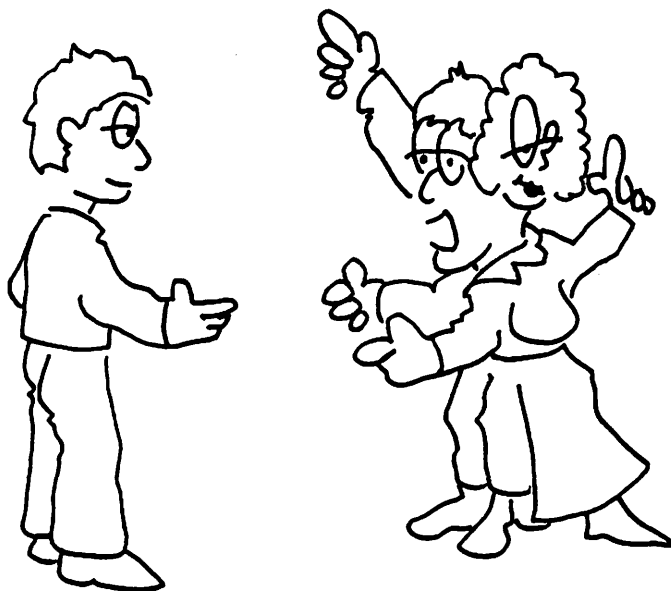
When I start using the program, I will inform you of its operations under personal testing. I haven't had the opportunity to investigate its working as yet, only to look at the manual and read some reports.

You could jump in and learn all this stuff, or you could merely sit back and let others write macros and you use them to do your bidding. If you want to get involved, investigate the new UltraMacros SIG that has formed within the Pi. We will be covering both *UM 3.1* and *U4*. Contact Gary Hayman the SIG Chairperson at 301-345-3230.

The author is currently Chairman of the AppleWorks *and Apple IIGS Special Interests Groups and is the organizer of the new UltraMacros SIG. He is published frequently in the Journal of the Washington Apple Pi. He is also a Beagle-Quality "Buddy," a Seven Hills "Partner" and a TimeWorks "Ambassador" for the WAP. Professionally, he is a Certified Hypnotherapist in private practice in McLean, Virginia and does part-time Apple II family computer application programs consulting and teaching. His latest software program, THE MAGIC FILE CABINET is presently selling internationally.*

Pi POWER

"It happened in a computer dating accident when our files got merged!" © J. B. Davison 1991

Ultra Woe-is-Me

The following is a capture from the GEnie on-line service written by Larry Elseman who received *Ultra 4.0* and "jumped right in." Read his story and realize that you should read the manual (at least the installation section) several times before attempting to install *Ultra 4.0*. Larry wasn't the only one who made mistakes, but his story is well written and entertaining so I thought that I would present it here.

"Pull up a chair and grab a box of Kleenex as I tell you the tale of "The *Ultra 4.0* Monster that ate the GS," a true story, soon to be made into a major motion picture, starring Hugh Beumont, Barbara Billingsly, Tony Dow, and Larry Elseman as the eager 'Beaver'.

"It began innocently enough sure. I placed the *Ultra 4.0* disk in the drive and booted it. Within seconds the menu screen appeared and my heart began to quicken as I anticipated the installation process. I knew that soon all would be well in GS- and *AppleWorks*land... but alas, it was not to be."

"My system locked up on me after installing the new INIT manager. But, being the brave warrior who had been through many battles (lock-ups) before, I rebooted and attempted a second try at installing the INIT... but the same thing happened again. Undaunted I moved ever onward. I rebooted and skipped the INIT installation process, assuming that it might have been successful, and attempted to install *Ultra 4.0*. I selected option #1 from the menu. Things seemed to be going smoothly. Of course I had to tell the program the pathname where it could find *AppleWorks*, but that was no big deal. Okay, that went well. Next I had to tell it where to find the TimeOut apps. Again, no big deal, and I did. But this was not Nirvana! The program kept telling me, over and over again that it could not find the TimeOut apps. directory... yet

the pathname I gave was correct! Once again, another reboot. The same process was completed again and this time... success!

"So I finally launched my new revved up *AppleWorks* with *Ultra 4.0* and messed around with it for a few moments and then decided to quit, using my BA-Q macro... the result was a locked-up *AppleWorks* that broke-out in the computer version of hives... moustext at the top of the screen. Not having any electronic Calamine lotion, I did the next best thing, what else?– Rebooted!

"Well, this went on for about 3 hours! Rebooting—> Reinstalling—> Running *AppleWorks*—> Crashing—> Rebooting, ad nauseam. I finally decided that if I was going to get anywhere I would have to install *Ultra 4.0* on a fresh copy of *AppleWorks*. So, I did. I copied a clean *AppleWorks* 3.0 onto the directory and started anew, confident that my troubles would soon be over. Little did I know that my troubles had just begun, and that soon I would be OD'ing on Tylenol to stop the pain.

"This time I could not get past the 'Can't find TO.Utilities' message during the installation process, no matter what I did. So I went investigating to see what had happened to my TimeOut apps [applications] directory. What I discovered almost put me into cardiac arrest! There in my TimeOut directory were all my files from my boot partition!!! What in the h*ll is going on?! I thought the Twilight zone only happened on TV, not on computer screens!! I thought I was seeing things. Sure, I'm 40, but I just had a new eyeglass prescription filled this spring and I thought life was 20-20... N O T ! ! ! !

"After I took a couple of shots of Jim Beam (diet Pepsi actually, but it doesn't have the same literary effect) I thought that I would just have to delete all the non-TimeOut files in the directory and everything would be okay. Wrong! I got some sort of 'damaged files, please move to a different disk' message. Damaged Files! I nearly screamed. My next move

was to give ProSel a shot at recovering the damage, but the 23 errors it repaired out of 36 was still not enough to let me delete the directory. I was facing a very serious dilemma here. I knew that the only way out of this mess now was to backup my files and re-initialize the partition. Thank God it wasn't the GS/OS boot block that was damaged or I would have had to re-format the entire drive... ugh, that was a scary thought, especially since I had to do that very same thing once before a year ago or so.

"So now I get out *Salvation Backup* and prepare to backup what I could and then re-initialize the partition and then copy the files back. But this was not my night! Backup must read the whole partition before it will give you any choices in backing up your files, so of course, guess what... when it came to those files it said something like 'damaged files, cannot continue', so another option had closed its door to me. My last choice was to manually shrink the files and copy them to 3.5" disks, but guess what?... I didn't have any extra disks. Besides, I didn't feel like this would save any time since I have copies of all my programs and data elsewhere.

"The realization hit hard. I would have to re-initialize the partition and begin the slow process of rebuilding it. And so, within a matter of moments after booting my 3.5" System.Disk, I was staring at 32 MB of clean slate. And like the first snowfall that blankets the old growth, eventually new life bursts through. So it will be with my hard drive partition. But even with the beauty of the first snowfall comes the painful realization that you have to shovel the d*mn stuff. Well, I've done the shoveling and now I hope spring is just around the corner! :)"

[GH–In fairness I would like to point out that Larry received immediate attention and the "error of his ways" and "what to do" was pointed out. He has since corrected things and is now in operation in *"Ultra 4.0* Land."]
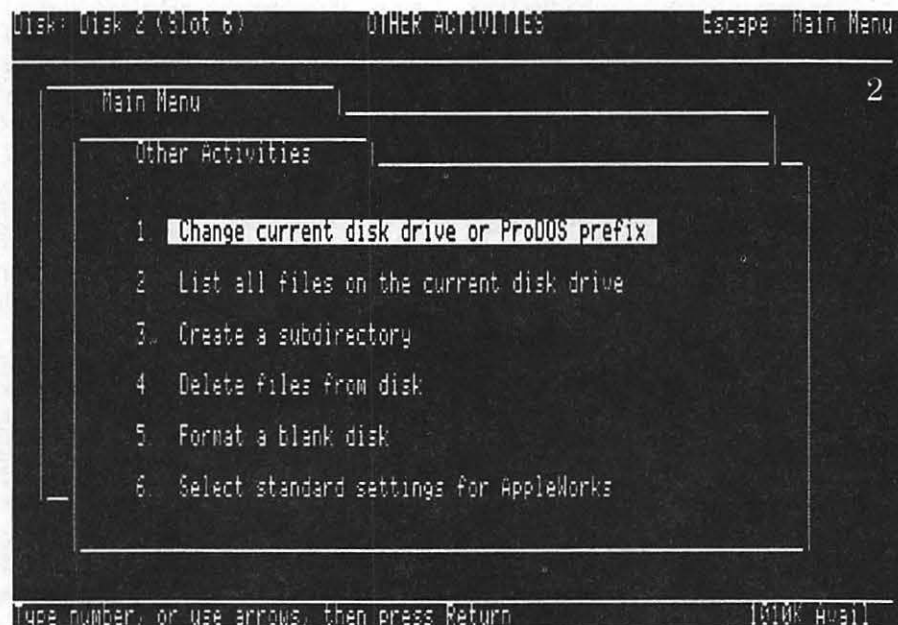
Apple II Screen Shots:
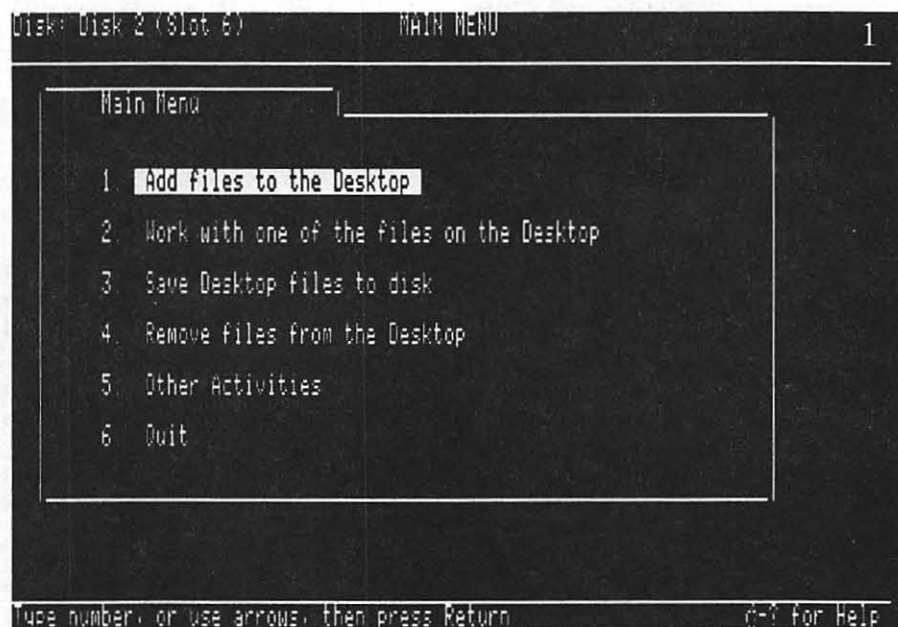# Seeing is Believing
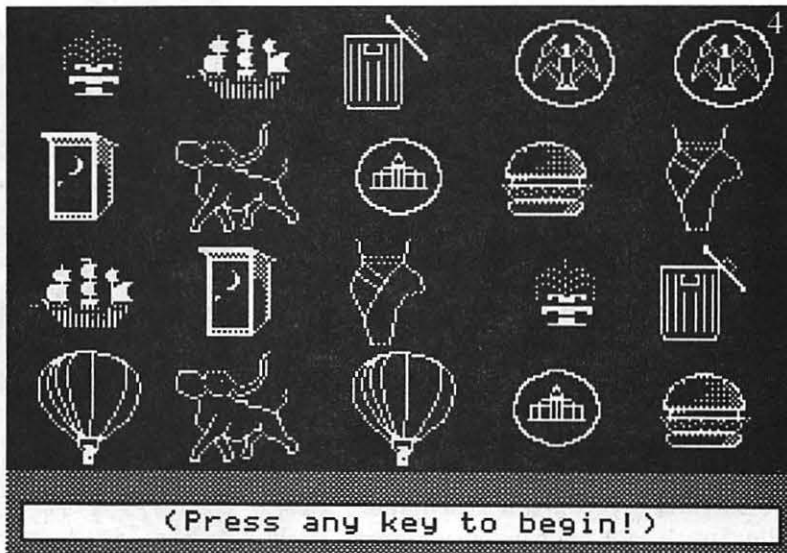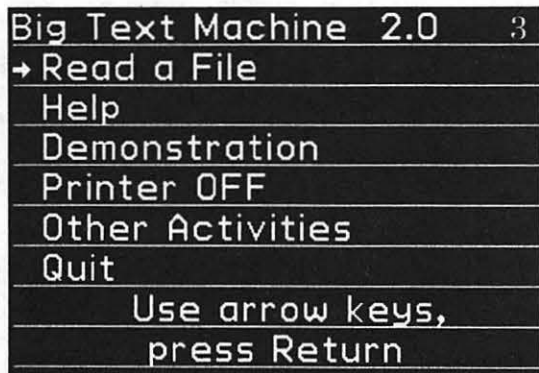
by Phil Shapiro and Bill Wydro

To celebrate Computer Learning Month, we thought it might be nice to include screen shots from several popular Apple II educational programs. If a picture is worth a thousand words, then a single screen shot from a software program should be able to replace an entire page of text in the WAP Journal. Instead of writing several pages of text about these wonderful programs, we thought we'd let the programs speak for themselves.

Should you be interested in learning more about the educational programs displayed in these screen shots we invite you to stop by the regular EdSIG (Education Special Interest Group) meetings held at the club office (in Bethesda) on the fourth Thursday of every month. Also, several of these programs have been reviewed in past issues of the WAP Journal.

If you just recently joined the club, you can locate back-issues of the WAP Journal at the club's office. A complete set of WAP Journals is kept on a shelf in the club's hard copy library. It's helpful to know that the office has a photocopier available for use by members, too.

Some of you may be wondering how these Apple II screen shots were made. The screens were captured on a Mac LC. The Apple II software was booted using the LC's IIe card. After booting the Apple II

Big Text Machine 2.0   3
→ Read a File
Help
Demonstration
Printer OFF
Other Activities
Quit
     Use arrow keys,
       press Return

(Press any key to begin!) 4

Home Keys Practice 5

Use your left index finger
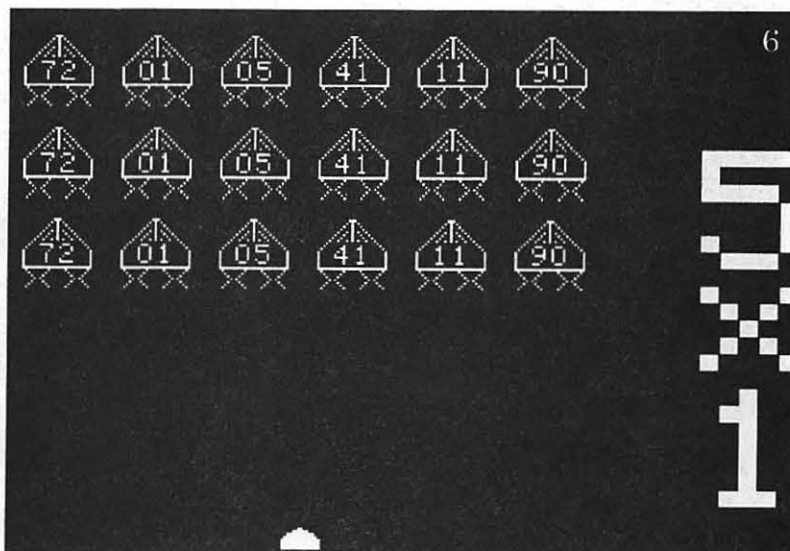to press the F key.

6

software, the technique to capture an Apple II screen in Macintosh format is to press the three key combination: Command-Shift-3. (Apple II users might take note that the Macintosh <command> key is identical to the Apple II <Open Apple> key.)

Regardless of what is happening on the Apple II screen, a Macintosh dialogue box will jump up onto the screen. The dialogue box asks you to give a file name for the screen you're saving. Because this dialogue box is a Macintosh (rather than Apple II) dialogue box, you can give a file name of up to 32 characters. (Apple II's *ProDOS*, on the other hand, limits file names to 15 characters.)

After you type in a file name and press return, you're shown the regular Macintosh save screen. At this point you can choose where to place the screen file on the Mac hard drive. Or perhaps you might want to save the screen right onto a formatted Mac floppy disk. It's helpful to know that the average Apple II screen takes up about 15 to 20K on a Macintosh disk. So you can safely fit about 40 Apple II screens on an 800K Mac disk.

When using the IIe card on the Mac LC, you need to know how to get into the IIe control panel. Apple IIGS fans will be familiar with the key combination to get into the control panel: Apple-Control-Escape. However, on the Mac LC both the <Control> key and the <Escape> key positions on the keyboard are elsewhere. The <Control> key has moved south from its location on the Apple II keyboard. On the Mac LC keyboard you can find it in the lower lefthand corner. The <Escape> key seems to have escaped altogether from its previous location and can be
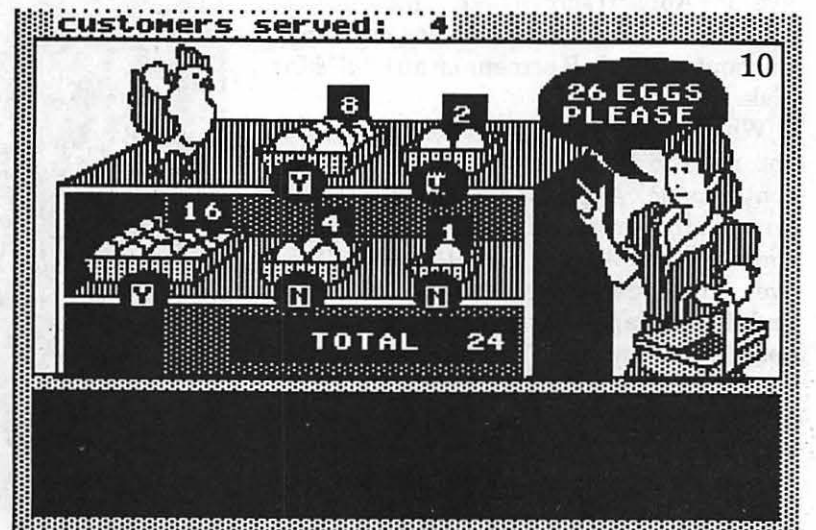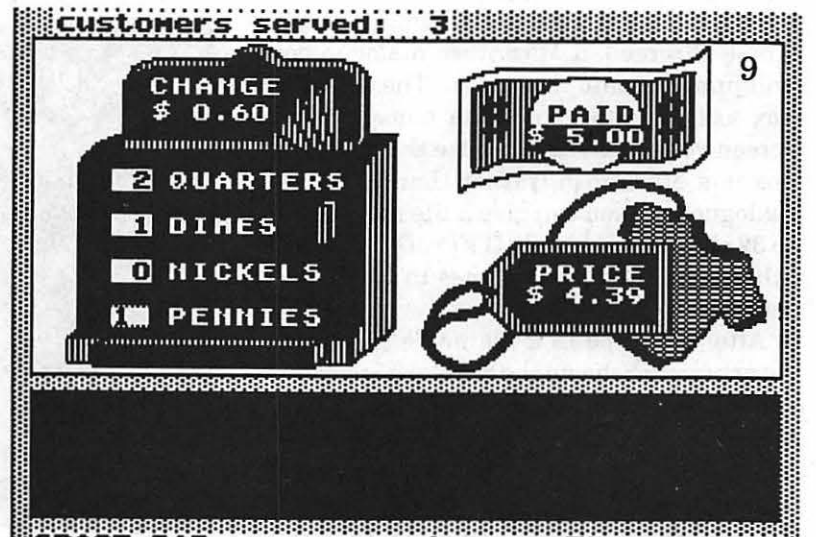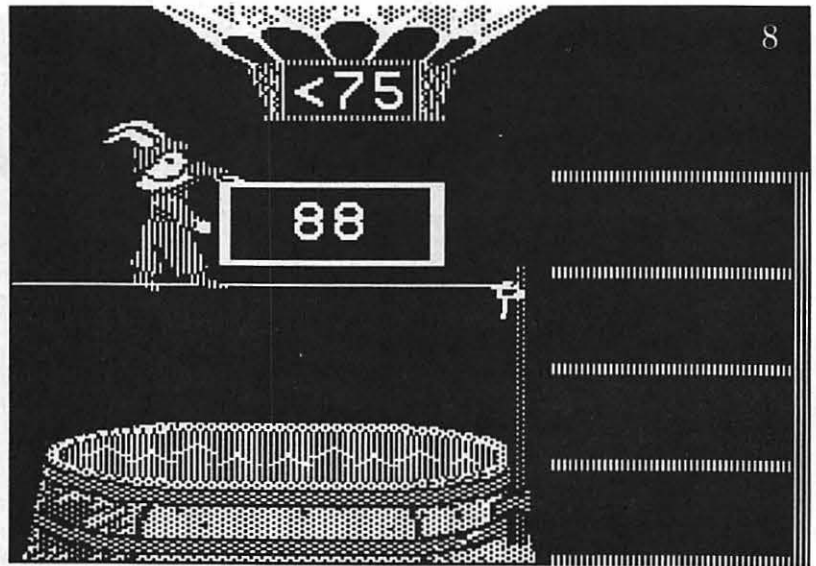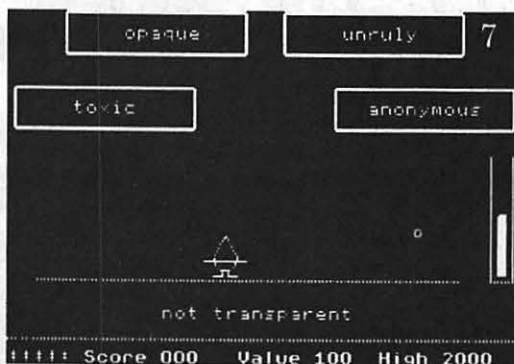
found immediately to the right of the space bar.

After you've finished doing your Apple II screen saves, you'll likely want to return to the Mac LC's desktop. To do so, go to the IIe control panel, and then choose the <Quit> option.

When the Apple II screens are saved in Macintosh format, they show up as TeachText files on the Macintosh desktop. Theoretically, you should be able to double-click on these icons and have the Apple II screen pop up onto your Macintosh screen. But doing so gives you the message: "Unable to open this TeachText file."

Fortunately you can still import these files into a Mac page layout program, such as *PageMaker*. Once in *PageMaker*, you can scale down the dimensions of the screen shot. Very rarely will you want to print a screen shot in its full, original size. *PageMaker* does an excellent job of scaling down the Apple II screens without distorting the graphics in any serious way.

What else can you do with these Apple II screens, you might ask. Well, it's possible to import them into a Mac *HyperCard* stack. Doing so requires a little maneuvering, though. *HyperCard* does not recognize the graphic file format of these Apple II screens, so you'll need to load them into a Mac paint program, such as *SuperPaint*, and then save them in a different graphics format. A standard Mac graphics file format is "*MacPaint* format."

One small caveat, though. When you import an Apple II screen into Mac *HyperCard*, the bottom seventh of the

screen is lost. The reason for this is the differing aspect ratios of the Apple II and Macintosh screens. Depending on the project you're working on, this may or may not be a problem. As usual, there is probably some nifty workaround solution for crafty, imaginative people to figure out.
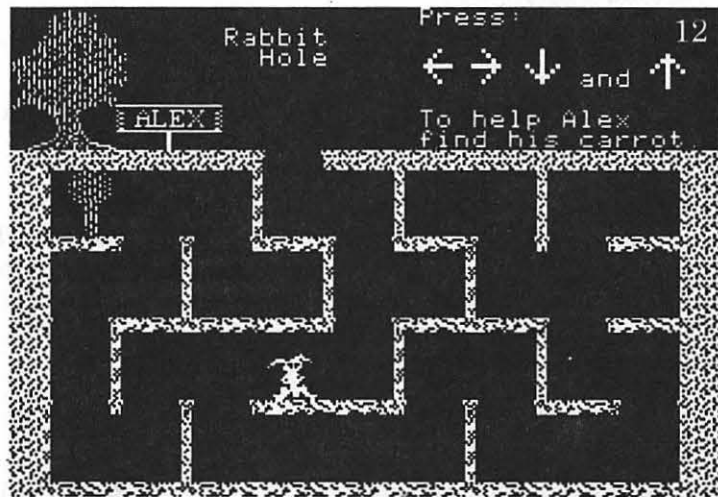
[Bill Wydro serves on the Board of Directors of the Washington Apple Pi and is an active supporter of EdSIG. Phil Shapiro serves as the chairperson of WAP's EdSIG. Both of their phone numbers are listed on page 4 of the WAP Journal.]

[These screens were captured on a Mac·LC running System 7.0]

But, What Are the Names of the Programs?

Each screen shot is identified by a number in its upper right hand corner. These numbers correspond to the program names listed below:

1   AppleWorks Main Menu
2   AppleWorks Other Activities
3   Big Text Machine Menu
4   Compuration 1
5   Keyboarding
6   Math Invaders
7   Word Attack 1
8   Math Rabbit
9   Math Shop 1
10 Math Shop 2
11 Numbermunchers
12 Rabbit Maze
13 Think Quick 2

Level: 1   Multiples of 2   11

Score: 25

Rabbit Hole   Press: ← → ↓ and ↑   12
To help Alex find his carrot
ALEX

The Learning Company 13
by Leslie Grimm and Sid Weber
Press SPACE BAR
©1987 THE LEARNING COMPANY   V1.2

Apple II Walkabout

by Seth Mize,
WAP Contributing Editor

Once Upon A Time
In a castle in Boston town, there came a great multitude of apple friends. They listened in wonderment to wise men who foretold of the day when apples and oranges would grow from the same tree.

Great Events Unfold
In secret meetings throughout the town, tradesmen and magicians counted their chickens before they hatched.

Magical Lights and Sounds
Vagabonds sang of new cards that made moving pictures and loud sounds.

Laptop Magical Boxes
Hidden in dim rooms, small grey boxes were seen to change into small blue boxes.

Invisible Pigeons Deliver News
Grand dinners were held by the great trainers and their loyal supporters. Magical routes of new design were announced.

No Sleep Was Had
Until the end of the third day, few dared to close their eyes, for fear of missing a great event.

Jesters Entertained All
Throughout it all, fun and frolic prevailed. Gifts were given at every corner.

Unknown Wonders Revealed
Tradesmen displayed their new games and other wares. To be released "real soon now." Most tables were bare by the final day.

The Boston "Castle" located at Arlington and Columbus Avenues was the site of Apple Expo East held on October 2, 3 and 4.

A factual account of what transpired will be in next month's Journal.

Geography Lesson
The geographical center of Boston is in Roxbury. Due north of the center we find the South End. This is not to be confused with South Boston which lies directly east from the South End. North of the South End is East Boston and southwest of East Boston is the North End.

Bug Joke

A mosquito was heard to complain

That a chemist had poisoned his brain

The cause of his sorrow

Was para-dichlorodiphenyl-trichloroethane.

[Seth Mize is a IIGS owner with a basement full of Apple III's and an Apple II Plus. He is related to a Mac SE/30 owner. He is one of our Apple II Editors and is the Annapolis Slice Apple II Programs Chairman]

September Apple II Meeting

by Lorin Evans

A wonderful reissue was the object of interest at the September Apple II meeting. Beagle Brothers, the folks who bring you *Platinum Paint*, the *AppleWorks* TimeOut series and other neat things has released a word processor for the II series called *BeagleWrite* and *BeagleWrite GS*.

Those of you who have been in the word processing business for a while will recognize the genesis of these programs. They were originally created by StyleWare and called *MultiScribe* and *MultiScribe GS*. This rebirth and update brings back fond memories for me because *Multiscribe GS* was the first program I got for my IIGS, and the first I managed to erase while making a back-up copy on my one 3.5" drive. I am sure the program is no more forgiving of such errors now than it was then, while I have gone on to more creative foolishness.

BeagleWrite brings the world of pull down menus, menu bar, dialog boxes and the option of mouse control. Unlike the GS version, IIc and IIe owners can access the menu bar through the Escape and arrow keys. There is a keyboard equivalent for every command. Thus, while a mouse makes accessing the features easier and faster, it is not essential. You get built-in fonts, changeable styles and font sizes and, via the font editor, the ability to customize existing fonts or to create new ones. You can import any word processor file that has been saved in ASCII format. And there is a built-in 50,000 word spelling dictionary.

Like the rich folks, *BeagleWrite* allows you to see on the screen the size and shape of the characters that will be printed. However, the justification (left, right, and center) can only be viewed in the print-preview mode. With the addition of *BeagleWrite Picture Manager,* you can add graphics to your document. You can directly import a graphic from any Apple II paint/draw program and a conversion utility on the disk allows you to import any *Newsroom* or *PrintShop* graphics.

The GS version of the program is a full 16-bit word processor, with a limited draw program built-in. You can read *AppleWorks* files directly into *BeagleWrite GS*. In addition graphics can be imported reshaped and trimmed to fit perfectly within the text. Through add-ons such as *Pointless* by Westcode Software, *Independence* by Seven Hills, and *Harmony* by Vitesse, you can use TrueType fonts and print to inkjet or laser printers. Not bad performance for an "obsolete" computer.

The GS version was demonstrated by David and Joan Jernigan. They have recently moved to a IIGS, complete with hard drive from their much beloved and still owned III. Several machines were available to attendees for hands-on experience as the program progressed. Grace Gallager surveyed the IIc/e version. It is to be noted that *BeagleWrite* requires an enhanced IIe with at least 128K of memory.

Beagle Brothers Apple software is now distributed by Quality Computers. They are offering a special package price of $68.95 for *BeagleWrite, BeagleWrite Desk Accessories*, and *Picture Manager. BeagleWrite GS* is $59.95.

After the presentation, there was a discussion of the tutorial on HyperStudio to be held Sunday, October 18 at 6:30 PM at the Pi office. Frank Harris will teach the creation of interactive stacks with this hypermedia program. If you are interested in attending, please call Beth at the office to reserve a space. There will be no charge for the program. To get the most out of this session, you should bring your GS and *HyperStudio 3.1* (or arrange to share a machine).

The morning concluded with a preview and demonstration of *VIAD* the new ShareWare game from Ken Mock. *VIAD* (Vocabulary In Any Direction) is quite similar to Columns except letters fall rather than colored blocks and your job is to form words in English to make the letters go away. The Pi will feature all of Ken Mock's games at our booth at Apple Expo East in Boston. We've been given a complete set of his GS software to sell at Expo East because so many of us who enjoy his games have paid the ShareWare fee thus helping to maintain his interest in writing for the IIGS. Look for additional information on the availability of Ken's games elsewhere in this Journal.

On the Trail of the Apple III

by David Ottalini
Apple III SIG Co-Chairman

I've been working on a number of Public Domain (PD) disk projects these past couple of months but have nothing to report at the present time for you (vacations and kids always seem to get in the way). Along with *StemWriter* and *Write On! III*, I can promise you a couple of new telecommunication programs which are in the works, a new utility to test disk speed, another Pascal contributions disk, and even more Dr. Al Bloom disks.

I'm also starting to work on a project for John Ruffatto to put all the ReadMe (or similar) files from our PD disks onto one 800K disk, so that it can be used to develop a new Apple III PD Disk (hard copy) catalog. As I can, I'll also update these disks with the new *Menu.Maker* and associated files so that the programs are "modernized" as much as possible.

Transferring Files

As you might guess, a hot topic these days is how to transfer data from our Apple III to another computer. Just such a question came up on CompuServe recently.

[Question] I have an Apple III and a whole lot of Apple Writer III text files that I want to convert over to MS-DOS Does anyone out there know a simple method for this? Please reply as soon as possible.

[Answer–from On Three's Bob Consorti] There are two ways. If you had an 800K 3.5" drive on your Apple III, simply copy the files to the 3.5" disk. Take them to a Mac with a SuperDrive and use Apple File Exchange (AFE) or the newer ProDOS INIT that will also recognize the Apple III SOS disks. Use the Finder to copy the files to an MS-DOS disk. If you don't have a Mac or a 3.5" drive for your III, you will have to either directly connect the Apple III and PC via the III's RS-232 port and the Mac's comm port or through two modems. Next, on the Apple III end you'll need a package like my *Communications Manager* that will transfer the files for you. On the PC side you will need any communications program to receive the files.

[from MAUGer Bill Arnold] Years ago when my III was brand new I transferred all my Electric Pencil files from my SOL-20 to *AppleWriter III*. I just had capture text turned on on the Apple III. I have transferred files that way a number of times since.

I recently transferred a ton of *Three Easy Pieces/AppleWorks* files for a relative. He needed the final files in MSDOS *Word Perfect 5.0* format. It went very smoothly. My Apple IIe is attached to my Macintosh with an Appletalk IIe card. I copied all the files onto the Mac's hard disk using System 7.0 filesharing, and then I did the translation with *ClarisWorks*. *ClarisWorks* lets you import the *AppleWorks* file then save it out as WP DOS 5.0. Next, I just used Apple File Exchange to copy the converted files to a 3.5 MSDOS disk.

I think people get confused at times. Just for the record, you do *not* need a SuperDrive in your Macintosh to read and write ProDOS disks. A standard 800K Macintosh drive with AFE works just fine.

[from Bob again] The latest ProDOS INIT does not require that you have the IIe card in order to access SOS/PRODOS disks from the Mac Finder. To get the files to a PC disk, you do need a SuperDrive or an Apple 3.5 800K drive attached to the Rapport, a device that plugs into the disk drive port and allows regular Mac 800K drives to write in the PC style disk format.

[from III's Company's Ed Gooding] Text files in the III world have each line terminated by a Carriage Return (CR). Text files in the MS-DOS world like to have their lines terminated by a CR and Line Feed (LF). You can do this in *AppleWriter* before you do your transfers by doing a global scan and replace:
CONTROL-F <><>CONTROL-J<A

This finds each occurrence of a CR and changes it to a CR-LF. Then you can transfer your files via direct connect, modem, or through a Mac and you will be in business. If you have imbedded AW commands for print formatting, etc., you would be better off to remove them before the transfer. You can set up a WPL program to scan each file for .LM's, etc. and remove them automatically.

SuperDrive Project

I'm happy to report some progress with our SuperDrive driver project. In mid September, Dave Jernigan reported that, "Bob Consorti has the new (Apple II controller) card working on the III in the 800K drive mode but is not happy with the speed. He needs Tech data from Apple and Apple has not been forthcoming (what else is new). I'm hoping Lorin's contact can get Bob the info he needs. Once Bob gets the real 1.4 MB drive from us/Apple, he'll continue development.

"I hope that by the time you read this, we'll really have some good news about the driver. I want to thank the Jernigans for really pushing this project and our esteemed President, Loren Evans, for helping us obtain the hardware Bob needed to complete the project.

"Looking ahead, I've asked Bob Consorti what it would take to write a driver for the Quickie scanner, and adapt either *Draw On Three* or *Graphics Manager* to accept graphics scanned from the Quickie. If the price is reasonable, I think this may well be another project we can pursue. Any other ideas? I'm very open to any you might have. Please let me know what you are interested in.

"Frankly, the only way we will be able to get new software for our III in the future will be to contract for it. If it can help us to continue getting some additional use out of our SARA's then I think it's worth the effort and cost. What do you say???"

Steve Truax Hits The Jackpot

What is that old saying, "If you keep your eyes open, someone will sell an Apple III?" OK... so it's not an old saying but III SIGer Steve Truax had his eyes wide open when he took advantage of a great Apple III sale recently.

[Steve] I visited Mr. Griffin and Mr. Crossley this weekend looking for a Profile and color monitor but they made me an offer I couldn't refuse and I drove back to West Virginia with their entire stock—three systems (including two Profiles, a 10 MB Corvus, an Epson printer, and several boxes of software and manuals) and a lot of interesting odds and ends. I now have several things that I've never had before, and the only problem is finding places for it all!

I've seen more Apple III's and software on the market again recently and there's also been a good selection at the recent Garage Sales. So keep your eyes open. You never know what you might find. You can never have enough III's (unless your wife says otherwise!!).

512K Upgrades

They are available again from On Three—while they last. Dave Jernigan reports, "I talked with Bob Consorti awhile back about the 512K upgrades. He has about a dozen boards which were originally rejects. He is trying to turn them into working copies. I asked about a new run and he said it could be done but he would need a backer to put up the front money (thousands and thousands).

"If you're interested in upgrading to 512K (and I can highly recommend it), give Bob a call at (312)-338-2202 for more information."

Paul Campbell

Our column wouldn't be complete without some comments from Detroit. On the TCS recently, Paul commented about my reports that Frank Freeman was interested in working to upgrade our SARA: "In regard to the plans that Frank Freeman has, I agree completely with his ideas. Replacing the internal floppy drive with a 3.5 inch model makes sense, just look at the possibilities:1) Running programs larger than 140K without swapping disks; 2) Word processors AND dictionaries on the same disk; 3) WAP graphics disks can have *Menu.Maker* 6.1 and about 40 super hires fotofiles on a single 800K floppy; 4) two half-height 3.5 drives can be internal, or the ultimate Apple III: a 512K system running under Selector III with background desk accessories, two 1/4 height 3.5 drives, and an internal hard drive running off a controller card in slot 4!! With the space available where the old drive was, there are lots of potential configurations.

I understand Frank's need for source code. The search for .D1 is initiated by the Apple III's startup ROM, and although the device drivers for everything else are found in the SOS.DRIVER file, the drivers for .D1-.D4 are contained in SOS.KERNEL. As far as additional memory is concerned, 512K is more than enough for the present applications and will allow spreadsheet sizes that are much larger than the average IBM can handle. Unless running with a large chunk of RAM devoted to a ramdisk, I have never run out of memory.

The new processor will bring about an interesting situation. Most people "in the know" understand that MS-DOS is on the way out, UNIX will be one of the operating systems moving to the forefront of technology.

On the SOS front, I've been working with our friends at ATUNC to try and get Apple to release SOS into the Public Domain. Their answer? No—because the Macintosh OS was based on SOS, and they don't want to release it. Amazing that Apple still cares about *something* related to our III, even when it bares no relationship to the MAC OS of today. Stay tuned. We're still working on this.

Finally

I maintain a large library of Apple III program disks. If you have a program that crashes (and shame, shame, you don't have a backup), give me a call. I can likely help.

An Open Letter To John C. Dvorak

Dear Mr. Dvorak:

I'm writing to say that I enjoyed your "What Ever Happened To..." article about the Apple III in the July Tech Section of Computer Shopper.

But I would like to contribute some of my own comments to your column, as well as clear up some inconsistencies. Basically, I just want to bring you up to date about what's happening with the Apple III in 1992.

I have no real arguments with your history of the III. Apple made major mistakes by thinking the Apple II was on its way out and that the III would be its replacement. Bottom line here was that as a very young company intent on building its first product, Apple Computer didn't bother to do any real marketing or find out what its customers and dealers thought. They decided to design a product without any research.

SARA was rushed into its introduction at the National Computer Conference in May 1980 before all the bugs were worked out. Everyone wanted to see the III and its introduction was a huge success (helped along with free tickets to Disneyland). But Apple soon discovered that it had, in effect, a vaporware product that was not ready for production.

Steve Jobs refused to let designer Wendell Sander put a fan in the III. That meant the case had to be designed, in effect, as a giant heat sink, cast by a company that made engine blocks somewhere in the midwest. VLSI (Very Large Scale Integration) was unknown at that time and the III's motherboard has got a lot of chips on it. That resulted in lots of heat, something not even the III's die-cast frame deals with well. Add poor manufacturing to start (as you mentioned) and that spelled major troubles and a loss of valuable time to the competition.

I frankly don't think you gave Apple enough credit for replacing every single defective mother board in that initial run of 14,000. I don't know of any other company that would have done that. IBM certainly would not. I also think you give too much weight to the detachable keyboard and it's contribution to the III's problems. It would have been nice, but most IIIers don't miss it that much.

You touched on the real issues in your column: the IBM PC and Apple's own marketing problems. For example, Lotus 1-2-3 was being developed on the III but dropped when the PC was introduced. Why didn't Apple work with Lotus to make sure that killer program was finished for the III? As for marketing, Apple neglected to sell the III to its own sales force. They knew little about it and less about how to operate it. Don Williams finally brought them all together into a room and made each salesman put together his own III to force the issue.

Further, Apple did not support its dealers like it should have. The III was the most powerful personal computer on the market when it was introduced. But its operating system was so flex-ible that it could be confusing to use. Apple provided plenty of written materials, but little real training so that dealers could themselves feel comfortable selling SARA and setting her up properly for customers who wanted to purchase turnkey systems. When I bought my new III+ in fact, I knew more about how to operate it than the saleswoman did.

As for SOS, it is, in fact, a powerful assembly language program written and assembled using Pascal. It is not a P-Code program or a DOS-like shell. You mentioned that SOS used a menu system that turned out to cause more problems than it solved. What I think you mean is that the early versions of programs like System Utilities (which was written in Pascal 1.0) quit to the Pascal command line but could not actually "quit."

SOS itself had nothing to do with that. Later versions of Pascal-based programs simply quit to a "Reboot" message on screen (the Pascal Menu being an option). Unfortunately, Apple did not (as it did with ProDOS) include a way to get to another program after quitting except by physi-cally rebooting with another disk in the internal disk drive. That was taken care of by Quark's excellent hard disk management system-catalyst and later, *Selector III*. They both allow users to load all their programs on a hard disk and then select them from a menu. Once finished, the user can return to the menu and continue working without having to reboot.

SOS remains one of the most powerful oper-ating systems ever written for an 8 bit computer. Apple thought so much of it that they rewrote it into ProDOS for the IIe and ProDOS 16/GS-OS for the IIGS. Files are completely transferable between those machines.

The Lisa Operating System drew heavily on SOS and Apple just recently refused to place SOS into the public domain because "The Macintosh Operating System was developed from SOS." Frankly, SOS still provides more flexibility than any of the versions of ProDOS. Its unique bank switching technology allows use of up to 512K of memory (which many IIIers have installed thanks to a third party vendor which is still available.) It allows complete control of all devices by pathname or device name, something few other computers can do. It uses interrupts that make possible background utility programs like On Three's *Desktop Manager* which, unlike on the II, can be used from within any program at any time.

Had Apple designed the III motherboard better, it could make use of almost any Apple II peripheral card on the market. The case/motherboard is simply too small to accept some cards. But for those that are small enough, all that's needed is a device driver to access them. Today, IIIers routinely use 800K (and soon 1.4MB) drives, mice and trackballs, SCSI hard disks, 9600 baud modems, laser printers and more.

One thing Apple did get right was the III's keyboard. It is still the best keyboard available for any Apple computer. Period.

Apple did make a major mistake by not up-grading SARA's emulation mode. Interesting isn't it that Apple believed the III would succeed the II, yet cripple it by not providing a 100% upgrade path. Apple never did provide more than a 48K II+ emulation, even for its final III+ machines. It was left up to another third party vendor, Titan Technologies, to develop first a single card to allow up to 128K for II+ programs and later, a 128K IIe emulation using two cards. Those cards are still available today and com-bined with a 65c02 CPU replacement on the III's motherboard allows the use of any Apple IIe program, including *Publish It! 4, the New Print Shop*, etc. The RAM on the Titan cards is avail-able as a RAM disk in III native mode.
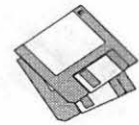
Software continues to be written and sold commercially for the III and there are active III user groups on both coasts. In fact, in Detroit, we have a member who sells III's to lawyers and other professionals and regularly delights in running rings around MS DOS machines with his 12 year old orphan.

Was the III the wrong machine at the wrong time? Apple did not do its research, failed to have a real vision for the III in light of competing demands made by the Lisa and Mac lines, rushed the machine into production and had to waste a great deal of time making good on damaged goods. Apple could have simply improved the II's hardware while providing ProDOS as an up-graded Operating System. Instead they decided to bring out a more powerful machine that came *this* close to being the right machine at the right time. I think it was simply inexperience that pushed things the other way.

You must know Mr. Dvorak, that by the time production on our SARA ended, Apple actually had a winner on its hands. All the bugs were gone and the machine worked like a champ. And the III was turning a profit. But the computer world had by that point bypassed SARA. Those of us still using her don't care, though, because we still know what a great machine we have. It can still do many of the basics we need done. Maybe not as fancy as the Mac or a PC with Windows. But then, we can get along just fine with 256 or 512K and a 5MB hard disk. Our software has been elegantly written to get the most out of a small amount of memory and doesn't cost all that much either. We have a tremendous Public Do-main software library from which to draw as well.

There are many of us, Mr. Dvorak, who still serve proudly aboard the Good Ship Apple III. If you need a picture, just let us know!

Sincerely:
David Ottalini
WAP III SIG Co-Chairman

Macintosh Disk Library:
New Disks - Phase Two

by Dave Weikert

There are 16 disks this month; all are the result of the Mac Disketeria Reorganization. See the individual headings for the list of revised and new disks. We also revised Mac Disk #00.01, the Mac Catalog list of files. Descriptions of the revised and new files are included below.

Disketeria Reorganization

We are continuing with the reorganization of the Mac Disketeria. When finished, it will include two libraries; a current library that will be available at meetings and at the office and an archive library which may only be ordered through the office. The current library will have programs from 1989 and later. The archive library will include older files and some recent files with limited demand. The new Disketeria Catalog will include program notes for the current library only; if space permits we will also list the folders or primary files for the disks that are archived. We will maintain a notebook in the office with the full descriptions of folders and files for all the archived disks. You will also be able to order a copy by phone or mail. Although I hoped to complete the Disketeria reorganization and new Disketeria Catalog by early fall; it looks as if it may now be more appropriate as a Christmas present.

System Utilities

After the Disketeria reorganization, Disk series 16.XX now extends through Mac Disk #16.16D. The first 10 disks include files previously issued. Mac Disks #16.11D through #16.16D include new and revised files as of September 1992. Descriptions of the new files are included below.

The Best of the Pi series

We previously revised our "The Best of the Pi" series of 10 disks to showcase our Macintosh library at the recent MacWorld Expo in Boston in August and the AppleFest show in Boston this month. This series has the most popular and useful programs from our extensive Mac Disketeria for your use and enjoyment.

The programs in this series are an eclectic mixture; some are "oldies" that have withstood the test of time and others are newer than System 7.0. Most will work with all of Apple's recent System Software releases and any Mac Plus or later. A few will operate only when run in conjunction with System 6.0.7 or earlier. A few others are System 7.X specific; they are designed to work with or take advantage of the features of Apple's newest System.

Mac disks #25.01A through #25.10A include approximately 17 Megabyte of material. (Just a minute folks, how can the Disketeria get over 20 disks worth of stuff on 10 disks? Answer—Compactor Pro was used to compress the files.) Think of the value—the equivalent of two disks for one.

The Best of the Pi series is available in two configurations, a complete set consisting of 10 disks for $35 and an update set which includes 5 disks for $17.50. The update set, Mac disks #25.06A through #25.10, is for members who purchased the Best of the Pi series in the past year and now want the latest collection. The update set includes all the revisions of programs previously issued as well as new programs.

DISK #00.01 — C 1
THE MAC CATALOG

Catalog.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 #16.01D — SU 1
SYSTEM UTILITIES

ADB Reset *f*: **ADB Reset** and **ADB Reset FKEY**: By Duane Kanz. Resets your keyboard and mouse to their pre-startup state. ADB Reset Instructions is in text format. *Shareware – a postcard of your home town.*
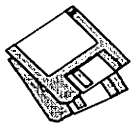
Alias Assassin 1.1 *f*: **Alias Assassin 1.1**: By Bill Monk. Deletes any alias when the parent document is trashed and the trash is emptied. Requires System 7 or later.

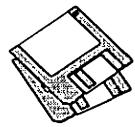Alias Finder 1.0 *f*: **Alias Finder**: By Patrick C. Beard. Locates the original file of an alias when the alias file is

dropped onto the Alias Finder icon. **About Alias Finder** is in text format. For System 7 and later.

Alias Maker 7.0: By James. H. Moore. Makes aliases of all applications on the startup disk and places them in a folder. You may then launch applications from this folder or move the aliases to the Apple Menu folder. For System 7 and later.

AliasThis! 2.0 b2 f: **AliasThis!**: By Bruce Oberg and Gordon Sheridan. Drop a file on AliasThis! and it will create an alias to it in your Apple Menu. **AliasThis ReadMe** is in text format. For System 7 and later.

Anonymity: By Anonymous. Removes a program's owner's name from the opening menu of some applications. Run only on copies of applications.

Anti-Finder 1.0.1 f: **Anti-Finder**: By Morpheus Systems. A small application that causes the Finder to quit when you run it, and restarts the Finder when you quit it. Use it to save a few hundred K of memory. **Anti-Finder 1.0.1 doc** is in text format. For System 7 and later.

AppleEase 1.0 f: **AppleEase 1.0**: By Peter Kaplan. Two complementary files to enhance the use of the Apple Menu with System 7.0 and later. AppleEaseIn creates an alias of any file dropped on it and places it in the Apple Menu. AppleEaseOut removes Apple Menu items if you hold down the option key when accessing the menu item. **AppleEase ReadMe** is in text format. For System 7.0 and later.

ArcMac1.3e: By D. G. Gilbert. The "Martian Operating System," an MS-DOS like shell (finder replacement). *Shareware: $25.*

ArcPop.Arc: By D. G. Gilbert. A de-archiver for archives in the ArcMac and MS-DOS archive formats; compatible with SEA's ARC version 5.12.

Balloon Font Utilities 7.0 f: **Balloon Font Program**: By Jim Moore. An application which changes the size and style of System 7's Balloon Help display to Geneva 9 or 12 or Chicago 12. **Chicago:** An application which changes the Balloon Help font to size 12 of whatever font name the application is given. (Put it or an alias in the startup folder to change it automatically on startup.) **Balloon Font FKEY**: An F-Key to the same

effect. **Read Me.Balloon Font** is in TeachText format. For System 7 and later.

BitFont 1.0 f: **BitFont 1.0.1**: By Peter DiCamillo. Creates a bit mapped font from any font that can be drawn on your Mac including Adobe outline fonts using Adobe Type Manager and Apple TrueType outline fonts. **bitfont.doc** is in TeachText format. Source code is provided in BitFont source.

BNDL Banger v.1.2 f: **BNDL Banger v.1.2**: By Tim Swihart. Updates an application's BNDL resource by forcing an update to the volume desktop database file(s). Use this as a more convenient alternative to rebuilding the desktop after you have modified an application or other file with a BNDL resource. **Read Me - BNDL Banger v.1.2** is in TeachText format. For System 7 and later.

BootMan 1.1: By Bill Steinberg. Use this handy utility to set the System Heap Size, Maximum Number of Open Files and Maximum Number of Operating System Events. This is a handy alternative to Heap Tool and Heap Fixer.

BundAid 1.2 f: **BundAid 1.2**: By Jim Hamilton. Scans the whole disk and removes "bundle bits" from the 'BNDL' resources incorrectly set by some applications. **BundAid Read Me** is the Teach Text documentation.

Button Pad f: **Button Pad**: By Jeffrey L. Ehrlich. An improved version of the NotePad desk accessory that comes with the Macintosh. ButtonPad lets you categorize your notes into up to eight separate "Quick Access" pads that can be quickly accessed via push buttons. **ButtonPad Doc** is in text format. *Shareware – $10; $15 for latest version and DA version.*

ChatMan f.sea: By Ken Bereskin. Send typed comments (with font, size, style, etc.) from one Mac on a network to another. **Read Me • ChatMan** is in TeachText format. Source code is included for the curious. Requires System 7.0 or later.

DISK #16.02D — SU 2
SYSTEM UTILITIES

Catalog 1.11: By Ola Boström. Creates a text file directory (catalog) of all floppy disks inserted after the program is launched. *Shareware – $6.*

Control Key f: **Control Key**: By Anthony D. Saxton. Adds the Control Key function to pre-Apple Desktop Bus (ADB) keyboards (Mac 512K and Mac Plus). **Read Me...** is in double clickable application format. For System 6.0.5 and later.

CptExpand 1.0 f: **CptExpand 1.0**: By Bill Goodman. A utility for extracting files from archives created by Compactor (now Compact Pro). CptExpand creates a folder which has the same name as the archive with an "f" appended; this is a real time saver when expanding many separately compressed files not otherwise placed in a folder. **CptExpand Doc** is in text format.

CTC 1.2: By Brian Bechtel. Change type and/or creator of any file by dropping it onto this file. For System 7.0 and later.

Cursor Animator 2.0.1 f.sea: By Wilhelp M. Plotz. CursorAnimator lets you substitute all of the five system cursors (arrow, watch, text, cross-hair, and plus) by a static or animated cursor of your choice. If your Macintosh supports color, you can even get color cursors! It is said to work under both Systems 6 and 7. The Read Me file provides extensive documentation. (Use under System 7 presented some problems in which large icons on the Desktop were temporarily corrupted.) **Cursor Collection f**: Contains additional examples of alternate cursors. **ResEdit Extension f**: acur Picker. An extension to ResEdit 2.1 or higher which allows the animation of newly designed cursors to be viewed inside ResEdit. *Shareware – A picture postcard of your home town.*

DA Piggyback 1.4 f: **DA Piggyback 1.4**: By Kerry Clendinning. Converts Desk Accessories into stand-alone applications. **ReadMe** is in DOCMaker application format. *Shareware – $10.*

Dark Side of the Mac 3.0 f.sea: By Tom Dowdy. A screen saver for Macintosh computers that run MultiFinder. Runs in the background and has an expandable set of "blackouts" or "Faders" to select from. Requires MultiFinder and 128K ROMs.

Data Fork Opener 1.0 f: **Data Fork Opener 1.0**: By Joe Zobkiw. Allows you to quickly open the data fork of

any file. If you don't know what this is, you don't want to use it. **ReadMe** is in text format.

dBase to CSV *f:* **dBase II & III to CSV**. By R. Mark Fleming. Used in conjunction with Apple File Exchange to convert between dBase II or III and Comma Separated Variable (CSV) formats. **dBase to CSV.rtf** is in Microsoft RTF format; it may be opened with Word or other WP applications that support the RTF format. *Shareware – $10.*

DISK #16.03D — SU 3
SYSTEM UTILITIES

DeBNDLer 1.1 *f:* **DeBNDLer 1.1:** By Stephan Somogyi. Scans the active system folder or volume on which DeBNDLer resides and removes the Bundle information from PostScript font files. This increases the speed of rebuilding the desktop for systems with lots of PostScript font files. **Read Me—DeBNDLer 1.1** is in TeachText format.

Desktop Checker 1.0ß1 *f:* **Desktop Checker 1.0ß1:** By Tom Santos, Salient Software, Inc. Counts the number of resources in the desktop file. Why? The Mac Finder cannot store more than 2727 resources in the desktop file. Exceeding this number may cause system crashes and possible file corruption. If you are approaching the limit, install the Desktop Manager, an INIT that eliminates the 2727 resource limit. System 6.0.X and earlier. **About Desktop Checker** is in text format.

DiskCopy 4.2 *f:* **DiskCopy 4.2:** By Steve Christensen, Apple Computer, Inc. Duplicate 3.5" floppy disks from a single master disk. It performs checksumming of the master disk to assure a reliable duplication. Copies 800K Apple and 720K and 1440K MFM disk formats. Requires a double sided disk drive. **MountImage 1.1b3** permits you to view and use disk images just as if they were disks. **Apple DiskCopy** documentation is in MacWrite format and **Disk Image Directions** is in text format.

DiskBench 1.1: Benchmark the performance of your hard drive; times read and write transfers and disk accesses. Disk Timer II, included in this series, is considered the standard for hard disk performance benchmarking.

DisKeeper v1.2 *f:* **DisKeeper v1.2:** By

J. Geagan. A very handy disk management utility that lists all files and possible file anomalies such as identical files, files of zero length, empty folders, etc. You also have the ability to move such files to a DisKeeper Trash folder for later removal (or other operations). **DisKeeper help** is the Word format documentation. *Shareware – $10.*

Dlx Extra Translators *f:* By Aladdin Systems, Inc. Translators for Stuffit Deluxe and Stuffit Classic include **AppleLink Package Translator, btoa/atob Translator, DD Translator, MacBinary Translator, TAR Translator, Text Translator** and **UUCode Translator**. Translator Documentation *f* includes descriptions of five of the seven translators.

DownLine 1.1.1 *f:* **DownLine 1.1.1:** By Eric Bloodworth. An archive utility with set-and-forget preference files, background archiving and unarchiving, "drop-folder" operation, "drop-app" operation (with System 7), simultaneous operation with communications programs, and folder-oriented batch operations. It can (transparently and without much user intervention) decode Stuffit 1.5.1, Binhex and Packit archives and encode Binhex and Stuffit 1.5.1 archives. **DL 1.1.1 Rel Notes** is in text format. *Shareware – $25.*

dTimer 2.0 *f:* **dTimer 2.0:** By David Hairston. Displays date or time, 2 alarms, countup or elapsed time and countdown time functions in four small custom windows on the desktop. **dTimer Docs** is in MacWrite format. Requires System 6.0.3 or later. *Shareware – $5.*

DTPrinter 1.1 *f:* **DTPrinter 1.1:** By Leonard Rosenthol. Use this as an alternative to selecting printers from the Chooser. Creates icons on your desktop that represent specific printers. Just drag any document to the icon of your choice and follow the print dialogs after the application opens. **About DTPrinter** is in text format. Requires System 7.0 or later.

Easy Alias *f:* **Easy Alias:** By Allen H Simon. Drop any file onto Easy Alias to create an alias with the same name as the original file. **Read Me about Easy Alias** is in text format. Easy Alias Folder includes the program code. For System 7.0 and later.

EasyLaunch 7.0: By James H. Moore. Launches applications from the Apple Menu. You first have to create a folder into which you place EasyLaunch and aliases of all desired applications. This doesn't seem any easier than just installing the alias of each application in the Apple Menu folder. For System 7.0 and later.

En Mass 1.1 *f:* **En Mass 1.1:** By Russell Street and Grant Wilson. Change the type and creator of a number of files at one time. **En Mass Read Me** is in TeachText format.

Extractor 1.20: By Bill Goodman. Extracts files from archives created by Compact Pro and Stuffit 1.5.1. Just double click the archive file or open the archive from within Extractor.

FileSorter 1.0.2 *f:* **FileSorter 1.0.2:** By Rick Johnson. Creates a tab-delimited list of all files on all mounted volumes on your Mac. The list includes file name, size, creation and revision dates, etc. The list may then be imported into the database of your choice for further processing. **FileSorter docs** is in text format.

DISK #16.04D — SU 4
SYSTEM UTILITIES

Fast Formatter™ 3.0 *f:* **Fast Formatter™ 3.0.** By Beyond™ Inc. Speeds up the initialization of disks by permitting you to select the volume name and disk size once at the beginning instead of once for each disk. **FF 3.0 Release Notes 2** is the TeachText documentation and a plug for Beyond's neat MenuFonts INIT.

FastFix *f:* **FastFix:** By ALSoft, Inc. Designed to repair a specific type of damage to directory entries of files optimized with Norton Utilities Speed Disk. **FastFix Documentation** is in TeachText format.
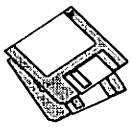
File Fanatic 1.1 *f:* **File Fanatic 1.1:** By Roby Sherman. Change the type and creator of a number of files at one time. Fanatic - **READ ME!** is in text format. For System 7 and later.
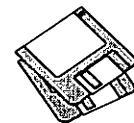
FileBackup 1.0: By Douglas H. Ihde. A demo file backup program which has a number of basic backup features some of which are disabled. *Shareware – $12 for registration.*

FileEdit 3.0 *f:* **FileEdit 3.0:** By Dan Weisman. Changes and adds to the list of default application(s) the finder tries to use when an application

cannot be found. **FileEdit.docs - Please Read!!!** is in text format. For System 7.0 and later. *Shareware – $10.*

FileList 1.4 f: **FileList 1.4:** By Erny Tontlinger. A file and disk organizer that reads entire volumes and saves volume and file information. An option enables "Stuffit"(Classic and Deluxe) and/or "Compactor" archives to be opened and to be treated like a folder; all files in the archive (including encrypted entries) will be listed. **FileList.Doc** is in text format.

Finder 7 Menus! 1.2 f: **Finder 7 Menus! 1.2:** By Adam Stein. Lets you change the command key combinations in the menus of the System 7 Finder. This demo is limited to using the first 11 letters of the alphabet as Command keys. **Finder 7 Menus! Read Me!** is in MacWrite format. Requires System 7.0 or later. *Shareware – $10.*

FileMover 1.0 f: **FileMover 1.0:** By John Sarapata. Automates complicated file transfers. Builds and runs script files that perform all of the file copying that would normally be done by hand. Runs in the background. **FileMover.MW, FileMover.word** and **Read Me (FileMover)** are in MacWrite, Word and text formats respectively. *Shareware – $25.*

FinderPalette 1.0 f: **FinderPalette 1.0:** By R. Beecher, Anchor Beech Software. A file launch and organization utility that has a launch palette with icons of the installed file or folder. A very nice alternative to the Apple Menus folder. **Finder Palette • Read Me!** is in Teach Text format. For System 7 and later. *Shareware – $20.*

FinderToFront 1.0 f: **~FinderToFront 1.0:** By Michael Peirce. If placed in the System 7 Startup folder and named so as to be the last application run, makes the Finder the front most application after startup. **FinderToFront.ReadMe** is in text format.

Fix File Dates: By Chuck Pliske. Searches the on-line volume for files with impossible future creation dates, allows them to be fixed. Note: File search is automatic once the application is opened. A more comprehensive utility would also flag dates before the date the Mac was created.

Folder Icon Maker 1.0 f: **Folder Icon Maker 1.0:** By Gregory M. Robbins. Creates folders with custom icons. **Folder Icon Maker 1.0 Notes** is in text format. Requires System 7 or later.

Font Changer 1.01 f: **Font Changer 1.01:** By Russell Street. Permits you to change the font, size and tab width to one or more text files. **Read Me — Font Changer** is in TeachText format.

FONT Lister v.1.1 f: **FONT Lister v.1.1:** By Bovine Software. Provides you with a printed list of all fonts currently available to your Macintosh in their own typeface. **FONT Lister™ -READ ME-MACA** is in MacWrite format.

FontLister 1.2 f: **FontLister 1.2** By Armpit Studios. Creates a text list of all fonts currently available to your Macintosh. **FontLister.doc** is in MacWrite format.

HellFolderFix f: **HellFolderFix:** By John Jeppson. Removes "Folders from Hell." These are folders which appears to be empty but cannot be trashed; that is, you can put them in the trash, but you get an error when you try to empty the trash. The problem persists even though you have rebooted your Mac and no applications are running which could possibly be using the folder. **Read Me** is in text format.

DISK #16.05D — SU 5
SYSTEM UTILITIES

Font Downloader 4.0: By Adobe Systems. For downloading Postscript fonts or files to a Postscript device. Also permits some other utility functions such as clearing the font cache and changing passwords.

GicaCat 4.7 f.sea: **GigaCat e:** By Matthias Müller and Wade Arnold. An application to search and organize file information by volume (hard disk, etc.). Files can be moved, changed, and deleted from within the application. *Shareware – $20.*

IBM: By Macsetra. Installs a modified trash can icon into the Finder of your choice.

ICON Warehouse 1.0: By Jim H. Moore. Permits you to copy icons from the invisible desktop file to the Icon Warehouse. You may later use ResEdit to open Icon Warehouse and to edit and copy ICONs and ICN#s to other files.

Iconder f: **Iconder:** By Stepan Riha. Creates an icon-family of a folder with the icon embedded in it (like the system Folder). **Iconder.txt** and **Additional Iconder Info** are in text format. Note the caution to use only on a system with Color QuickDraw. Requires System 7 or later.

Index Maker 3.0 f: **Index Maker 3.0:** By Lon McQuillin. Creates an ASCII text file index (list) of files on any mounted volume or volumes. The index may include file type and creator and the creation and revision dates in any combination. **Index Maker 3.0 Doc**.is in TeachText format. *Shareware – $15.*

KeyHolder 7.0: By James H. Moore. Archives your old FKeys for use under System 7. Put this application or its alias in the Startup Items folder. For System 7.0 and later.

Kick the Can (v1.0): By True Value Software. Replace the trashcan icon with any of four included in this utility. You can't replace the icon of an active Finder running under MultiFinder.

Launch 3.0 f: **Launch 3.0:** By Michael Libes. Permits you to start applications and/or switch to other running applications from an icon "dock" similar to NeXT or the Mac with BlackBoxINIT. **L_docs 3.0** is in TeachText format. *Shareware – $10.*

Layout 1.9: By Michael C. O'Conner. The popular utility that allows customizing the desktop by specifying spacing between icons, list view sizes and formats, new folder views and size, etc. This version includes color for the Mac II family; for System 6.0.8 and earlier.

LHarc 0.41 f: **LHarc 0.41:** By Kazuaki Ishizaki. An archiving utility compatible with archives created with MS-DOS LHarc v1.13, UNIX LHarc, and LHarc for various other machines. Does not extract from self-extracting archives created under MS-DOS or from archives containing subdirectories. **Readme.txt** and **Read Me** are the text and Word format documentation respectively; **lharc.doc** in text format appears to need conversion to low ASCII.

ListApps 1.0 f: **ListApps 1.0:** By SK Hushing III. **ListApps 1.0 Info** is in text format. Produces a list of all applications, INITs and cdevs on a disk. *Shareware – $5.*

Lullaby f: **Lullaby**: By James H. Moore. A screen saver with "hot corner" selection for invoking immediately. Put this application or its alias in the Startup Items folder. For System 7.0 and later.

Mac <-> MacBinary AFE f: **Mac to MacBinary** and **MacBinary to Mac**: By Richard L. Trethewey, PEEK[65]. A translator document for Apple File Exchange. It translates files from the original Macintosh format into the MacBinary format and vise versa. Useful for those who normally use MS-DOS or Apple II systems to send and receive Macintosh software using the commercial services and local bulletin boards. **Mac to MacBinary Documentation** is in text format.

MacIntalk for 6.0.7 f: **MacIntalk**: By Apple Computer, Inc. The latest version of the system file that allows the Mac to "talk". Place it in the System folder to permit programs like Talking Moose to talk.

DISK #16.06D — SU 6
SYSTEM UTILITIES

MacProfiler 1.1 f: **MacProfiler 1.1**: By Technology Works. A personal version of Technology Works' GraceLAN Network Management software. It gives you a quick and easy view of the complete software and hardware configuration of any Macintosh. **Mac Profiler Read Me** is in text format.

MakeScreen: By Jerry Whitnell. For customized startup screens, run Make Screen on any MacPaint file selecting the part of the painting to be used for the start up screen. Save the file with the name exactly as StartUpScreen. Quit MakeScreen and place the StartUpScreen file in the system folder. The new picture will appear on the next boot.

Mini Grinders 1.0 f: **GroupInfo, Lock It!** and **Snd2SysBeep**: By Steve Smith. Three small applications that perform simple tasks on files. GroupInfo totals the sizes of all files/folders dropped on it. Lock It! locks or unlocks any file dropped on it (locked files are unlocked and unlocked files are locked). Snd2SysBeep searches all files dropped on it for sound resources and creates SysBeep files from those resources. **Read Me** is in text format. Requires System 7.0 or later.

Minor•Repairs (v1.01): By 1st Aid Software. Rebuilds the desktop file

without losing any comments you placed in the Get Info comment box. This takes two steps but is well worth it if you use the Finder Get Info frequently to add comment notes on files and applications.

Mug Shot Lite™ 1.30: By James K. Miles. Creates a "rap sheet" of information about your computer and the programs on it. The rap sheet may be copied to the clipboard or saved as a text file for later formatting in your favorite word processor. Designed to facilitate collecting information about your system when you need to report suspected bugs in programs.

MultiXfer f (v0.4a1): **MultiXfer**: By Martin Dubuc. A Mac to Mac serial connection file transfer utility. With MultiXfer, other Macs can call your system, receive, send, catalog the files and navigate through the directories of your disk without any human intervention by using a fast protocol and a convenient interface allowing text interaction while in the File Transfer Mode. MultiXfer Docs is in MacWrite format. Not tested.

myPageSetup 1.2: By D. G. Gilbert. Allows you to choose and save your own default settings for the Apple printer drivers (ImageWriter and LaserWriter) Page Setup and Print dialog boxes. You can change paper sizes for the ImageWriter dialogs.

NetClip 1.0: By Chris Meyer. Share clipboard items over the network when network sharing is enabled. Not tested. Requires System 7 or later.

New Creator f: **New Creator**: By Dominic Mazzoni. Do you keep getting the dialog "The file ... could not be opened/printed (the application is busy or missing). Then change the creator of some of these files to make them openable from the Finder. Requires a Macintosh Plus or higher and System 4.1 and up. **Documentation** is in MacWrite format. *Shareware – $10 or what you think it is worth.*

No Cache 1.0 f: **No Cache 1.0**: By Tom Thompson. Turns 68040 processor caches in the Quadras off and on. This allows those applications that do self-modifying code no-nos to operate. No Cache doesn't change the operating mode of the caches: it simply disables them.

Nom de Plume 1.2.2 f: **Nom de Plume 1.2.2**: By Bill Monk. An elegant

application that creates an alias of a folder or file and places it in a designated folder (such as the Apple Menu folder, etc.). Excellent for repetitive installation of aliases in the same folder. **Nom de Plume 1.2.2 READ ME** is in text format. For System 7 and later.

Out to Launch! 1.1.0a f: **Out to Launch! 1.1.0a**: By Mike Throckmorton. An easy to use application launching facility. You can create and edit a list of applications and Load Sets for quick launch. Load Sets are user defined related applications and files. **OTL Pinch Launch** application gives you the ability to launch a specified application by double clicking a document file created by a different application. You could, for example, launch MS Word by double clicking a document created by MacWrite (or vice versa). **Out To Launch™ Docs MACA** is in MacWrite format.
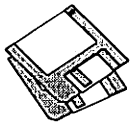
Popcorn™ 1.0.1 f: **Popcorn™ 1.0.1**: By Leonard Rosenthol. Allows you to view and edit movies compatible with the QuickTime™ Movie Toolbox. It is compatible with both System 6 and System 7 provided that the QuickTime extension is installed. **Popcorn™ Read Me** is in text format.

PopOver 7.0: By James H. Moore. Launches applications from the Apple Menu. You first have to create a folder into which you place PopOver and aliases of all desired applications. Similar to EasyLaunch but doesn't require the presence of the Balloon Help menu. For System 7.0 and later.

DISK #16.07D — SU 7
SYSTEM UTILITIES

PREC Manager 1.01 f: **PREC Manager 1.01**: By Bill Steinberg. You can change the Print RECord in the ImageWriter driver to define different paper sizes than the ones provided by Apple. **PREC Manager Doc** is in TeachText format.

QCat 2.0b6 f: **QCat 2.0b6**: By Richard De Luca. A utility for cataloguing hard or floppy disks. Creates a "TEXT" file that can be imported into any database program that supports it. Has a full set of options including selection of field and record separators for use with databases. SyQuest® cartridges and network volumes are NOT supported. **Disk Cataloger** and **File Catalog** are supporting HyperCard stacks. **QCat 2.0b6 Dox**

and **QCat 2.0b6 Dox.txt** are in MacWrite and text formats respectively. *Shareware – $10*.

RAM Check 2.0 *f*: **RAM Check**. By ProVUE (Panorama database). Check your Random Access Memory (RAM) to see if there are any problems with it. RAM Check will check the area of RAM on your Macintosh that is available for use by applications (the Application Heap). RAM Check does not check the area of memory occupied by the System (the System Heap). If successful, the following message appears: "Once again, goodness and niceness triumph over the forces of rottenness and evil." **RAM Check Info** is the MacWrite documentation from an earlier version of the program.

Rename Delay Editor *f*: **Rename Delay Editor**: By Adam Stein. Lets you turn on or off or modify the rename delay time for the Finder. **Rename Delay Editor! Read Me!** and **Rename Delay! Order Form.MW** are in MacWrite format. Blurbs *f* includes information in text format on some other offerings. For System 7.0 and later. *Shareware – $10*.

ResBulker 1.0.1 *f*: **ResBulker 1.0.1**: By Kenneth Knight. Set resource attributes for any group of resources that you specify. Requires Mac Plus or higher (512Ke) and Systems more recent than 4.1. ResBulker docs and ResBulker docs (macwrite) are in Word and MacWrite formats respectively.

Reset ADB: By Alan Danziger. A small application to reset the Apple Desktop Bus (ADB).

Save a BNDL 1.2 *f*: **Save a BNDL 1.2**: By Michael S. Engber. Gets the Finder to recognize changes in a file's BNDL resource without requiring rebuilding the DeskTop or rebooting. **about Save a BNDL** is in text format. Requires System 7.0 or later.

SCSI Spy 1.9b3: By Maarten Carels. Save "hidden" information about your hard disk controller as a text file.

SCSI Test v.02: By Arata Kubota. Designed to test a Mac Plus SCSI port and responses. Not tested.

SendPS 2.0: By Adobe Systems. Download files to Postscript printers over AppleTalk networks.

Set Clock 3.3: By Jim Leitch. Synchronize your Mac to within one second with a 10 second call to Toronto Canada, Washington D.C. or Chesapeake Virginia.

ShutDownLater: By Richard Chandler. Shut down your computer at a preselected time.

Signature Sucker: By James K. Miles. Collects and lists the Creator signatures for all the applications and other files you have on your disk. James has agreed to act as the collection and distribution point for information on Creator signatures as discussed in the program notes.

Simsonite 1.1 *f*: **Simsonite 1.1**: By Don Munsil. Create new suitcases without Font/DA Mover. **Simsonite 1.1 Read Me** is in text format. Compatible with System 6 and 7.

SitExpand 1.0 *f*: **SitExpand 1.0**: By Bill Goodman. A utility for extracting files from archives created by Stuffit 1.5.1. SitExpand creates a folder which has the same name as the archive with an "*f*" appended; this is a real time saver when expanding many separately compressed files not otherwise placed in a folder. **SitExpand Doc** is in text format.

SitToCpt 1.10 *f*: **SitToCpt 1.00**: By Bill Goodman. Convert archives created by Stuffit 1.5.1 into Compactor Pro archives. **SitToCpt Doc** is in text format.

Slot Investigator 1.1: By Brett Bilbrey. Reads the slot resources information from any circuit cards installed in Mac II family computers. *Fragware – send code fragments or programs*.

Spam 1.0.1 *f*: **Spam 1.0.1**: By Aron Nelson. Allows you to create groups of items in your Apple Menu. When you activate one of the groups, only the individual menu items in that group appear for selection. **FinderHack 1.0ß1** lets you create aliases right into the Apple menu. Requires System 7.0 or later. **Spam Docs.readme** and **In this package** are in TeachText format. *Shareware – $15*.

DISK #16.08D — SU 8
SYSTEM UTILITIES

sndConverter 1.2.1 *f*: **sndConverter 1.2.1**: By Joe Zobkiw. Converts or extracts 'snd' resources to a format that may be used with System 7.0 and higher. **sndConverter 1.2.1 Read Me!** is in text format.

SoftLock 1.4 *f*: **SoftLock 1.4**: By David Davies-Payne. Place a software lock on any disk to prevent changing its contents. A password may be included so that only those who know it may change the locked status. **SoftLock 1.4 Intro** is in text format. *Shareware – $10*.

Sound Extractor 1.21 *f*: **Sound Extractor 1.21**: By Alberto Ricci. Extracts sound resources from SoundMover and SoundEdit suitcases and creates a folder with sounds that can be played from within System 7 by double clicking them. Also extracts any contained sound resources from applications, stacks and other files. **SoundExtractor 1.21 Doc** is in text format. For System 7 and later. *Shareware – $5*.

Stuffit Classic™ Installer 1.6: By Raymond Lau and Aladdin Systems, Inc. The Stuffit program creates a type of file called an archive, which is a collection of one or more files and folders that have been reduced in size through compression. Stuffit Classic is an update of Stuffit and includes some of the features of Stuffit Deluxe, Raymond's commercial program. Easy to install, just double click and follow the directions. Stuffit Classic™ User's Guide, in MacWrite format, is included in the Stuffit Classic folder. *Shareware – $25*.

Stuffit Expander™ 1.0 *f*: **Stuffit Expander™**: By Leonard Rosenthol. Decompress any Macintosh file compressed with Stuffit, Compact Pro or AppleLink packages. **Stuffit Expander Docs** is in TeachText format. Requires System 6.0.4 or later.
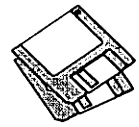
Styler 2.00 *f*: **Styler 2.00**: By Peter S. Bryant. Prints out styler sheets of all of the fonts that you currently have active and installed in your system. **Styler 2.00 Users Manual** is in MacWrite format. *Shareware – $10*.

Swatch 1.2 *f*: **Swatch 1.2**: By Joe Holt. A multicolored display helps programmers track down heap bugs. It's also claimed to be lots of fun to watch by normal people. **Swatch Read Me** is in text format.
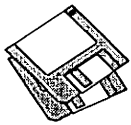
sys7snd2 *f*: Seven sounds created by Mark D. Gessner which can be installed into the System 7 system file. See the **Read Me** file in text format for use under System 6.

DISK #16.09D — SU 9
SYSTEM UTILITIES

Suitcase Maker *f*: **Suitcase Maker**: By Guy T. Rice. Creates empty suitcases for fonts, DAs and sounds. **Suitcase**

Maker README! is in text format. Requires System 7.0 or later.

System Errors 7.0.1: By Pete Corlis. A stand-alone document which sets out the host of error codes which System 7 can generate. For System 7 and later.

System Picker 1.0b11 *f:* **System Picker 1.0b11:** By Kevin Aitken. Automatically searches all mounted hard drives to list all System folders and then lets you select one of the Systems from the list to boot from. Perfect for switching between System 6.0.X and 7.0. This version can now successfully select System Folders on partitioned drives. **Read Me(System Picker 1.0b11)** is in text format.

SystemSwitcher 1.1: By Keisuke Hara. Permits you to easily search for and switch to systems on any mounted disks. Perfect for switching between System 6.0.X and 7.0.

TAA 0.2: By Van Kichline. Summarizes the configuration of your Mac. Includes machine environment, ∗ System files, INIT files, device drivers, Desk Accessories, Printer drivers and contents of Parameter Ram.

Tadeseiyo 1.0: By Clive Steward. Password protect your disks with a password with this program with icons representing the Korean character for shut or closed gate.

tar 3.0 *f:* **tar 3.0:** By Craig Ruff. A program to read and write UNIX tar archives. Tested by author against tar running on A/UX (2.0.1), 4.3 BSD and GNU tar (POSIX compatible). Works with System 6.0.5 and later. **Tar Manual** is in TeachText format.

The Namer 7.0: By Apple Computer. Allows you to rename Apple network printers.

theFONDler 2.1 *f:* **theFONDler 2.1:** By Jim Lewis. An alternative to Apple's Font/DA Mover utility for users of "harmonized" font systems. Use it to support management of two or more suitcases of many fonts each. **theFONDlerGeneral.txt, theFONDlerFunctions.txt** and **theFONDler Procedures.text** are all in text format. *Shareware – $10.*

Tidy It Up ! 1.0 *f:* **Tidy It Up ! 1.0:** By Guy Fiems. Organizes the contents of your system folder on your screen by grouping files into logical categories and showing the groups together. *Shareware – $15.*

ToMultiFinder 4.0 *f:* **ToMultiFinder 4.0:** By Rich Siegel. Easily switch from Finder to MultiFinder. **ToMultiFinder Info** is in text format. *Shareware – $15.*

Trash Chute 2.0: By Melissa Rogers. Doble click this application to empty the trash.

TrashMan 3.1.1 *f:* **TrashMan 3.1.1:** By Dan Walkowski. A "smart" trash utility that automatically empties your trash after a pre-selected time has elapsed since you threw each file in the trash. **TrashMan 3.1.1 Docs** is in text format. Requires System 7.0 or later. *Shareware – $5.*

Type Spec 1.2 *f:* **Type Spec 1.2:** By Big Rock Software. Another utility to create and maintain a typeface reference book. **TypeSpec 1.2 Readme** is in text format. *Shareware – $10.*

UnStuffit Deluxe™ Installer 2.0: By Raymond Lau and Aladdin Systems, Inc. Decompress (unstuff) archive files created with Stuffit Classic and Stuffit Deluxe programs. Easy to install, just double click and follow the directions.

DISK #16.10D — SU 10
SYSTEM UTILITIES

UnBundle 1.0 *f:* **UnBundle 1.0:** By Jack A. Littleton. Searches the Desktop file for a certain application's icons. When a match is found, the icons are drawn and their resource IDs are listed beside them. Also lists the type of file each icon is associated with and the resource id of the file reference resource (FREF) for the application. **V 1.0 documentation** is in MacWrite format. *Shareware – $10.*

UnZip 1.10 *f:* **UnZip 1.10:** By Samuel H. Smith, Darin Wayrynen, R.P. Byrne, Paul DuBois and Peter Maika. A utility for decompressing files archived by the popular PC utility PKZIP. **About.UnZip 1.01, appnote.txt** and **UNZIP.DOC** are all in text format.

uu decode 1.0 *f:* **uu decode 1.0:** By Adam van Gaalen. Reads UU-encoded files and produces a binary file. The resulting file .may be converted to MacBinary format using the Apple File Exchange package, extended with the Mac to MacBinary option, which is included. **READ ME** is a text file. Not tested.

uu**code *f:* **uu**code:** By Bernie Wieser. Code and glue for programmers to create UU encoding and decoding applications for Mac files on UNIX systems. HOW TO USE uu**code is in text format.

Varityper ToolKit 1.0: By Ken Winograd. A PostScript and TrueType font utility that incorporates and updates the functions of the Varityper DAs FontMaster, FontWizard, PS FontFinder and FontConflicts.

Version Sleuth 2.0 *f:* **Version Sleuth 2.0.** By Craig Schmidt. In general, all files on the Macintosh can contain at least three different kinds of comments. The type you probably are most familiar with are the comments in the Get Info window in the Finder. There are also two other kinds of comments, version info and CE Info. Version Sleuth 2.0 can be used to edit these two types of comments. **Version Sleuth 2.0 Docs** is the MacWrite documentation. *Shareware – $5.*

Viewer *f* (Glue): **Viewer.** Permits you to view snapshots of documents saved with Glue or Super Glue. **Glue.des** is the text documentation.

VM-Eject 2.0: By PB Computing. Modifies System 7.0 to permit use of Virtual Memory with removable cartridges. Be very careful not to eject the cartridge while using Virtual Memory.

Watch 1.5.1 *f:* **Watch 1.5.1:** By Brad Parker and Pong Choa, Cayman Systems, Inc. A networking debugging tool for use on a Macintosh on LocalTalk or directly on Ethernet. Allows collection and decoding of network packets from Ethernet or LocalTalk. **Read Me First - Watch 1.5.1** is the TeachText format documentation.

what *f:* **what.** By John Martyniak. Interrogates your Mac and lists everything (more than you may ever want to know) about it. **ReadMe.what** is the text documentation.

WhereSIT 1.4 *f:* **WhereSIT 1.4:** By Robert S. T. Gibson. Allows you to search for a Stuffed file, an uncompressed file, or both. Includes pattern matching "grep" searches. **WSAdd1.4.mwt** and **WSAdd1.4.wd4** are the MacWrite and Word documentation respectively.

XferIt 1.4b1 *f:* **XferIt 1.4b1:** By Steven Falkenburg. XferIt is a Macintosh-based FTP client. It can be used to

send and receive files from various network hosts which support the TCP/IP File Transfer Protocol. XferIt requires Apple's MacTCP and a Macintosh connected to a TCP/IP network to run. If you need this, you know what it is; if you don't know what this is, you don't need it. **XferIt Docs.mw** and **XferIt Docs.text** are in MacWrite and text formats respectively. *Shareware–$10 single copies, $45 per zone and $175 internet.*

DISK #16.11D — SU 11
SYSTEM UTILITIES

Alias Director 2.8 f: **Alias Director 2.8**: By Laurence Harris. Use its drag and drop and keyboard shortcut capabilities to make creating and deleting aliases as easy as using them. With the proper selection, you can send an alias directly to the Apple Menu folder. **Alias Director Read Me** is in text format. For System 7 and later. *Shareware – $7.*

AliasZoo 1.4.1 *f.sea*: By Cliff McCollum. Manage aliases across multiple hard drives. Locate and delete or repair aliases that no longer "point" to anything. • **ReadMe - AliasZoo** • is in TeachText format. *Shareware – $20.*

Announce 1.0 f: **Announce User1.0**: By Tad Woods. A network utility to send messages to other users on the network. **Read Me/Instructions (MS Word)** are in Word format. *Shareware – $39, unlimited users at one site.*

AppDisk 1.6 f: **AppDisk 1.6**: By Mark Adams. A RAM disk that lets you use part of your RAM as a fast disk drive, without restarting your Mac. It is System 7.0 dependent. It has the ability to save its contents to provide some protection against loss of data due to system crashes. **AppDisk 1.6Read ME!** is in text format. *Shareware –*

Applicon 2.2 f: **Applicon 2.1**: By Rick Holzgrafe. Creates a tile for each active application; click on the tile to bring the application to the front. **Applicon - READ ME** is in TeachText format. Requires System 7.0 or later.

AutoClock 1.3.1 *f.sea*: By Jean-Pierre Gachen. An application and a system extension that keeps your Macintosh's clock correct by calling a time server in Washington D.C. For System 6.0.5 or later, including system 7.0. **AutoClock 1.3.1 Documentation** and **AutoClock 1.3.1 Read me** are in MacWrite and text formats respectively.

ColorAlias 1.0 f: **ColorAlias 1.0**: By Mark Adams. Change the color depth for your color or gray scale monitor by double clicking on the appropriate alias. You can also set your sound level and change the 68040 cache state. **ColorAlias Read Me!** is in text format. *Shareware – $10.*

Compact Pro 1.33 *f.sea*: (Previously called Compactor.) By Bill Goodman. Lets you reduce the size of many of the files on your computer by "compressing" the data in the files. Also supports "archives" which are collections of files and folders combined into a single unit. You can simplify the storage of large amounts of data by grouping related items into an archive. **Compact Pro User's Guide** is in MacWrite format. *Shareware – $25.*

DART™ 1.5.1 *f.sea*: By Apple Computer, Inc. A disk archiving and retrieval utility. Copy floppy disk to floppy disk with one or two disk drives or copy from floppy to archive format on your hard disk and vice versa. User Manual (MS Word) includes the documentation in Word format and **DART Release Notes 1.5.1** is in TeachText format. **DART™ Converter** is a HyperCard stack that permits batch conversion of earlier DART and Disk Copy formats and allows running DART by "remote control" across networks. System 6 compatible and System 7 savvy.

DeSEA 1.3 f: **DeSEA 1.3**: By Ken Hancock. DeSEA removes the overhead self-extraction code from files created from self-extracting archives (SEAs). DeSEA first changes the type and creator of the file to the program's native format, renames the file from the self-extraction suffix to the native suffix, strip the resource fork of all the overhead code, and resets the finder flags. Can be run on a single file or on an entire folder of files. Configured for Disk Doubler, Compact Pro and Stuffit Classic/Deluxe. **DeSEA 1.2 Release Notes** is in text, format.

DFerase 1.0 f: **DFerase 1.0**: By Dave Hirsh. Change the personalization information on applications which feature this such as MS Excel and Word. Operates by clearing the application's data fork so backup before using. DFerase 1.0 Doc is in Word format. *Shareware – $5.*

DISK #16.12D — SU 12
SYSTEM UTILITIES

DDExpand™ 3.7.5 *f.sea*: By Lloyd Chambers & Terry Morse, Salient Software, Inc. DiskDoubler is a commercial file compression program available for the Macintosh. DDExpand is an expand-only version of DiskDoubler which is provided free of charge to individuals. **DDExpand READ ME** in text format.

DeskWriter 3.1.sea: By Hewlet Packard. The print drivers for the popular serial and AppleTalk HP DeskWriter ink jet printers. This version includes a PrintMonitor and extensions for printing in the background while continuing to work in your application. **READ ME FIRST!!** is in text format.

DiskDup+ 2.1 f: **Disk Dup+ 2.1** By Roger D. Bates. A disk duplication program written to automate as much as possible the sector-by-sector duplication of a floppy onto one or more duplicates. Performs sector duplication of either 400K to 800K floppies. Formats copies as single or double sided. **Read Me - DiskDup+** is in TeachText format. *Shareware – $30.*

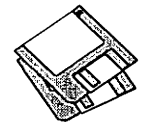Dvorak f: **Dvorak**: By Jan Steinman. Install the Dvorak keyboard in accordance with instructions in the **Dvorak Read Me** file in TeachText format. The documentation also includes useful information on Dvorak keyboards, templates and other accessories.

DISK #16.13D — SU 13
SYSTEM UTILITIES

DeskWriter-C 2.0.sea: By Hewlet Packard. The print drivers for the popular serial and AppleTalk HP Color DeskWriter ink jet printers. A PrintMonitor and extensions for printing in the background while continuing to work in your application are included. **READ ME FIRST! (A)** and **READ ME FIRST ! (B)** are in text format.

DiskStatus 1.2 f: **DiskStatus 1.2**: By Eric Bloodworth. Provides a real-time display of the free and used space of all current drives, including floppies. **DiskStatus** is localized for Japan. **DS 1.2 Release Notes** is in

text format.

File Typer 3.2 ƒ.sea: By Daniel Azuma. Permits you to change a file's type, creator and finder flags. Very hand drag and drop capability. MakeAutoTyper Folder includes a utility to create custom drag and drop editors to change specific file types and creators to specific others. **Read Me First!** is in TeachText format. Docs Folder includes documentation in Word and TeachText formats. For Mac Plus and later; System 6.0.X and later. *Shareware – $10.*

DISK #16.14D — SU 14
SYSTEM UTILITIES

iContraption 1.0.2 ƒ: **iContraption 1.0.2**: By Brian Zuk and Tom Poston. Bugged by the complexity of ResEdit for moving icons? iContraption allows you to easily move icons and icon families from file to file and to create and/or edit icons. **iContraption Documentation (mw)** is in MacWrite format. Requires System 7.0 or later. *Shareware – $20.*

Kill~Desktop™ 1.0.0 ƒ: **Kill~Desktop™ 1.0.0**: By S. Koren. For users of System 6.0.8 or earlier who have switched to System 7. Purges all of your Desktop files, freeing up the disk space the useless Desktop files now take up. For those who forget that you can do the same thing by holding the Command Option keys down during startup. **Kill~Desktop™ Read Me** is in text format. *Shareware – $15.*

LaserWriter Utility 7.2.sea: By Apple Computer, Inc. The newest version of the application that sets up Apple's LaserWriter printers. This one supports the IIf and IIg printers as well as prior models. From the File menu you can download fonts, display a list of available fonts, print font samples and catalogs and initialize the printers hard disk A Utilities menu lets you name the printer, set or clear the startup page, get the current page count, restart the printer, download a PostScript file and a number of other functions.

MacCompress 3.2 ƒ: **MacCompress 3.2**: By Lloyd Chambers. Compresses and decompresses files in a manner compatible with the UNIX program "Compress," for transmission back and forth to UNIX systems. MACCOM.txt is in text format.

MyAliAsMaker 1.0.1 ƒ.sea: By Steve Krouse. Permits you to make an alias by dragging the file icon on top of the MAAM file icon. Create aliases of hard and floppy disks by double clicking the MAAM icon and select the desired volume from the window. **About MAAM 1.0.1** is in text format; **About MAAM 1.0.1 Word 4** is in Word format. Requires System 7 or later. *Shareware – $1 to $5.*

PRAM-5.0: By Ken Winograd. Inspect the contents of your Parameter RAM (PRAM). *Shareware – $10.*

Quick Format! 7.1. By Michael Conrad. Like Fast Formatter, permits you to initialize disks quickly and control how the disk is initialized by permitting you to select the volume name and disk size once at the beginning instead of once for each disk. Demo version has erase, rename volume, set volume name (other), verify disks and external drive capabilities disabled. System 7.0 compatible. *Demoware – $12 for password, $15 for disk.*

ShowSizes 2.2.1 ƒ.sea: By Jon Pugh. Displays HFS volumes as folders, identifying what percentage of the disk their contents occupy. Includes a variety of formats and reports. *Shareware – $20.*

DISK #16.15D — SU 15
SYSTEM UTILITIES

Save A Tree 1.52 ƒ: **Save A Tree 1.52**: By Michael S. Engber. A text file printing utility designed to conserve paper by printing on 1 page what would normally use 2 or 4 pages. **About SaveATree.txt** is in text format.

SCSI Evaluator 1.07: By William A. Long. Tests the performance of any Small Computer System Interface (SCSI) device. Tests include read and write seek times and data transfer (Kbits/sec.) rate. Note the author's caution "Joy riding with SCSI Evaluator can be dangerous!" *Shareware – $20.*

Secure Your Mac ƒ: **Secure Your Mac**: By Victor Willingham. A password protection system to secure your Mac during start up. Easily defeated by booting from a floppy disk. **ReadMe.MSW, ReadMe.txt** and **ReadMe.WdPerf** are in Word, text and WordPerfect formats. *Shareware – $15.*
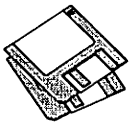
Sound Mover Package 1.75 ƒ: By Riccardo Ettore. A package of four sound programs for different versions of the Mac and System Software. **SoundMover 1.75** moves sounds into and out of the System file and automatically converts between several different (and incompatible) sound formats. **IBeep2** lets you pick an alternative to the standard sound of the Macintosh beep and works with Mac Plus and SE users running System 4.1 and later. SndControl contains two complementary cdevs to Apple's Sound control panel, one for System System 6 and one for System 7. **StartupSndInit** plays compatible sounds placed in the System Folder. **SMP Read Me** is in TeachText format and **SndControl Manual** and **Format 1 vs Format 2 snds...** are in text format. *Shareware – $25.*

Speedometer 3.1 ƒ.sea: By Scott Berfield. A system information and performance testing program for the Macintosh family of computers. Various tests are available; the central one is designed to give a performance rating for the system as a whole. Intended to help you understand and tune the performance of your computer and to give you some basis for comparing different systems. **Read Me** and **READ ME - UPDATE** are in text format. *Shareware – $30.*

StripFonts 1.2b0 ƒ: **StripFonts 1.2b0**: By James Elliott. For printing PostScript files created on a Mac on a PostScript printer that is networked on a UNIX machine. **Mac help** and **Read Me** and in TeachText format.

System 7 Pack 3.0 ƒ: By Adam Stein. System 7 Pack! 3.0 combines the functions of Finder 7 Menus!, Rename Delay Editor and Application— Document Linker into a single program. Allows command key combinations be changed, added, and deleted , permits the rename delay which built into System 7 to be adjusted and allows the default by which TeachText is used to open text and PICT documents for which applications are not available to be changed. You can create new links between documents and applications; for example, MacWrite documents can be linked to open under MS-Word. Note **From Adam Stein** and **Upgraders! Please Read** are in text format; **System 7 Pack! 3.0 Read Me** and others are in MacWrite format. For System 7 and later. *Shareware – $29.95.*

Disk #16.16D — SU 16
System Utilities

Shutdown Items 2.1 f: Shutdown Items 2.1: By John Covele. Allow a system running system 7.0 or later to have a folder which is analogous to the Startup Items folder (inside the System Folder). Any item placed within the "Shutdown Items" folder, which you create inside your System Folder, will be launched or played during shutdown just as if you double-clicked the item from the Finder. *Shareware – $10*.

Suntar 1.2.1 f: Suntar 1.2.1: By Sauro Speranza. Allows any Mac with a Superdrive to exchange files with a SPARCstation, or any UNIX workstation having a 720 or 1440 KByte, 3.5 inch, MFM floppy disk drive. **suntar 1.2.1.doc** is in text format.

SuperTools f: SuperLauncher, SuperPrint and SuperTrash. By Pascal Pochet. Drag and drop tools for use with System 7 and later. SuperLauncher is a tool to create sets of applications and/or documents to be launched together. SuperPrinter is a desktop printer; just drop the files to be printed on the icon. SuperTrash is a document eraser: before deleting a document it writes zero on top of its data. **SuperTools READ ME** is in text format. *Shareware – $25*.

Test Pattern Generator 1.06 f: Test Pattern Generator 1.06: By Larry Pina. Includes a number of different patterns useful for checking horizontal and vertical linearity and focus of your monitor. The program can interrogate video boards to determine the monitor's specifications. *Shareware – $10*.

The Complete Delete: By Alysis Software Corp. Completely deletes the contents of a file when you invoke it from within this application.

theTypeBook v3.04s f.sea: By Jim Lewis. Create and maintain a typeface reference book (extremely popular in the Graphics and Typesetting industries). Helps people select typefaces by demonstrating the various artistic attributes of each face on a printed page. **tTB-Manual.txt** and other documents are in text format. Compatible with System 7.0 and TrueType.

TTConverter 1.1 f: TTConverter 1.1: By Chris Reed. Convert TrueType fonts between Windows 3.1 and Macintosh formats. Works with either font suitcases or System 7 font files. For System 6 and later. **TTConverter Docs** and **TTConverter Registration** are in TeachText format. *Shareware – $10*.

UnlockFolder 1.0 f: UnlockFolder 1.0: By Kazu Yanagahira. Permits you to rename your hard disk after a System 6 user logs onto a System 7 file sharing server. **Unlock Folder !! doc** is in text format.

Version 2.2 f: Version 2.2: By Dana Basken. creates a tab delimited file of applications and their version numbers (if available as a resource). **Version Blurb, Version Manual (MWII)** and **Version Manual (WORD)** are in text, MacWrite II and Word formats respectively. *Shareware – $5*.

Zorba 1.0.1 f: Zorba 1.0.1: By John Wind. A simple security application for the Macintosh. Allows establishment of three different passwords for each Mac on a network. Shuts down the Mac after three unsuccessful logon attempts. **Zorba docs (Read First!)** is in TeachText format.

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

Mail this form with your check to : Disk Library Washington Apple Pi 7910 Woodmont Avenue, Suite 910 Bethesda, Maryland 20814	Are you a member of Washington Apple Pi, Ltd.? Y/N __ If Yes, Member Number _____. All payments must be in U.S. funds drawn against U.S. banking institutions. Non-members add $3.00 per disk to listed prices.
Number of **Disks** **Member** **Price @** **Extended**	**Name**
Singles __ 4 or less @ $4.00= ____ __ 5 or more @ $3.50= ____	**Box Number, Apartment, Suite, etc.**
__ Sets (marked above) $ (above) + postage $1.00/disk, maximum $5.00. ____	**Street Address**
__ Disk Catalogs + $1.50 postage $4.50	**City** **State** **Zip Code**
TOTAL AMOUNT DUE $____	**Day Telephone** **Evening Telephone**

Pi Library
— 0.01 - C 01

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

Desk Accessories#
— 10 disk set; $30
— 2.01D - DAs 1
— 2.02D - DAs 2
— 2.03D - DAs 3
— 2.04D - DAs 4
— 2.05D - DAs 5
— 2.06D - DAs 6
— 2.07D - DAs 7
— 2.08D - DAs 8
— 2.09D - DAs 9
— 2.10D - DAs 10

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

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

LaserWriter Fonts
— 29 disk set; $87
— 6.01 - LW 1
— 6.02 - LW 2
— 6.03 - LW 3
— 6.04 - LW 4
— 6.05 - LW 5
— 6.06 - LW 6
— 6.07 - LW 7
— 6.08 - LW 8
— 6.09 - LW 9
— 6.10 - LW 10
— 6.11 - LW 11
— 6.12 - LW 12
— 6.13 - LW 13
— 6.14 - LW 14
— 6.15 - LW 15
— 6.16 - LW 16
— 6.17 - LW 17
— 6.18 - LW 18
— 6.19 - LW 19
— 6.20 - LW 20
— 6.21 - LW 21
— 6.22 - LW 22
— 6.23 - LW 23
— 6.24 - LW 24
— 6.25 - LW 25
— 6.26 - LW 26
— 6.27 - LW 27
— 6.28 - LW 28
— 6.29 - LW 29

TrueType Fonts
— 11 disk set; $33
— 7.01 - TT 1
— 7.02 - TT 2
— 7.03 - TT 3
— 7.04 - TT 4
— 7.05 - TT 5
— 7.06 - TT 6
— 7.07 - TT 7
— 7.08 - TT 8
— 7.09 - TT 9
— 7.10 - TT 10
— 7.11 - TT 11

INITs & cdevs#
— 17 disk set; $51
— 9.01B - I/C 1
— 9.02B - I/C 2
— 9.03B - I/C 3
— 9.04B - I/C 4
— 9.05B - I/C 5
— 9.06B - I/C 6
— 9.07B - I/C 7
— 9.08B - I/C 8
— 9.09B - I/C 9
— 9.10B - I/C 10
— 9.11B - I/C 11
— 9.12B - I/C 12
— 9.13B - I/C 13
— 9.14B - I/C 14
— 9.15B - I/C 15
— 9.16B - I/C 16
— 9.17B - I/C 17

Miscellaneous
— 10.01 - M 1

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

Digitized Sounds
— 31 disk set; $93
— 12.01A - S 1
— 12.02A - S 2
— 12.03 - S 3
— 12.04 - S 4
— 12.05 - S 5
— 12.06 - S 6
— 12.07 - S 7
— 12.08 - S 8
— 12.09 - S 9
— 12.10 - S 10
— 12.11 - S 11
— 12.12 - S 12
— 12.13 - S 13
— 12.14 - S 14
— 12.15 - S 15
— 12.16 - S 16
— 12.17 - S 17
— 12.18 - S 18
— 12.19 - S 19
— 12.20 - S 20
— 12.21 - S 21
— 12.22 - S 22
— 12.23 - S 23
— 12.24 - S 24
— 12.25 - S 25
— 12.26 - S 26
— 12.27 - S 27
— 12.28 - S 28
— 12.29 - S 29
— 12.30 - S 30
— 12.31 - S 31

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

Programmer/Hacker
— 24 disk set; $72
— 14.01 - PH 1
— 14.02 - PH 2
— 14.04 - PH 4
— 14.05 - PH 5

— 14.06 - PH 6
— 14.07 - PH 7
— 14.08 - PH 8
— 14.09 - PH 9
— 14.10 - PH 10
— 14.11 - PH 11
— 14.12 - PH 12
— 14.13 - PH 13
— 14.14 - PH 14
— 14.15 - PH 15
— 14.16 - PH 16
— 14.17 - PH 17
— 14.18 - PH 18
— 14.19 - PH 19
— 14.20 - PH 20
— 14.21B - PH 21
— 14.22A - PH 22
— 14.23 - PH 23
— 14.24 - PH 24
— 14.25 - PH 25

Miscellaneous Utils
— 13 disk set; $39
— 15.01A - MU 1
— 15.02A - MU 2
— 15.03A - MU 3
— 15.04A - MU 4
— 15.05A - MU 5
— 15.06A - MU 6
— 15.07A - MU 7
— 15.08A - MU 8
— 15.09A - MU 9
— 15.10A - MU 10
— 15.11A - MU 11
— 15.12A - MU 12
— 15.13A - MU 13

System Utilities#
— 16 disk set; $48
— 16.01D - SU 1
— 16.02D - SU 2
— 16.03D - SU 3
— 16.04D - SU 4
— 16.05D - SU 5
— 16.06D - SU 6
— 16.07D - SU 7
— 16.08D - SU 8
— 16.09D - SU 9
— 16.10D - SU 10
— 16.11D - SU 11
— 16.12D - SU 12
— 16.13D - SU 13
— 16.14D - SU 14
— 16.15D - SU 15
— 16.16D - SU 16

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

Adobe Screen Fonts
— 16 disk set; $48
— 18.01A - AF 1
— 18.02A - AF 2
— 18.03A - AF 3
— 18.04A - AF 4
— 18.05A - AF 5
— 18.06A - AF 6
— 18.07A - AF 7
— 18.08A - AF 8
— 18.09A - AF 9
— 18.10A - AF 10

— 18.11A - AF 11
— 18.12A - AF 12
— 18.13A - AF 13
— 18.14A - AF 14
— 18.15A - AF 15
— 18.16A - AF 16

HyperCard StackWare
— 44 disk set; $132
— 19.01A - SW 1
— 19.02A - SW 2
— 19.03 - SW 3
— 19.04 - SW 4
— 19.05 - SW 5
— 19.06 - SW 6
— 19.07 - SW 7
— 19.08 - SW 8
— 19.09 - SW 9
— 19.10 - SW 10
— 19.11 - SW 11
— 19.12 - SW 12
— 19.13 - SW 13
— 19.14 - SW 14
— 19.15 - SW 15
— 19.16 - SW 16
— 19.17 - SW 17
— 19.18 - SW 18
— 19.19 - SW 19
— 19.20 - SW 20
— 19.21 - SW 21
— 19.22 - SW 22
— 19.23 - SW 23
— 19.24 - SW 24
— 19.25 - SW 25
— 19.26 - SW 26
— 19.27 - SW 27
— 19.28 - SW 28
— 19.29 - SW 29
— 19.30 - SW 30
— 19.31 - SW 31
— 19.32 - SW 32
— 19.33 - SW 33
— 19.34 - SW 34
— 19.35 - SW 35 †
— 19.36 - SW 36 †
— 19.37 - SW 37
— 19.38 - SW 38

Mac II Series
— 13 disk set; $39
— 20.01 A- M II 1
— 20.02 A- M II 2
— 20.03 A- M II 3
— 20.04 A- M II 4
— 20.05 A- M II 5
— 20.06 A- M II 6
— 20.07 A- M II 7
— 20.08 B- M II 8
— 20.09 B- M II 9
— 20.10 A- M II 10
— 20.11 A- M II 11
— 20.12 A- M II 12
— 20.13 A- M II 13

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

HyperCard Externals
— 5 disk set; $15
— 21.01 - HE 1
— 21.02 - HE 2
— 21.03 - HE 3
— 21.04 - HE 4
— 21.05 - HE 5

Best of Pi Series
set; $35   10 disk complete
$17.50   5 disk revised set;

System Software
$12   6.0.3 - 4 disk set;
$12   6.0.5 - 4 disk set;
$12   6.0.7 - 4 disk set;
$12   6.0.8 - 4 disk set;
       7.0 - 9 disk set; $20
$20 (‡)   7.0.1 - 6 disk set;
Up $3   Sys 7/7.0.1 Tune-
set; $6   QuickTime - 2 disk
set; $6   TrueType - 2 disk

HyperCard Update
—   1.2.5 - 3 disk set; $9
—   2.0 - 5 disk set; $15
19.35†   6 disk set; $15
19.36†   2 disk set; $7

diskette (‡)   on 1.44 Meg
Revised disk series

Apple Disk Library

The Apple Disk Library has been updated and reformatted to enable you to more easily locate those disks in which you are interested. 3.5" disks are listed first, followed by 5.25" disks. Look for the 🖫 and ◆ icons which distinguish them. For your reference - the numbers shown in parentheses ( ) after the disk names are the old disk numbers. SW after the disk description indicates that it is ShareWare.

Eamon Adventure Listing:

Codes:–D = DOS 3.3   P = ProDOS   PLC = ProDOS Lower Case

1. Main Hall & Beginners Cave - D
2. The Lair of the Minotaur - D
3. The Cave of the Mind- D
4. The Zyphur Riverventure - D
5. Castle of Doom -D - P
6. The Death Star -D
7. The Devil's Tomb -D
8. The Abductor's Quarters - D - P
10. The Magic Kingdom - D
11. The Tomb of Molinar - D
12. The Quest for Trezore -D - P
13. Caves of Treasure Island - D
14. Furioso - D
15. Heroes Castle - D
16. The Caves of Mondamen -D - P
17. Merlin's Castle - D
18. Hogarth Castle - D
19. Death Trap - D - P
20. The Black Death - D - P
21. The Quest for Marron - P
22. The Senator's Chambers - P
23. The Temple of Ngurct -D - P
24. Black Mountain - D - P - PLC
25. Nuclear Nightmare - D - P
26. Assault on the Mole Man - P
27. Revenge of the Mole Man - P
28. The Tower of London - P
29. The Lost Island of Apple - D
30. The Underground City - D
31. The Gauntlet - D
33. The Orb of Polaris - D - PLC
34. Death's Gateway - D - PLC
35. The Lair of Mutants - P
36. The Citadel of Blood - P
37. Quest for the Holy Grail - D - P
38. City in the Clouds - D - P
39. Museum of Unnatural History - P
41. Caverns of Lanst - D - P
42. Alternate Beginners Cave - D
43. Priests of Xim! - D
44. Escape from the Orc Lair - D
45. SwordQuest - D - P
46. Lifequest - D
47. FutureQuest - D - P
48. Picnic in Paradise - P
49. The Castle Kophinos - P
51. The Caves of Eamon Bluff - P
53. Feast of Carroll - D - P
54. Crystal Mountain - D
55. The Master's Dungeon - D - P
56. The Lost Adventure - D - P
57. The Manxome Foe - D
58. The Land of Death - P
60. The Sewers of Chicago - D
64. Modern Problems - P
68. The Smith's Stronghold - P
69. The Black Castle of NaGog - PLC
73. The Deep Canyon - P
74. DharmaQuest - P
75. Temple of the Guild - P
76. The Search for Yourself - P
77. Temple of the Trolls - PLC
78. The Prince's Tavern - PLC
80. The Search for the Key(80a) - P
81. The Rescue Mission (80b) - P
86. Castle Mantru - P
87. Caves of Hollow Mountain - P
90. The Doomsday Clock - P
91. FutureQuest II - PLC
92. The Fugitive - P

93. Flying Circus - P
97. The House of Secrets - D - P
98. Slave Pits of Kzorland - D
99. In the Clutches of Torrik - P
100. Sorceror's Spire - P
106. Camp Eamon - P
107. The Last Dragon - PLC
108. The Mines of Moria - PLC
109. The Forest of Fear - P
112. Hills of History - P
113. The Life-Orb of Mevtrelek - P
114. Thror's Ring - PLC
117. Dungeon of Doom - P
118. Pittfall - PLC
119. Grunewalde - P
120. Orb of My Life - PLC
121. Wrenhold's Secret Vigil - P
124. Assault on Dolni Keep - PLC
126. The Pyramid of Anharos - P - PLC
127. The Hunt for the Ring - P
128. Quest of Erebor - P
129. Return to Moria - P - PLC
130. Haradwaith - P
131. Nucleus of the Ruby - PLC
132. Rhadshur Warrior - P
137. The Ruins of Ivory Castle - P
138. Starfire - PLC
139. Peg's Place - P
142. The Beermeister's Brewery - P
143. The Alternate Zone - P
145. Buccaneer! - P
146. The House of Horrors - P
147. The Dark Brotherhood - PLC
148. Journey to Jotunheim - P - PLC
149. Elemental Apocalypse - P
150. Walled City of Darkness - P - PLC
154. A Trip to Fort Scott - P
155. Tomb of the Vampire - P
158. The Lair of Mr. Ed - P
159. The Bridge of Catzad-Dum - P
160. Monty Python & Holy Grail - P
161. Operation Endgame - PLC
162. Eamon 7.0 Demo Adventure - P
163. The Sands of Mars - P
164. A Real Cliffhanger - P
165. Animal Farm - P
166. Storm Breaker - P
169. The Black Phoenix - PLC
170. Ragnarok Revisited - P
183. The Boy and the Bard - P
188. Encounter: The Bookworm - P
191. Enhanced Beginners Cave - P
194. Attack of the Kretons - PLC
195. The Training Ground - P
198. Revenge of the Bookworm - P
204. Sanctuary - P - PLC
205. Utterly Outrageous - P
206. Curse of the Hellsblade - PLC
208. Assault on Helstar - P
211. Lair of the Marauders - P
213. Demongate - P
214. Deathstalker's Castle - P
215. Treasure Island - P
Unk. Temple of the Undead - D
Beginners Cave - P (Pro.Eamon.01)
Dungeon Designer - P
Dungeon Designer Diskette, V.7.0 - P
Eamon Utilities Diskette - P
Eamon Utilities 2 & 3 - D
Graphics Main Hall - All P & PLC Disks

3.5" DISKS

Apple II GS

IIGS SYSTEM DISKS
___ GSAS-01   System 5.04 - 2 Disk Set - $6
___ GSAS-02   Hyper Mover v. 1.1 (Mac/GS)-2 Disk Set - $6
___ GSAS-03   GS Bug & Debugging Tools - V. 1.6 - $3
___ GSAS-04   System 6.0 - 6 Disk Set - $18

IIGS COMMUNICATIONS (4 DISK SET-$12)
___ GSCM-01C FreeTerm - (2003)
___ GSCM-02B SnowTerm - (SW)
___ GSCM-03   Mega Term V. 1.3
___ GSCM-04   Generic Term V. 3.2 / Telecom V. 0.28

IIGS DEMO (21 DISK SET-$63.00)
___ GSDM-01   Cartooner's Demo
___ GSDM-02   Deluxe Paint II Demo
___ GSDM-03   Music Studio Demo
___ GSDM-04   Beagle Write GS Demo
___ GSDM-05   Calendar Crafter Demo
___ GSDM-06   G.A.T.E. Demo
___ GSDM-07   Crystal Quest, Dragon Wars, Pyramid GS
___ GSDM-08   Diversi-Tune, Nexus, ProSel 16, Salvation
___ GSDM-09   Shanghai Demo & Extra Tile Sets
___ GSDM-10   Medley V. 2.0 Demo
___ GSDM-11   Battle Chess Demo
___ GSDM-12   Task Force Demo
___ GSDM-13   Genesys, ProTerm 2.2, TIC
___ GSDM-14   Space Harrier Demo
___ GSDM-15   HCGS Screens, MasterTracks Jr., SysEx MIDI
___ GSDM-16   AC Basic, Design Master, GS16 Forth, Micol, MicroDot
___ GSDM-17   GeNav, ProTerm 3.0, Viad Promo
___ GSDM-18   World Geography Program - Disk 1
___ GSDM-19   World Geography Information - Disk 2
___ GSDM-20   ABC Zoo, AnsiTerm, Dream Graphics. Math Blaster Plus
___ GSDM-21   Battle Axe, Deluxe Tetris

IIGS DESK ACCESSORIES (15 DISK SET-$45)
___ GSDA-01   Desk Accessories 1 - (2020) - (SW)
___ GSDA-02   Desk Accessories 2 - (SW)
___ GSDA-03   Desk Accessories 3 - (SW)
___ GSDA-04   Desk Accessories 4 - (SW)
___ GSDA-05   Desk Accessories 5 - (SW)
___ GSDA-06   Desk Accessories 6 - (SW)
___ GSDA-07   Desk Accessories 7 - (SW)
___ GSDA-08   Desk Accessories 8 - (SW)
___ GSDA-09   Desk Accessories 9 - (SW)
___ GSDA-10   Desk Accessories 10 - (SW)
___ GSDA-11   Desk Accessories 11 - (SW)
___ GSDA-12   Desk Accessories 12
___ GSDA-13   Desk Accessories 13
___ GSDA-14   Desk Accessories 14
___ GSDA-15   Desk Accessories 15

IIGS DEVELOPER (11 DISK SET-$33)
___ GSDV-01   Demo Source Code 1 - (2005)
___ GSDV-02   Demo Source Code 2 - (2006)
___ GSDV-03   Shell Applications (EXE) 1 - (SW)
___ GSDV-04   Shell Applications (EXE) 2 - (SW)
___ GSDV-05   Miscellaneous Developer Files 1 - (SW)
___ GSDV-06   Miscellaneous Developer Files 2
___ GSDV-07   Miscellaneous Developer Files 3
___ GSDV-08   Miscellaneous Developer Files 4
___ GSDV-09   Miscellaneous Developer Files 5
___ GSDV-10   Miscellaneous Developer Files 6
___ GSDV-11   Miscellaneous Developer Files 7

IIGS EDUCATION (7 DISK SET-$21)
___ GSED-01   Astr. GS: Astronomer - Disk 1 - (SW)
___ GSED-02   Astr. GS: Moon 1 - Disk 2 - (SW)
___ GSED-03   Astr. GS: Planets 1 - Disk 3 - (SW)
___ GSED-04   Astr. GS: Planets 2 - Disk 4 - (SW)
___ GSED-05   Astr. GS: sTools - Disk 5 - (SW)
___ GSED-06   Astr. GS: Sun - Disk 6 - (SW)
___ GSED-07   Astr. GS: Utilities 1 - Disk 7 - (SW)

IIGS FONTS (27 DISK SET-$81)
___ GSFT-01   A-Plain
___ GSFT-02   A-Fancy, Foreign, Graphic
___ GSFT-03   B-Plain, Foreign, Graphic
___ GSFT-04   B-Plain, Fancy
___ GSFT-05   C-Plain
___ GSFT-06   C-Plain
___ GSFT-07   C-Graphic, Foreign
___ GSFT-08   C-Fancy
___ GSFT-09   D-Plain, Fancy, Foreign, Graphic
___ GSFT-10   E-Plain, Fancy, Foreign, Graphic
___ GSFT-11   F-Plain, Fancy, Graphic
            G-Foreign, Fancy
___ GSFT-12   G-Plain, Graphic
___ GSFT-13   H-Fancy, Foreign
            I
___ GSFT-14   H-Graphic, Plain
            J
___ GSFT-15   K
            M-Fancy
___ GSFT-16   L
            M-Foreign
___ GSFT-17   M-Plain
___ GSFT-18   M-Graphic
___ GSFT-19   N-Plain, Fancy
___ GSFT-20   N-Foreign, Graphic
            O
            P-Foreign, Graphic
___ GSFT-21   P-Plain, Fancy
___ GSFT-22   Q
            R
___ GSFT-23   S-Fancy
            T-Fancy
___ GSFT-24   S-Plain, Graphic
___ GSFT-25   S-Foreign
            T-Plain
___ GSFT-26   T-Foreign, Graphic
            U
            V
___ GSFT-27   W
            Y
            Z

IIGS GAMES (31 DISK SET-$93)
___ GSGM-01A Mean 18 Golf Courses - (2007)
___ GSGM-02A Mean 18 Golf Courses 2 - (2018)
___ GSGM-03   Bouncing Bluster Boot Disk - (SW)
___ GSGM-04   Bouncing Bluster Data &Docs - (SW)
___ GSGM-05   Bouncing Bluster Consn. Set - (SW)
___ GSGM-06   Games 1 - (SW)
___ GSGM-07   Games 2 - (SW)
___ GSGM-08   Games 3 - (SW)
___ GSGM-09   Games 4 - (SW)
___ GSGM-10   Games 5 - (SW)
___ GSGM-11   Games 6 - (SW)
___ GSGM-12   Games 7 - (SW)
___ GSGM-13   Games 8 - (SW)
___ GSGM-14   Games 9 - (SW)
___ GSGM-15   Games 10 - (SW)
___ GSGM-16   Games 11 - (SW)
___ GSGM-17   Mean 18 Golf Courses 3
___ GSGM-18   Games 12 - (SW)
___ GSGM-19   Games 13 - (SW)
___ GSGM-20   Games 14
___ GSGM-21   Columns GS V. 2.0 - (SW)
___ GSGM-22   Lode Runner GS
___ GSGM-23   Games 15
___ GSGM-24   Games 16
___ GSGM-25   Games 17
___ GSGM-26   Games 18
___ GSGM-27   Games 19
___ GSGM-28   Sensei
___ GSGM-29   Easy Dead
___ GSGM-30   Space Cluster
___ GSGM-32   Explorer GS

IIGS GRAPHICS (31 DISK SET-$93)
___ GSGX-01   Demo Disk A - (2002)
___ GSGX-02   Slide Show 1 - (2004)
___ GSGX-03   Slide Show 2 - (2016)
___ GSGX-04   Slide Show 3 - (2017)
___ GSGX-05   Nucleus Demo-ROM 3
___ GSGX-06   GIF Graphics 1 - (SW)
___ GSGX-07   Pics and Utilities 1 - (SW)
___ GSGX-08   Pics and Utilities 2
___ GSGX-09A Pics and Utilities 3
___ GSGX-10   Pics and Utilities 4 - (SW)
___ GSGX-11   Modulae
___ GSGX-12   Paula Abdul Demo
___ GSGX-13A Pics and Utilities 5 - (SW)
___ GSGX-14   Slide Show 4
___ GSGX-15   Slide Show 5
___ GSGX-16   Nucleus Demo-ROM 1 - (2024)
___ GSGX-17   PSGS Graphics 1-Color
___ GSGX-18   PSGS Graphics 2-Mono
___ GSGX-19   PSGS Graphics 3-Mono
___ GSGX-20   Marilyn Monroe Slide Show
___ GSGX-21   Pics and Utilities 6 - (SW)
___ GSGX-22   Pics and Utilities 7
___ GSGX-23   3200 Pics 1
___ GSGX-24   3200 Pics 2
___ GSGX-25   FTA Xmas Demo
___ GSGX-26   FTA Delta Demo
___ GSGX-27   Animaga
___ GSGX-28   Sap V. 0.5
___ GSGX-30   Sap Spin
___ GSGX-31   Pics and Utilities 8
___ GSGX-32   Pics and Utilities 9

IIGS HYPERCARD (6 DISK SET-$18)
___ GSHC-01   HyperCard Utilities 1 - (SW)
___ GSHC-02   HyperCard Utilities 2 - (SW)
___ GSHC-03   HyperCard Utilities 3 - (SW)
___ GSHC-04   Utilities: General 1 - (SW)
___ GSHC-05   Fun & Games: General 1 - (SW)
___ GSHC-06   Fun & Games: Eamon 1

IIGS HYPERSTUDIO- DEMO (10 DISK SET- $30)
___ GSHS-01   HS System-Demo Version
___ GSHS-02   HS Demo-Demo Version
___ GSHS-03   HS Sounds-Demo Version
___ GSHS-04   More Stacks-Demo Version
___ GSHS-05   More Stacks 2-Demo Version
___ GSHS-06   Video Demo-Demo Version
___ GSHS-07   Comm Stack-Demo Version
___ GSHS-08   MUG 087-Demo Version
___ GSHS-09   USA-Demo Version
___ GSHS-10   HS Art 2-Demo Version

IIGS HYPERSTUDIO (13 DISK SET - $39)
___ GSHS-11   Miscellaneous HS Stacks 1
___ GSHS-12   Miscellaneous HS Stacks 2 - (SW)
___ GSHS-13   Arizona Stack Disk 1
___ GSHS-14   Arizona Stack Disk 2
___ GSHS-15   Photography Stack Disk 1
___ GSHS-16   Photography Stack Disk 2
___ GSHS-17   1906 SF Earthquake & Fire Disk 1
___ GSHS-18   1906 SF Earthquake & Fire Disk 2
___ GSHS-19   Miscellaneous HS Stacks 3
___ GSHS-20   Miscellaneous HS Stacks 4
___ GSHS-21   Miscellaneous HS Stacks 5 - (SW)
___ GSHS-22   Miscellaneous HS Stacks 6
___ GSHS-23   Soundsmith Song Player XCmd

IIGS ICONS (11 DISK SET-$33)
___ GSIC-01A   Finder Icons 1 - (2022) - (SW)
___ GSIC-02A   Finder Icons 2 - (SW)
___ GSIC-03A   Finder Icons 3 - (SW)
___ GSIC-04A   Finder Icons 4 - (SW)
___ GSIC-05A   Finder Icons 5 - (SW)
___ GSIC-06A   Finder Icons 6 - (SW)
___ GSIC-07A   Finder Icons 7 - (SW)
___ GSIC-08   Finder Icons 8 - (SW)
___ GSIC-09   Finder Icons 9 - (SW)
___ GSIC-10   Finder Icons 10 - (SW)
___ GSIC-11   Finder Icons 11 - (SW)

IIGS MISCELLANEOUS
___ GSMS-01   New Member's Disk - (2000) - (SW)
___ GSMS-02B GS Disk Library Catalog Disk 1
___ GSMS-03B GS Disk Library Catalog Disk 2

IIGS MUSIC (39 DISK SET $117)
___ GSMU-01A SoundSmith and Songs - (SW)
___ GSMU-02   SoundSmith Songs 1
___ GSMU-03   SoundSmith Songs 2
___ GSMU-04   SoundSmith Songs 3
___ GSMU-05   SoundSmith Songs 4
___ GSMU-06   SoundSmith Songs 5
___ GSMU-07   Diversi-Tune (C) Songs 1
___ GSMU-08   Music Studio Songs 1
___ GSMU-09   MS Songs 2 (Golden Album Rock 2)
___ GSMU-10   A Variety Pack of Songs
___ GSMU-11   SoundSmith Songs 6
___ GSMU-12   MCS Song "Slide Show"
___ GSMU-13   Noisetracker V. 1.0
___ GSMU-14   Soundsmith Songs 7
___ GSMU-15   Soundsmith Songs 8
___ GSMU-16   Music & Speech
___ GSMU-18   Noisetracker Songs 1
___ GSMU-19   Noisetracker Songs 2
___ GSMU-20   Noisetracker Songs 3
___ GSMU-21   Noisetracker Songs 4
___ GSMU-22   GS-IRC Music Disk 1
___ GSMU-23   Noisetracker Songs 5
___ GSMU-24   Noisetracker Songs 6
___ GSMU-25   Noisetracker Songs 7
___ GSMU-26   Noisetracker Songs 8
___ GSMU-27   Noisetracker Songs 9
___ GSMU-28   Noisetracker Songs 10
___ GSMU-29   Noisetracker Songs 11
___ GSMU-30   Noisetracker Songs 12
___ GSMU-31   Noisetracker Songs 13
___ GSMU-32   Noisetracker Songs 14
___ GSMU-33   Noisetracker Songs 15
___ GSMU-34   Noisetracker Songs 16
___ GSMU-35   Noisetracker Songs 17
___ GSMU-36   Noisetracker Songs 18
___ GSMU-37   Noisetracker Songs 19
___ GSMU-38   Noisetracker Songs 20
___ GSMU-39   Noisetracker Songs 21
___ GSMU-40   Noisetracker Songs 22

IIGS SOUNDS (16 DISK SET-$48)
___ GSSN-01A   Sounds 1 - (2014)
___ GSSN-02A   Sounds 2-Nostalgia - (2015)
___ GSSN-03   Sounds 3
___ GSSN-04   Sounds 4
___ GSSN-05   Sounds 5-Simpsons 1
___ GSSN-06   Sounds 6-Simpsons 2
___ GSSN-07   Sounds 7
___ GSSN-08   Sounds 8
___ GSSN-09   Sounds 9
___ GSSN-10   Sounds 10
___ GSSN-11   Sounds 11
___ GSSN-12   Sounds 12-Cartoons 1
___ GSSN-13   Sounds 13-Cartoons 2
___ GSSN-14   Sounds 14-Cartoons 3
___ GSSN-15   Sounds 15-Cartoons 4
___ GSSN-16   Sounds 16-Cartoons 5

IIGS UTILITIES (14 DISK SET-$42)
___ GSUT-01B   Utilities 1 - (2001) - (SW)
___ GSUT-02   JumpStart Prog Sel V. 3 - (2021)
___ GSUT-03A   Utilities 2 - (2028) (SW)
___ GSUT-04A   Utilities 3 - (2029) (SW)
___ GSUT-05A   Utilities 4 - (SW)
___ GSUT-06A   ZZ Copy-V. 2.21 Disk Copier

___ GSUT-07A Utilities 5 - (SW)
___ GSUT-08D Utility Works GS V. 2.01 (SW)
___ GSUT-09 Utilities 6 - (SW)
___ GSUT-10 Utilities 7 - (SW)
___ GSUT-11B Utility Works Launcher v. 2.3.1-(SW)
___ GSUT-12 Utilities 8
___ GSUT-13 Utilities 9
___ GSUT-14 Desktop Utilities V. 3.3

3.5" DISKS

APPLE II

APPLE SYSTEM DISKS
___ 2APS-01 System Disk - Utilities v. 3.2- $3

APPLEWORKS
___ 2AWK-01 Claris Tech Support for AW / AW-GS

COMMUNICATIONS
___ 2COM-01 TCS Instructions 1.05
___ 2COM-02 Applenet V. 1.3
___ 2COM-03 Comm. Sys. 2.5/Z.Link 12.15 /Utilities

EAMON (ProDOS): (17 DISK SET ($51)
___ 2EAM-01A Dungeon Designer, Utilities, Etc.
___ 2EAM-02 Advs 1, 5, 8, 12, 16, 19, 20, 21
___ 2EAM-03 Advs 22, 23, 24, 25, 26, 27, 28
___ 2EAM-04 Advs 35, 36, 37, 38, 39, 41, 45
___ 2EAM-05 Advs 47, 48, 49, 51, 53, 55, 56
___ 2EAM-06 Advs 58, 64, 68, 73, 74, 75, 76, 86
___ 2EAM-07 Advs 80, 81, 87, 90, 92, 93, 97
___ 2EAM-08 Advs 99, 100, 106, 109, 112, 113
___ 2EAM-09 Advs 117, 119, 121, 126, 155
___ 2EAM-10 Advs 127, 128, 129, 130, 132
___ 2EAM-11 Advs 139, 145, 148, 150, 154
___ 2EAM-12 Advs 149, A, B, C, D
___ 2EAM-13 Advs 158, 160, 166, 166A, 166B
___ 2EAM-14 Advs 170, 183, 191, 195, 204
___ 2EAM-21 Advs 137,142,143,188,208,215
___ 2EAM-22 Advs 146,164,198,205,211,213
___ 2EAM-23 Advs 159,163,165,214

EAMON (ProDOS) (LOWER CASE) (7 DISK SET $21)***
___ 2EAM-15 Advs 33, 69, 77, 118, 124, 150
___ 2EAM-16 Advs 34, 120, 138, 161
___ 2EAM-17 Advs 78, 107, 108, 114, 147
___ 2EAM-18 Advs 91, 129, 169, 194, 206
___ 2EAM-19 Advs 24,131,148
___ 2EAM-20 Advs 126,204
*** includes 2EAM-01A
Note: (23 Eamon Disk Set-$690)

EDUCATION
___ 2EDU-01 Newton's Apple/Cocaine & Teeth

TECH NOTES (5 DISK SET $15)
___ 2TEN-01B II GS Parts 1 & 2
___ 2TEN-02B II GS Parts 3, 4, & 5
___ 2TEN-03B File Types
___ 2TEN-04B More Tech Notes 1
___ 2TEN-05B More Tech Notes 2

UTILITIES
___ 2UTL-01 New Member Disk 2.01
___ 2UTL-02A DB Master V. 1.01 (SW)

5.25" DISKS

APPLE II

APPLE SYSTEM DISKS
___ APSD-01 System Disk-Util V. 3.2-$1.50
___ APSD-02 DOS 3.3 Sys. Master/DOS 3.3 Tut. $1.50

APPLEWORKS
___ APWK-01 Desk, Printer and $ Helpers-(813/814)
___ APWK-02 Food. Lists, etc.-(815/816)

COMMUNICATIONS (9 DISK SET $13.50)
___ COMM-01 TCS Inst. 1.05 A & B-1 of 2-(825)
___ COMM-02 TCS Inst. 1.05 A & B-2 of 2-(826)
___ COMM-03** WAPABBS.1 Docs-(121)
___ COMM-04 WAPABBS.1-(135/136)
___ COMM-05 DI COMM-(SW)-(503)
___ COMM-06 Kermit 3.78-Kermit File Transfer
                (516/820)
___ COMM-07 CommTerm & Telecom -(808/817)
___ COMM-08 MicroModem II (SW)-Hayes Term-
                (116/169)
___ COMM-09 Comm. System 2.5 / Z.Link 12.15

CP/M (11 DISK SET $16.50)
___ CP/M-01** Master Catalog-(401)
___ CP/M-02 Utilities I and II-(402/404)
___ CP/M-03 Communications-(403/409)
___ CP/M-04 ZCPR2 Install and Utils-(406/408)
___ CP/M-05 ZCPR2 Doc/Essential Util(407/410)
___ CP/M-06 Text Editor/ Spreadsheet-(411/412)
___ CP/M-07 MDM740 (SSC. Comm, 7710, &
                A-CAT- (413/414)
___ CP/M-08 Kermit Source and Running Code-
                (416/418)
___ CP/M-09** Kermit Documentation-(417)
___ CP/M-10 Utilities-(419)
___ CP/M-11 Small C. Compiler-(420)

EAMON ADVENTURES (24 DISK SET $36.00)
___ EAMN-01 Utilities II and III -(220/221)
___ EAMN-02* Dungeon Des/ Adv 38-(180/229)
___ EAMN-03 EAMON MASTER /Adv 42-(181/214)
___ EAMN-04* Adventures 2 & 3 -(182/183)
___ EAMN-05* Adventures 4 & 5- (184/185)
___ EAMN-06* Adventures 6 & 7- (186/187)
___ EAMN-07* Adventures 13 & 14-(188/189)
___ EAMN-08* Adventures 10 & 11-(190/191)
___ EAMN-09* Adventures 29 & 8- (192/193)
___ EAMN-10* Adventures 12 & 30-(194/195)
___ EAMN-11* Adventures 17 & 18-(196/197)
___ EAMN-12* Adventures 19 & 20-(198/199)
___ EAMN-13* Adventures 23 & 24-(200/201)
___ EAMN-14* Adventures 25 & 53-(202/203)
___ EAMN-15* Adventures 55 & 54-(204/205)
___ EAMN-16# Adventures 56 & 57-(206/207)
___ EAMN-17* Adventures 31 & 41-(208/209)
___ EAMN-18* Adventures 47 & 97-(210/211)
___ EAMN-19* Adventures 60 & 98-(212/213)
___ EAMN-20* Adventures 46 & 45-(215/216)
___ EAMN-21* Adventures 43 & 15-(217/218)
___ EAMN-22* Adventures Unk. & 37-(223/224)
___ EAMN-23* Adventures 16 & 33-(225/226)
___ EAMN-24* Adventures 34 & 44-(227/228)
*-Requires EAMN-03

EDUCATION (20 DISK SET $30.00)
___ EDUC-01 Ed. and Personal Ed.-(76/110)
___ EDUC-02 Personal Ed. 2 and Ed. 3-(131/139)
___ EDUC-03 Math / Science and Ed. 4-(127/140)
___ EDUC-04 Adv. Math / Vectors / Mot.-(510/513)
___ EDUC-05 Albert Camus Int/ El. Math 53/150)
___ EDUC-06 French Vocab/ Tutorial-(46/123)
___ EDUC-07 Boot for L'Hote and L'Hote -(48/49)
___ EDUC-08 Tic-Tac-Toe ,Fr /L'Hote Quiz-(47/50)
___ EDUC-09 Fr. Poetry Tut /Appollinaire-(51/52)
___ EDUC-10 Rafel Boot Disk and Rafel-(55/56)
___ EDUC-11 Tic-Tac-Toe in Sp. /Rafel Quiz-(54/57)
___ EDUC-12 Matute and Lo Fatal -(58/59)
___ EDUC-13 Reading Fun (SW)-(505)
___ EDUC-14 Language Arts Treasures
___ EDUC-15 Floppy Book 1
___ EDUC-16 Computation Game /AW Temp
___ EDUC-17 Algebra Tutorial and Bagels Disk
___ EDUC-18 Newton's Apple (Cocaine)
___ EDUC-19 Newton's Apple (Teeth)
___ EDUC-20 WAP Stack and Tutorial Demo

FORTH
___ FRTH-01 Assem/Disassem/Screen Edtr-(700/701)

___ FRTH-02 Go Forth Tut./Fig/Forth 78-(702/703)
___ FRTH-03 Forth/Floating Point Math-(704)

GAMES (13 DISK SET $19.50)
___ GAME-01 Games A and B-(102/107)
___ GAME-02 Games C and D-(111/128)
___ GAME-03 Games E and F-(162/164)
___ GAME-04 Keyboard and Paddle Games-(72/74)
___ GAME-05 Pinball and Arcade Games-(142/157)
___ GAME-06 Text Adv/Mys. House (Sierra)-(73/517)
___ GAME-07 Ed. Games G and H-(508/509)
___ GAME-08 Sports and Utils / Games-(143/160)
___ GAME-09 Adventures /Game Room-(811/812)
___ GAME-10 Haunted House-(176/810)
___ GAME-11 Mostly Games/Wizard Wkr I -(122/161)
___ GAME-12 # Games 1 / WAP Math Games
___ GAME-13 Smart Dice

LOGO
___ LOGO-01 Logo Tool Kit \ Docs-(145/146)
___ LOGO-02 Sam. Disk/Dallas Apple Logo-(147/158)

MISCELLANEOUS (25 DISK SET $37.50)
___ MISC-01 SS (Coin Collect) /Misc.-(93/115)
___ MISC-02 Miscellaneous-(119/120)
___ MISC-03 Misc. and Recipe Files-(125/159)
___ MISC-04 Glaq and No Name Yet-(129/175)
___ MISC-05 Spec. DBs/Jim's DB (SW)-(141/504)
___ MISC-06 Misc/Aplesft/AppleWriterII-E-(152/156)
___ MISC-07 Astronomy Short Programs-(506)
___ MISC-08 Griffith and Weise Astronomy -(507)
___ MISC-09 Aviation-General (Disk 1 of 2)-(514)
___ MISC-10 Aviation-Navigation (2 of 2)-515)
___ MISC-11 Gardner's Assistant-(518)
___ MISC-12 Music and Sights / Sounds-(71/126)
___ MISC-13 Merry Xmas/Happy Holidays-(103/165)
___ MISC-14 Graphics and Cat Graphix-(108/171)
___ MISC-15 Print Shop Graphics-(172)
___ MISC-16 Clr Gr. for Fun/Science /Engi-(75/106)
___ MISC-17 Plots/Graphs/Charts/Graphs-(163/166)
___ MISC-18 Business/Math Stat and SS-70/90)
___ MISC-19 SS (Invest.) and SS (Bus.)-(91/92)
___ MISC-20 Business A and B-(104/113)
___ MISC-21 Investments A and B-(153/154)
___ MISC-22 Spreadsheet A and Misc.-(137/155)
___ MISC-23 Riley's Personal Instrumentation-(173)
___ MISC-24 ProDos Gr. Packer / DHR Convert
___ MISC-25 PSL Dual Dos

NEW PRINT SHOP (31 DISK SET $46.50)
___ NWPS-01 Graphics 01
___ NWPS-02 Graphics 02
___ NWPS-03 Graphics 03
___ NWPS-04 Graphics 04
___ NWPS-05 Graphics 05
___ NWPS-06 Graphics 06
___ NWPS-07 Graphics 07
___ NWPS-08 Graphics 08
___ NWPS-09 Graphics 09
___ NWPS-10 Graphics 10
___ NWPS-11 Graphics 11
___ NWPS-12 Graphics 12
___ NWPS-13 Graphics 13
___ NWPS-14 Graphics 14
___ NWPS-15 Graphics 15
___ NWPS-16 Graphics 16
___ NWPS-17 Graphics 17
___ NWPS-18 Graphics 18
___ NWPS-19 Graphics 19
___ NWPS-20 Graphics 20
___ NWPS-21 Graphics 21
___ NWPS-22 Graphics 22
___ NWPS-23 Graphics 23
___ NWPS-24 Graphics 24
___ NWPS-25 Graphics 25
___ NWPS-26 Graphics 26
___ NWPS-27 Graphics 27
___ NWPS-28 Graphics 28

___ NWPS-29 Borders 01
___ NWPS-30 Borders 02
___ NWPS-31 Fonts 01

PASCAL (8 DISK SET $12.00)
___ PASC-01 AttachBios for Pascal 1.1,Utils(300/301)
___ PASC-02 Crypto/Gr.& Bios/Printers-(302/303)
___ PASC-03 Misc.,Read/WriteDOS/Prters(304/305)
___ PASC-04 Cataloger/Hires Prting /Lisp-(306/307)
___ PASC-05 Puffin/Hol.Mus.-CPM-Pascal(308-309)
___ PASC-06 3D Ed./Drill /Hackers Stuff-(310/311)
___ PASC-07 Stocks/Weightwatch/Guerrilla Guide-(312/313)
___ PASC-08 Pascal / To & From DOS-(133/314)

PILOT
___ PILT-01** Pilot Language-(167)

UTILITIES (24 DISK SET $36.00)
___ UTIL-01 New Member's Disk-2.01 A/ B- (821)
___ UTIL-02 New Member's Disk-2.01 C/ D- (822)
___ UTIL-03 Utilities A and B-(100/101)
___ UTIL-04 Utilities C and D-(112/118)
___ UTIL-05 Utilities E and F-(124/132)
___ UTIL-06 Utilities G and H-(138/43)
___ UTIL-07 Utilities I and J-(44/77)
___ UTIL-08 Mach. Lang. Utils/One-Key DOS-(41/42)
___ UTIL-09 Beg.Choice /Int. Utils.-(501/502)
___ UTIL-10 Diversi Copy and Diversi DOS-(45/130)
___ UTIL-11 Add. to ProDOS/Zap Utility-(804/806)
___ UTIL-12 Utils A (ProDOS)/File Cabinet-(802/803)
___ UTIL-13 Imageworks-(174/807)
___ UTIL-14 Auto Unshrinkit 1.1/ II Plus Shrinkit, Shrinkit 3.4
___ UTIL-15 Visi-Trend/Visi-Plot/Calculink-(93/94)
___ UTIL-16 AppleSoft Tut/Picture Packer-(109/117)
___ UTIL-17 AppleWriter Utilities-(168)
___ UTIL-18 AppleSoft Prog/Love's Follies-(144/170)
___ UTIL-19 "Old" New Member's Disk-(134)
___ UTIL-20 JoyReader (SW)-(819)
___ UTIL-21 Large Type Joy Reader (SW)-(823)
___ UTIL-22 DB Master V. 1.01-Prog. Disk 1 / Sample Files (SW)
___ UTIL-23 DB Mstr v. 1.01-Prog. Disk 2/Docs (SW)
___ UTIL-24 Tutorial Maker

5.25" DISKS

APPLE III

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___ 3AWZ-05 Checkbook Templates
___ 3AWZ-06 Contributions - Disk 1
___ 3AWZ-07 BankCalc - Disk 1
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III BUSINESS BASIC (9 DISK SET $13.50)
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___ 3BSB-02 Pohlman Disk 02 - (1018)
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___ 3BSB-05 Pohlman Disk 05 - (1021)
___ 3BSB-06 PPT Demo / BASIC Helps - (1098)
___ 3BSB-07 BASIC 1.23/Utils/Auto Basic-Boston
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___ 3GRX-22 Tmem Demo / Trects Demo
___ 3GRX-23 GIF Graphics 01
___ 3GRX-24 GIF Graphics 02
___ 3GRX-25 GIF Graphics 03
___ 3GRX-26 GIF Graphics 04
___ 3GRX-27 Grafixworks 1 and 2 (SW)
___ 3GRX-28 Grafixworks 3 and 4 (SW)
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___ 3GRX-30 Scanned Graphics #1
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___ 3GRX-32 A2/A3 Graphics
___ 3GRX-33 Floppy Coloring Book 1
___ 3GRX-34 Floppy Coloring Book 2 (Trains)
___ 3GRX-35 Floppy Coloring Book 3 (More Trains)
___ 3GRX-36 Floppy Coloring Book 4 (Winter Olympics)
___ 3GRX-37 GIF Graphics 05
___ 3GRX-38 Dino Graphics
___ 3GRX-39 Book Plate Graphics
___ 3GRX-40 Animals #1
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___ 3GRX-43 Summer Olympics

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___ 3INF-07 Best of III's Company-01 (1015)
___ 3INF-08 Best of III's Company-02 (1057)
___ 3INF-09 The Best of Bloom-Disk 01 (1035)
___ 3INF-10 Impert's Corner by Bloom-(1096)
___ 3INF-11 Phase III Conference Plus!-(1047)
___ 3INF-12 Best of Ottalini - Disk 01-(1040)
___ 3INF-13 Best of Ottalini - Disk 02-(1058)
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___ 3INF-18 III Cheers (Boot and Program)
___ 3INF-19 III Cheers (Volumes 1 and 2)

___ 3INF-20 Best of Ottalini - Disk 05
___ 3INF-21 Three's Company BBS
___ 3INF-22 Best of Bloom - Disk 02
___ 3INF-23C WAP 3 SIG PD Catalog (3EZP)
___ 3INF-24 Best of ATUNC - Disk 02
___ 3INF-25 Best of ATUNC - Disk 03
___ 3INF-26 Best of ATUNC - Disk 04
___ 3INF-27 Best of ATUNC - Disk 05
___ 3INF-28 Best of ATUNC - Disk 06
___ 3INF-29 How Do I?
___ 3INF-30 Pair/DA Data System Catalogs
___ 3INF-31 3Works for Apple 3-Disks 1,2(SW)
___ 3INF-32 3Works for Apple 3-Disks 3,4(SW)
___ 3INF-33 3Works for Apple 3-Disks 5,6(SW)
___ 3INF-34 3Works for Apple 3-Disks 7,8(SW)
___ 3INF-35 Best of Ottalini - Disk 06

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___ 3MSC-07 Apple III Demo Disk 01 - (1100)
___ 3MSC-08 Apple III Demo Disk 02 - (1101)
___ 3MSC-09 Apple III Demo Disk 03 - (1102)
___ 3MSC-10 Apple III+ Keyboard Demo
___ 3MSC-11 Best of Salerno
___ 3MSC-12 Apple II Boot Disk
___ 3MSC-13 French Tutor
___ 3MSC-14 Italian Tutor
___ 3MSC-15 Contributions - Disk 04
___ 3MSC-16 Bowling List /Grid Grade
___ 3MSC-17 Floppy Book
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___ 3PCL-04 Pronto Debugger/SANE 1
___ 3PCL-05 SANE 2/ SANE 3
___ 3PCL-06 SOS IOUs/ExerSOS
___ 3PCL-07 Utilities: PutDemo/PutLib
___ 3PCL-08 Cisar's Pascal 1.2
___ 3PCL-09 Chaos Pascal Programs
___ 3PCL-10 Power Keys DM & Source Code
___ 3PCL-11 Power Keys DM-Disk 2
___ 3PCL-12 MacStuff
___ 3PCL-13 David Craig-Disk 1
___ 3PCL-14 David Craig-Disk 2
___ 3PCL-15 David Craig-Disk 3
___ 3PCL-16 IEEE Files for Apple II & Apple III
___ 3PCL-17 Modified Pascal Menu Maker
___ 3PCL-18 Fortran Manual - Disk 1
___ 3PCL-19 Fortran Manual - Disk 2
___ 3PCL-20 Fortran

III REPAIRS (9 DISK SET $13.50)
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___ 3REP-02 Apple 3 DiagnosticsDisk 02 /Block Edit by Mensh -(1094)
___ 3REP-03 Repairing your Apple III - (1088)
___ 3REP-04 Brain Surgeon - (1089)
___ 3REP-05 Disk Map - (1090)
___ 3REP-06 Disk Check and Pro Health - (1091)
___ 3REP-07 Vindicator,Catalyst Fixer-(1092)
___ 3REP-08 Block Editor, Block Byter-(1093)
___ 3REP-09 Jeppson Disassembler - (1095)

III TELECOMMUNICATIONS (9 DISK SET $13.50)
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___ 3TEL-02 Telecom-Disk 02/Access III(1064)
___ 3TEL-03 Telecom - Disk 03 - (1065)
___ 3TEL-04 Kermit III - (1066)

Apple II GS Games

GSGM-01 A - IIGS.GAMES.01 - Mean 18 Golf Courses 1–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation.

Mean 18 is a golfing simulation produced by Accolade and is currently available for a large number of 16 bit computers including the Amiga, Atari ST, IBM (and clones), and, of course, the Apple IIGS. The program disk comes with three prepared courses: St. Andrews, Pebble Beach, and Augusta National. Accolade has also issued three additional volumes of courses for some versions of the program. This disk contains 6 Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with your game for using extra course disks. An AppleWorks Classic word processing file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean 18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels. The following courses are on the disk: BUNGLE.M18 (Bayou Bungle), DESERT.M18 (Desert Hell), MULE.M18 (Mule Mountain), PGA.M18 (PGA National), SNAKE.M18 (Snake River), WALDEN.M18 (Walden).

GSGM-02 A - IIGS.GAMES.02 - Mean 18 Golf Courses 2–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation.

Mean 18 is a golfing simulation produced by Accolade and is currently available for a large number of 16 bit computers including the Amiga, Atari ST, IBM (and clones), and, of course, the Apple IIGS. The program disk comes with three prepared courses: St. Andrews, Pebble Beach, and Augusta National. Accolade has also issued three additional volumes of courses for some versions of the program. This disk contains 6 Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with your game for using extra course disks. An AppleWorks Classic word processing file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean 18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels. The following courses are on the disk: AUTUMN.M18 (Autumn in Maine), BEACH.M18 (Beachhead), JAX.M18 (Nas Jacksonville), JIMCLAY.M18 (Jimmy Clay), KAYAK.M18 (Kayak Point):, SUMMER.M18 (Summerdale)

GSGM-03 - IIGS.GAMES.03 - BOUNCING BLUSTER BOOT DISK / GSGM-04 - IIGS.GAMES.04 - BOUNCING BLUSTER DATA & DOCS / GSGM-05 - IIGS.GAMES.05 - BOUNCING BLUSTER CONST. SET–Bouncing Bluster is a ShareWare program ($15 fee). The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the documentation.

Bouncing Bluster is a variation on the traditional Breakout game. You must destroy a wall of bricks with a racket and a ball. This game includes advanced features: randomly moving monsters; a construction set module; six types of bricks (Normal, Rainbow, Invisible, Teleport, Steel and Come-Back); bricks that resist several times; and bricks that release a capsule. Touching the capsule with your racket will produce a variety of good or bad effects. This game is contained on a three disk set. The disk /B.BLUSTER/ contains the game Bouncing Bluster. The disk /BB.DATA/ contains the game's data files and documentation. The disk /BBCSET/ contains the construction set module.

GSGM-06 - IIGS.GAMES.06 - Games 1–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This folder contains the following IIGS games: Ark.II.Levels, One.Arm.Battle, PreThex, Worm.Runner.

GSGM-07 - IIGS.GAMES.07 - Games 2–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This folder contains the following IIGS games: F1.Racer, Plunder.

GSGM-08 - IIGS.GAMES.08 - Games 3–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This folder contains the following IIGS games: BlackJack, Cards, AppleLink Logo, Batman, Bears, Converter, Solitaire, Pyramid, Rummy, Solitaire2.0, Summer.

GSGM-09 - IIGS.GAMES.09 - Games 4–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Eucre.2.2, Monte.Carlo, Poker, Power.Play, Return.Woz, Sheepshead, Tetrotrix.

GSGM-10 - IIGS.GAMES.10 - Games 5–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or

the documentation. This disk contains the following IIGS games: Orbizone, Rogue.

GSGM-11 - IIGS.GAMES.11 - Games 6–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Golem, MAG, Moria.

GSGM-12 - IIGS.GAMES.12 - Games 7–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Battleship.GS, Columns.0.5b, Senseless.2, Yahtzee.

GSGM-13 - IIGS.GAMES.13 - Games 8–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: AsTheLinkTurns, Backgammon, Beast, Four.In.A.Row, Four.Play, Romulans, Spell.Binder.GS, TicTacToe.

GSGM-14 - IIGS.GAMES.14 - Games 9–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This folder contains a variety of IIGS games: Ballistics.GS, Chips & Dips, Copy.Killers, Dungeon.Master, and Music.Game.

GSGM-15 - IIGS.GAMES.15 - Games 10–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Adventure, Lunar.Lander, MageMaze, Medieval.War, Quadronome.

GSGM-16 - IIGS.GAMES.16 - Games 11–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Bounce.It1.2, Cosmocade, Othello, Puzzle, Tower.Hanoi, Towers.

GSGM-17 - IIGS.GAMES.17 - Mean 18 Golf Courses 3–This disk may include ShareWare programs as well as public domain software.

The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation.

Mean 18 is a golfing simulation produced by Accolade and is currently available for a large number of 16 bit computers including the Amiga, Atari ST, IBM (and clones), and, of course, the Apple IIGS. The program disk comes with three prepared courses: St. Andrews, Pebble Beach, and Augusta National. Accolade has also issued three additional volumes of courses for some versions of the program.

This disk contains 6 Mean 18 Golf courses for use with the game Mean 18. Follow the instructions included with your game for using extra course disks. An AppleWorks Classic word processing file named Mean.18.Info is included. This file provides further information on Mean 18 golf courses. Also included on this disk is an ASCII text file named Mean18.Hint. This file contains a chart showing the yardage ratings for your clubs at various power levels. The disk contains the following courses: AAW.M18 (All Around Worst), AQUALINK.M18 (AquaLinks), AUB-LAKES.M18 (Auburn Lakes), AUTUMN.-M18 (Autumn in Maine):, BALI.M18 (Bali Island C. C.):, WATERY.M18 (Watery Grave).

GSGM-18 - IIGS.GAMES.18 - Games 12–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: AnTetris; Hearts.v1.0, MileStones.2000, and Solitaire.

GSGM-19 - IIGS.GAMES.19 - Games 13–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Color.Mind, Columns.GS, Daleks, Elavators, Follower, GS.Daleks, Mystery.Color, Tanks.GS and Tesseract.

GSGM-20 - IIGS.GAMES.20 - Games 14–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Shanghai.Tiles, Star.Trek.GS.

GSGM-21 - IIGS.GAMES.21 - Columns GS v2.0–This disk is not a boot disk and doesn't contain system software. Columns GS requires GS/OS to be active. You will first need to boot

your System disk and then launch the Columns GS game from the Finder. This text file is called "WAP.ReadMe."

Columns GS is ShareWare. The writers of ShareWare code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This is Columns GS version 2.0. Just like the original except that the background songs are played.

The optional file is Jewels (version 0.3) which allows you to convert the Columns Box file to Jewels. Read the docs for instructions on how to install the Jewels file. By Zach Litvack. Jewels is a new template for "Columns" version 2.0 or higher. Instead of seeing the boring ol' boxes, you will see: Rubies (Red), Emeralds (Green), Sapphires (Blue), Polished Stones (Red, Green, Blue), Rings (Rainbow), Cut-Aways (Rainbow), Nasty Blocks (Chain Links)

GSGM-22 - IIGS.GAMES.22 - LODE RUNNER GS–This disk is a boot disk and doesn't contain system software. It requires that your hard drive has been turned off and then you boot from this disk to run this game.

GSGM-23 - /IIGS.GAMES.23/ - Games 15–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: "ManOfSteel" (to be used with Arkanoid GS), Dr. Mario version 2.0.3, "Fun Columns GS," "Nim" , Puz16 version 1.0 , Shuffle Mouse version 1.0.

GSGM-24 - /IIGS.GAMES.24/ - Games 16–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: a GS port of the PDP-11 program Dungeon (the sorce for the Zork I, II, and III programs, Floor.Tiles, The Immortal GS, Name.Maker, Quintette (board game similar to Go and the Nibble game of yesteryear called Quintic.), Sokoban version 2.1.

GSGM-25 - /IIGS.GAMES.25/ - Games 17–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Plunder! and SpaceArrow.

GSGM-26 - /IIGS.GAMES.26/ - Games 18–This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay

for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: Accrete, "Milestones 2000" v1.5, One Arm Battle v1.5.

GSGM-27 - /IIGS.GAMES.27/ - Games 19– This disk may include ShareWare programs as well as public domain software. The writers of shareware code ask that the user of his code pay for it's usage. Information on how to pay the programs author is included in the software or the documentation. This disk contains the following IIGS games: "Anti" Tetris., Dr. Mario version 3.0 , Mah Jongg.

GSGM-28 - /SENSEI/ - Sensei–This disk uses its own unique, non-standard disk operating system. This program can't be launched from the Finder or any other program launcher. To run the Sensei game you will have to boot the Sensei game disk. The Sensei game is FreeWare. This text file is called ReadMe.

Sensei is an addictive action game from Second Sight and Miami Software, along the lines of the long-since flooded market of martial arts games on Nintendo and in arcades. To start the game, it is highly recommended to insert the diskette in the drive and then to switch the computer off and back on after a short while. Once the diskette is booted, you will see in that order, and without additional entry, the "Toolbox" logo, the "Miami Software" logo and the introduction page just following the introduction music.

One or two player options. Use the games "Help" option to learn the different attack and defend positions that the karatekas can use during the game and how to get them with the joystick or the keyboard. Sensei features eight different backgrounds for fights in "Dojo,"

outside fights and in between scenes in which you will have to break bricks with the "Shuto." You can progress through the belts (white - yellow - orange - green - blue - brown - black) by scoring points during the "Kumite." High scores are saved on the diskette.

GSGM-29 - IIGS.GAMES.29 - FTA's Easy Dead–This disk uses its own unique, non-standard disk operating system. This program can't be launched from the Finder or any other program launcher. To run Easy Dead you will have to boot the Easy Dead disk. The Easy Dead program is FreeWare. Easy Dead is a GS game by the FTA gang from 1989. Requires joystick. Object is to move your "man" around so that none of the "bad guys" touch it. Try and do this for the longest time. The longer the time the higher the score! Okay music, it's a little strange, enjoy.

GSGM-30 - IIGS.GAMES.30/SPACE.CLUS-TER/- Space Cluster–This disk uses its own unique, non-standard disk operating system. This program can't be launched from the Finder or any other program launcher. To run Space Cluster you will have to boot the Space Cluster disk. The Space Cluster program is FreeWare. Good shoot-'em-up from France. Your average shoot-'em-up type game, similar to Galaga, from the French United Cracker's Klan. Does not work with a UniDisk 3.5" drive. Smooth action, good music. Turn off any accelerator you might have before playing this game!

GSGM-32 - IIGS.GAMES.32/Explorer.GS/ - Explorer GS–Explorer, by Jason Smart, is a desktop graphic adventure game. The Explorer program runs scenarios created with the GameMakerGS program. Although Explorer scenarios can be as different as your imagination,

they all have one thing in common: to 'win' the scenario, a specific object must be found. The overall layout of the scenario is divided up into 'rooms'. Each room has exits to other rooms. The auto-mapping feature shows the rooms location in the overall layout. As a character moves through the maze, fighting monsters and disarming traps, he will build experience points. These increase the character's stats and give him new spells.

The goal is to get a winning item, but there are many obstacles in the character's path (Eg: traps, locked doors, monsters, riddles, hidden entranceways, even solid walls.) that will hinder his progress. Success, then, depends on a good deal of strategy and thought, not just pure fighting. Just as in the real world, creatures in Explorer can be both good and evil. Before attacking anything, be sure it wants to attack you. Otherwise, your alignment will change to evil and all good creatures in the room will attack. Also, the person/creture might have had something important to say, but if he dies that information will be forever lost. This program is ShareWare, $10 fee.

The GameMakerGS program creates characters (from the 28 races) and scenarios for the Explorer adventure game. It is a full graphics program using the desktop/ point-and-click interface. Make sure any newly-created scenario can be played all the way through before making it public. GameMaker was written by Jason Smart and is ShareWare, $10 fee. The following 16 Explorer GS scenarios are included for your gaming pleasure: Brothell Quest, Deathflame, Death Quest, Dungeon, Galgoroth, Hell, Islands, Light Orb, Lord of Elbac, Lyle Valley, Nor for 1, Nor Forest, Oak Haven, Onslaught, Pantheon, and River.

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Give Aways

I have all the issues of the WAP journal from November 1982 through October 1989. If anyone would like to have any or all of these issues free of charge, call me (Don Hall) in Arlington at 703/532-5249

Wanted

Pro Bono Tax Lawyer Desperately Needed-I am recovering from a long illness and live on a Federal disability stipend. The IRS is pursuing me for a tax levy with no basis in reality and I cannot afford representation. Larry 301-869-9847

Bethesda Fellowship House, an Adult Day Care Charity, needs a used ImageWriter II printer for use with recently donated Mac Plus for accounting and client database. Sarah Nichols. (301) 654-2077.

Preschool software (games, education) that will run on a Mac 512KE (with 800k drive). Call Doug, (202) 966-7120.

Donations Wanted

Apple IIe CPU's and ImageWriter II's for public high school science department. Call Lillian, (301) 650-6638 (day), (301) 530-7942 (evenings).

For Sale

Internal 80 MB Quantum HD. $200 or best offer.John Love, (703) 569-2294.

Apple LaserWriter Logic Boards
Fast component level repairs: L/W -$200; +, NT -$250; NTX -$350 Call Thompson & Thompson 800/457-5776

Mac software for sale. Aldus Gallery Effects-$85. CE Calendar Maker-$25. Both new, unregistered. Tim, (703) 273-4513.

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Mac Plus, 4MB RAM, 20 MB hard drive, System Saver, needs new power supply. $500/best offer. Call Bob at (703) 742-6240 (day), (703) 620-5637 evenings and weekends).

Hayes Personal Modem 2400, model 3110US. Like new. $35 or best offer. Call Arnie at (301) 762-0779.

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DC color separator needs DTP individuals responsible for previewing, trapping, troubleshooting and outputting of PostScript files to image setters. Knowledge of color stripping helpful. Minimum of 2 years service bureau or "Scitext/Mac" experience required. PC and network understanding a plus. Resumes: Human Resources, 120 Q Street, NE, Washington DC 20002.

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