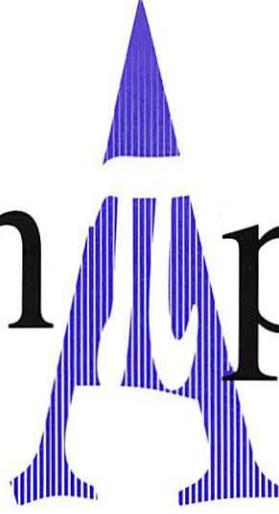


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The Journal of Washington Apple Pi, Ltd.



Volume 13, Number 11

November 1991



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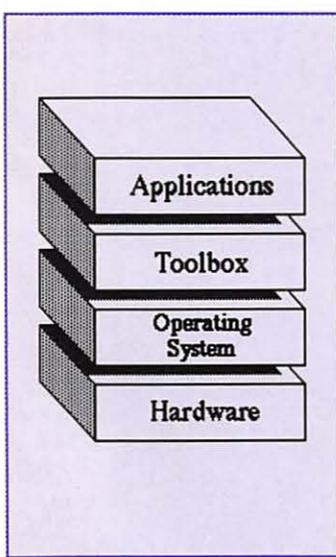
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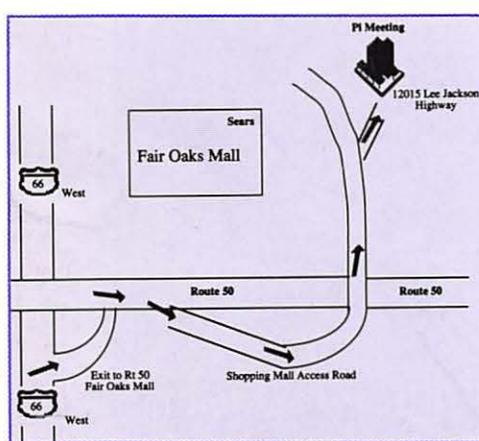


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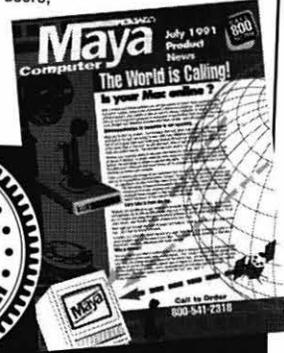
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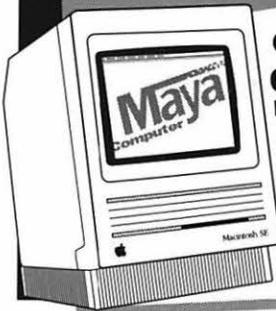
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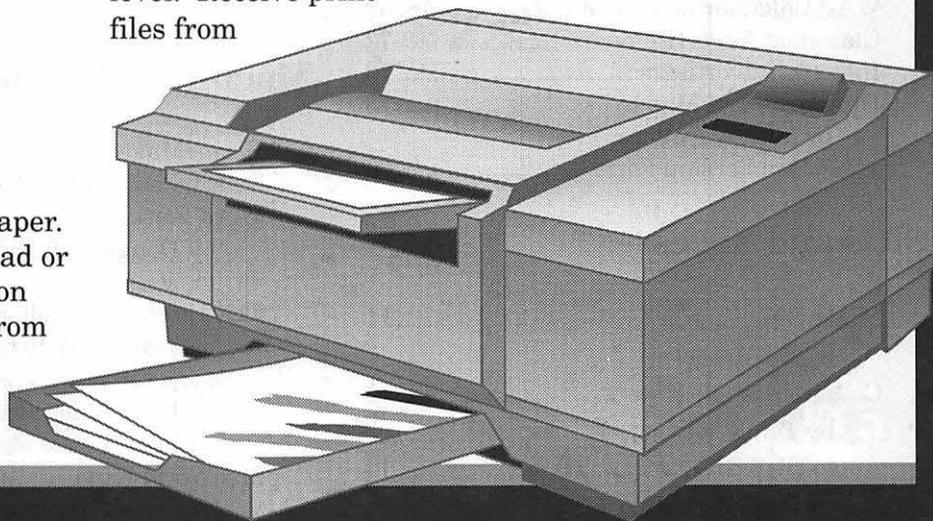
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In the FRY Pan...

Upon completion of last month's Journal, my predecessor, Mr. Potter, asked me how it felt to be "in the barrel." Little did I know that the water in the barrel would rapidly come to a full boil. After reading and hearing some of the reviews for the October issue I feel somewhat like Poached Editor a la poisson brulée. Nevertheless, we must press on. I present the November issue, an issue I sincerely hope is not my last. To my possibly overgenerous apologists, I hope you find something even better here to enjoy. To my detractors, I hope you find something more suited to your high standards of typographical taste.

I have made careful note of all the comments, good and bad, which I have received and have attempted to address all of them in one way or another. Please be assured that I welcome all feedback, whether it consists of praise or of sharp criticism. As has been noted on the TCS, constructive criticism is the best kind, for it avails me of the opportunity to immediately change something deficient into something I know will please. In other words, I will not have to guess what you like when you tell me to please eliminate what you most certainly do not like. Reciprocal feedback will be essential during this difficult transition time as you, the readers, and I, the editor, get better acquainted.

One trait that I have, often painfully, discovered about my readers is an overwhelming interest in the typographical "look" of the Journal.

This is a good thing. It means I will get plenty of help as I experiment and attempt to improve the overall publication style of the Journal. I know that you will not be shy about mentioning anything that you do not find acceptable. I have my own tastes and ideas about how I can improve the page layout style of the interior and exterior of our publication. I know that you do too. Working together we can make the Journal into the finest Users' Group publication in the country.

Compared with the furor concerning the typographical changes of last month's issue, there was almost no feedback concerning the content of the articles presented therein. This is not so good. Without some *raison d'être*, all the glitzy page design in the world is nothing more than so much expensive wallpaper. Fancy styling is just that, style, not substance. Good typography is great marketing for the WAP, but is not very informative. Information dissemination is what the Journal is all about. It gets the message about our wonderful computers and the software they run out to us so that we can use them in a more productive and efficient manner.

Are the articles that appear in this publication serving the membership's needs? Right now we print a great many software reviews. Is this what you want? Do you want more technical articles? Do you want software tutorials printed? Should we try to expand the Graphic Arts section? Do we need more articles about Desktop Publishing?

What about programming? Should there be a regular HyperCard Column? Without suggestions from you, I can only guess as to your needs and desires.

This Month's Changes

You have no doubt noticed that I have responded to innumerable complaints about the choice of font for the text of the Journal. Welcome to New Century SchoolBook (10/12). I hope it meets with your approval. I will not describe to you the full range of the observations about last month's font. Space would not permit. The whole Journal would not permit. However, not all of the assertions were negative. One member was heard to say, "Thank goodness someone finally made the text big enough so that we can read it." Many, many thanks to that member. I chose SchoolBook over a smaller version of Times and Palatino. I feel that it is easier to read and that it lends a certain intellectual weight to our publication, giving it a more formal air. In any case, give it a try and let me know what you think.

I have made a concerted effort this month to ensure that all the spelling, grammar, usage, and punctuation for the material published is current and accurate. I have taken some well-deserved hits about letting some questionable items go and missing others completely. This new determination will affect Journal authors. Some appreciate a more heavy-handed editorial approach. Others do not. However, the membership has demanded ex-

continued on page 8

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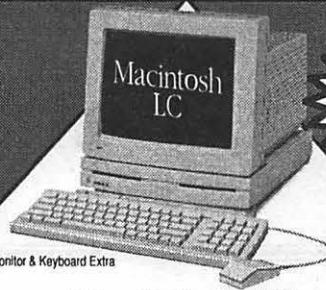


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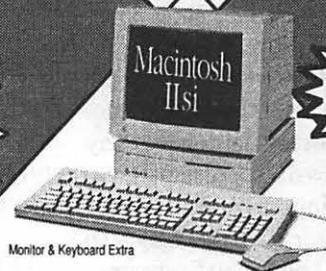
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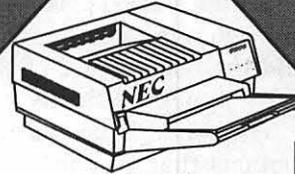
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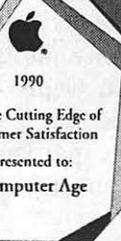
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cellence and thoroughness in these matters. I will do my utmost to deliver it.

You will notice that the sidebars which identified the section of the Journal have been removed. Personally, I find the blanket use of these sidebars typographically frustrating. They sharply curtail the layout options that an editor may employ on a given page. They give each page a very "vertical," constrained look that I do not like. They frame any white space on the page, accentuating it as a hole to be filled, as opposed to a natural break in the text. In addition, they are a pain in the neck to deal with as far as production is concerned. Since they cannot be on every page, I cannot use them on the master pages for the publication. Therefore, each and every one of the about 70-80 or so sidebars has to be placed manually on each page. If one gets knocked askew inadvertently by me or PageMaker, I may miss it until one of you points it out.

However, most of the membership that I have spoken to wants them or something to denote where the Apple section ends and the Macintosh section begins. Apparently any given member is either an apple or an orange (pardon the pun) and does not want to waste time looking through material that does not conform to their particular type of fruit. Accordingly, I have devised a system of corner logos that identify the subject of a given page. There is a Pi symbol for general interest, an Apple symbol for Apple II and Apple III articles, a Macintosh system symbol for Mac stuff, and a family of disk symbols for the various disk libraries. I hope you like them.

Please notice that I have completely revamped and updated the Apple II, IIGS, and III Disk Libraries. The Apple II and IIGS listings have been rearranged into a two column

format which is (I hope) more readable than the old three column format. I have also created a set of order forms for the Apple II and Apple III disks. They are at the end of their respective sections. The Macintosh order form is at its customary spot at the end of the Journal.

I have included in this month's issue an announcement of the general meeting as well as a map to the meeting site, page 73. Manny DeVera was kind enough to supply me with these. Thank you, Manny. Because our meetings appear to be hopping from place to place recently, I intend to make this a regular feature of our magazine. Unfortunately, because of the uncertainties of time and circumstance, I must add this warning: The meeting times and places will be as accurate as possible at the time of submission to the printer. As we all know, things can change and often do. Your best bet for up-to-the-minute info is, as always, the TCS or the WAP office.

Editorships

My editorial staff is still woefully thin in some areas. I appreciate all the help that I have been getting, but we still desperately need people in the Apple II and Graphics departments. We will soon be without an Apple II editor, and our graphics editor, Nancy Seferian, will leave us after the December issue is put to bed. This month the Apple authors were wonderful in their contributions (Thank You!), but I fear without an editor to prod, poke, plead, cajole, and pray the quality and the quantity of the articles we print for the Apple II will inevitably degrade. Also, with no editor, there is no one out beating the underbrush for new authors to replace the current ones that can no longer contribute for one reason or another. As far as "Artists on Exhibit" is concerned, that feature will simply disappear without an editor to find new com-

puter artists each month. I would love to expand the Graphics Arts section of the Journal, but without a Graphics editor to help, I cannot do it. Please, consider helping out. If you want to find out more about either position, call the WAP office or me. I would love to discuss it with you.

Profuse Apologies

I wish to extend my deepest apology to the wonderful folks at Back Office Support Services, Inc. (B.O.S.S.) of Gaithersburg, MD. The misplacement of your advertisement in last month's issue was an unmitigated botch on my part. I want everyone to check out the complete (i.e., not cut off) advertisement in this issue. Also, many mea cuplas to Dana Schwartz. His article about the MacExpo was turned in anonymously with another article of John O'Reilly's. Being new, I assumed the obvious instead of the correct. Please re-read this story with the correct byline.

Wither Mac?

We had a terrible time scrambling for Macintosh articles this month. Many, many thank you's to all who helped out at the last minute. See you next issue....

Office News

New Staff Member

I would like to welcome WAP's newest employee, Beth Medlin, to the office. Beth will be answering the phones and taking care of requests we receive from the members, as well as processing new memberships and renewals.

WAP Hotline

The Hotline is published in the Journal every month. If you turn to the centerfold, the Mac Hotline is on the next page, and the Apple II & III Hotlines are on the previous page. We at the office are the "bureaucrats" not the "techies". We would help if we could, but we just don't have the technical expertise. Please understand, and try to make use of the hotline numbers listed. Remember that the hotline people are volunteers. They don't get paid for answering questions, and they do it because they want to help their fellow members.

Washington Apple Pi Member Deals and Discounts

(As always, be sure to let the companies know that you are a member of Washington Apple Pi!)

Special Rate: inCider Magazine

WAP members are eligible for a special subscription rate of \$24.97 for a one year subscription for new subscribers (the regular rate is \$27.97 for one year, \$43.00/two years and \$59.00/three years). To order, please send your check for \$24.97 per one year subscription

made payable to inCider to the WAP Office at 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814. Also include mailing information.

Special Rate: MacUser Magazine

WAP members are eligible for a special subscription rate of \$13.50 (50% off the regular rate of \$27.00). To order, please send your check for \$13.50 per subscription made payable to Ziff-Davis to the WAP Office at 7910 Woodmont Avenue, Suite 910, Bethesda, MD 20814. Also include mailing information.

Macmillan Computer Publishing Books

Macmillan Computer Publishing is now offering all of the following series of books: QUE, Sams and New Riders Publishing. Macmillan is offering WAP members a 20% discount on all titles. To place your order call 800/428-5331 and ask for Diana David at ext. 2959. We have a limited number of Fall 1991 catalogs for the QUE and Sams titles, which you can pick up. Be sure to tell Diana that you are a member of Washington Apple Pi to ensure receiving the discount.

Peachpit Press

Peachpit Press has two new books on System 7: The Little System 7 Book and The Macintosh Font Book, Second Edition.

The Little System 7 Book covers virtual memory, desk accessories, the new Finder and Control Panels, TrueType, tricks for multitasking, customizing the desktop, network-

ing, and more. It includes a chapter on "neat tricks" as well as the popular "Oh, No! Troubleshooting!". Retail \$12.95.

The Macintosh Font Book, Second Edition is the updated version of the award-winning book which now includes up-to-the-minute advice on TrueType fonts and System 7. The book covers everything from font fundamentals to resolving ID conflicts. Other topics include hands-on solutions for managing a font collection, tips on printing options and working with service bureaus, and techniques for creating and enhancing typefaces. It also provides over 250 typeface samples from major vendors. Retail \$23.95

Washington Apple Pi members get a 20% discount off of the retail prices of these books as well as all other Peachpit Press Books. To order call Keasley Jones at (800) 283-9444 or fax your order to (415) 524-9775.

The Cobb Group

The Cobb Group publishes several "Support Publications" for software products. Among them are Inside HyperCard, Inside Works and Inside Word. For a free issue or to subscribe at 10% off, call Melissa Haeberlin at (800) 223-8720 for more information.

by Nancy Pochecko



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Service—The Cornerstone of Our Success

Music SIG

by Ed Moser

September 16 saw the second meeting of the renewed music SIG at Ellen Banizewski's house, where Band-in-a-Box was up and running for most of the meeting. Ellen's major use of this program is to generate "music minus one" sequences, and then dump the sequences to her keyboard (a Roland D10 which has an onboard sequencer). She can then take the keyboard (and nothing else!) to gigs and perform with it.

Band-in-a-Box has several virtues in this capacity. First, it is low priced. High powered Mac music programs are right up there with PageMaker. This is due to a combination of the specialised market and the magnitude of the task any music programmer faces. Band-in-a-Box, however, packs a lot of value to the buck. It'll pick up standard files, which in Ellen's case she can then re-arrange for the D10. Bare piano parts can be quickly fleshed out with the program's accompaniment generating options, an eye opener that I had never observed before in other, pricier sequencers. The accompaniments are no substitute for human composition or human improvisation, but genuine musicality can be coaxed out of the program with sensitive use. I'd rate the program's algorithms as a cut above the current class of accompaniments one finds on most consumer keyboards at stores such as Circuit City. Which is saying something, when one considers how sophisticated some of these programs have become. Ellen amused us all with the potentially disastrous results of heavy handed, intentionally tasteless use, i.e., the combination of wrenching Chopin nocturnes with a bluegrass/hillbilly backup. Must save the idea for the next time the inlaws drop by.

Otherwise it's a fairly standard sequencer with graphically based track sheets and step editing, similar to MasterTracks for the GS. One feature that did catch my attention was the power it gave the user to orchestrate on the fly while the sequence is playing! It keeps playing in the background while you select a part, pull down a menu, select an option that causes a box to pop up listing numerous instruments. Select an instrument, and presto! that instrument takes up the part. Ellen must have edited the list of instruments to match her program change table on the keyboard and sent out a program change message on the fly, because I can't imagine the D10 digesting a patch data dump that quickly, but we can ask her the next time we see her.

Other discussion topics included chasing bytes around the computer's innards, restrictions on transporting computer related equipment in and out of Austria, and similarities between Mac music & Atari ST music. The first subject quickly evolved into a listing of sources for systems and hardware documentation. APDA and the WAP's own library were both named (I know we've got the Addison-Wesley manuals hiding there somewhere). Also mentioned was the MIX Bookshelf, a business that stocks and distributes MIDI manuals of all kinds.

How MIDI data get poked in and peeked out of memory, pushed on and popped off stacks, placed onto status registers and eventually pumped out of computer ports ultimately remains a mystery to us. The fact that the users in the room supported their musical interests with four different systems (the Mac,

IIGS, IBM, and Atari ST) diverged rather than focused the theme of the discussion. The Atari may be the best system to study because it was designed from the ground up for music—the MIDI ports are right on the back panel—but it is, perhaps, the most poorly documented and supported. The IBM may engender more direct control of the processor, memory, and ports on the part of the assembly programmer (I certainly can't confirm or deny); but is that desirable? Directly studying the Mac or the GS would certainly mean chasing bytes from one Apple authored tool to another as opposed to a hard look at the computer itself. The topic was more or less jettisoned before we broached the broader subject of what happens when the data hits a network of sound equipment. Following one byte around a MIDI network might make for an interesting book or two, and might provide a novel way to introduce & explain MIDI / electronic / data network concepts, but it's beyond us to write it. Where's Danny Goodman when you need him?

Reinhard Weixler's presence initiated the subject of Atari music in general. The Atari is better supported in Europe than here, and Reinhard may well bop over there by the end of the year and return with a sackful of otherwise unavailable goodies. Our appetites were whetted for an upcoming meeting at his place in October.

However that turns out, it's becoming clear that we do indeed have MIDI enthusiasts in the club, that a functioning computer music SIG is in the cards. Excelsior!

Columbia Apple Slice

by Tom Cook

At our September 5 Apple II Columbia Slice meeting, Tom Cowley gave a very enthusiastic demonstration of On Balance by Broderbund. On Balance is a powerful yet very easy to use home finance package for the Apple family with 128k. Data is entered into a database that looks very much like a check register. Before entering the data, a user must define accounts (checking, savings, VISA, etc.), specify their types (assets, liability, income, expense) and possibly assign them to groups (business, household, etc.). Once the accounts are defined the data can be entered into the On Balance database. More than one account of each type can be defined. Recurring transactions can also be set up. Common recurring transactions are mortgage payments, loan payments, paycheck deposits, and utility bills. On Balance warns you when the accounts are coming due and allows you to edit the transaction.

You can use On Balance to reconcile accounts, print check set up and keep track of a budget, search for data you have entered, and produce reports. On Balance lets you set up a wide range of criteria to search for financial data that you have entered. You can search by date, check number, payee, or dollar amount. And you can even retrieve by text in the memo field. Up to four flags can be defined to aid in the search. The most obvious use is flagging tax deductible items.

On Balance produces four types of reports. These are the Net Worth, Net Income, Account, and Transaction List reports. These reports can give you insight into your financial affairs. Each report is viewed on the screen or printed out to provide organized financial material when needed.

On Balance also contains a number of special features that are available anywhere in the program. These "goodies" include a calculator and a notepad. On Balance can also be customized. You can change the way the screens are formatted, what prompts are given, what kind of information is displayed, and so on. The customizing options are carried out using the Customize Menu. The changes can be made or undone in a matter of minutes. In summary, Tom highly recommended On Balance as an easy to use but powerful financial tool. In fact, Tom remarked that On Balance handled non-checking transactions better than Quicken.

At our October 3rd Apple II Columbia Slice meeting, Andy Wakshul continued his look at the Apple IIGS disk library from Washington Apple Pi. The GS font collection has been redone and reorganized. It now contains 21 disks (A to Z) organized in the following categories: plain, fancy, graphic symbols, and foreign language. Each disk contains a Font List program and graphic files showing how the fonts look. Andy again demonstrated Font-DA loader which is a very useful NDA for loading fonts, and desk accessories after the initial boot. We also looked at disk volume GSDA-11, a new IIGS Desk Accessory volume containing the PIXIE CDA, a disk formatter, and various desk accessory loaders. We also looked at several of the GS Utility volumes which have been updated. These updated volumes included: Utilities 1, Utilities 4, and Utilities 5. Andy also stated that three new disks of icons have been added to the WAP IIGS library.

Apple IIGS SIG

by Paul Tarantino

Minutes of the September Apple II GS SIG Meeting

Gary's setup for our September meeting at NIH included a first for

the SIG: two monitors. Nobody was deterred by the fact that one of them was a venerable Apple Monitor III, in discrete monochrome green. It actually made me a bit nostalgic for the old Apple II+ setup which I acquired (for an incredibly exorbitant price) in 1981. But I got over it.

Oh, yes, the meeting... Gary was at center stage to provide two demos: the first was a quick trip through his own Magic File Cabinet (hereinafter referred to as MFC), a utility/task file/macro set which enables any user of Appleworks 3.0 and Ultramacros 3.1 to greatly expand the capabilities of the Appleworks database. Gary was driven to create MFC out of frustration with some of the limits imposed by the Appleworks database structure, namely 30 fields per record and 78 characters per field, which severely restricts the ability to include narrative in a database. MFC allows the user to attach an (essentially) unlimited narrative to any record in a suitably constructed Appleworks database. This capability can really enhance the utility of a database, as we shall see.

MFC creates an Appleworks word processor file which "attaches" to a database file (W.MYFILE would be the WP file associated with the database file MYFILE); each record in MYFILE can be tied to a portion of W.MYFILE, with macros to support easy switching back and forth between database and narrative (both-apples F and both-apples G). Potential applications are unlimited; some suggestions include recipe files (primary ingredients in the database, procedures in the WP file), student records (the database file lists all grades, WP file provides narrative comments), or a Rolodex database with a diary for each phone conversation. Both GENie and America On Line support MFC by providing areas in their services for exchange of ideas and problems (if you're a GENie subscriber, go to A2,

cat 13, topic 5; on AOL, go to Productivity, AW classes, Let's Discuss, List Boards, Let's Discuss (again) to find the dedicated MFC areas).

Gary's next demo (he is, indeed, a man of many talents) was a Quick and Dirty walkthrough of how to create a newsletter with Publish.It 4, an 8-bit program (which means it runs just fine on those other Apple II's). The most sensible way to employ this program is to generate narrative in a word processor (AppleWorks is fine) and use Publish.It 4 to establish a format/layout, with masthead, columns and all that. Graphics are easily imported, using 8-bit Print Shop or other sources. Gary showed us a lot of tricks (there were several "Aha!" comments from the attentive crowd), including how to align columns of text to the guidelines, the right window size to use for Print Shop graphics and how to link word processor files to text blocks which maybe "continued on page x." Handy Hint: Only Copy II+ can convert old Dos 3.3 Print Shop graphics to a ProDOS format recognized by Publish.It 4.

Formal presentations having been completed, our meeting degenerated into the usual riot of PD/shareware disk duplications and Q&A. Questions and answers ran the gamut; disks in demand included the latest FTA demo (called the Delta Demo), more gee-whiz graphics from a French programmers' group, a game disk from Big Red (thanks, Bob) and a disk of the "Best Fonts" from GEnie. Please join us next time!

EdSIG

by Phil Shapiro

Minutes of the September EdSIG Meeting

The featured presentation at the September EdSIG meeting was a demo of Think Quick, an interest-

ing and entertaining problem solving game by The Learning Company. The object of this puzzle-like maze game is to find "Magic Things" and "Secret Panels." To do so you have to navigate your little person around several rooms in a castle, opening all sorts of tricky locked doors, all the while avoiding the evil slime worms. It's hard to describe this very visual program in words. But the program offers some really interesting challenges, and the kids seem to enjoy playing it. (The suggested age range for this game is 7 to 14. But those in attendance believed that it would be more suitable for the higher end of the suggested age range.)

Following the demo, we went on to discuss how some educational software is better used in a home setting than a school setting. Think Quick, with its lengthy and involved games, lends itself better for use in a relaxed, unscheduled environment. Also, explaining the game's detailed rules can be difficult to cover in limited classroom time. Still, Think Quick ranks right up there with the other educational hits by The Learning Company. The program runs on any 64K Apple II, and lists for \$75. (Mail order price of about \$52).

After the Think Quick demo we took a look at a new program under development, Big Text Machine. This program displays any ProDOS text file or AppleWorks file in an attractive high-resolution font at a user-controllable rate of display. The program could be used to display public messages or children's creative writing. Scheduled for release later this fall, Big Text Machine runs on any 64K Apple II or Laser 128.

The last program we looked at was Drop It, a public domain version of Tetris. While the game has a definite arcade appeal, it also helps children develop spatial manipulation skills. Getting kids to think

quickly under the pressure of a game clock also has merit in our time-oriented modern world.

After that, computer whiz Liz Hemming told us of her success in getting parents to donate blank 5.25 inch floppy disks to her school. With so many of the new computers using 3.5 inch high-density disks, the older style 5.25 inch disks are often accumulating unused in large piles in many homes and office. Whether these 5.25 inch disks were formerly used for programs or data, they're always welcome when donated to schools. The disks can be used in several ways: 1) as data disks for students' word processing work; 2) for making backups of commercial software; or, 3) for making extra copies of public domain and shareware disks.

Liz mentioned that Apple II disk drives have no problem formatting regular double-density 360K IBM-style 5.25 disks. But you may have to buy a disk notcher if you want to use both side of the disk. And you can't use the high-density 5.25 inch disks on an Apple II drive.

Various educational public domain and shareware Apple II disks were then exchanged, including a crossword puzzle maker that looked rather interesting. Sue Racoosin, our language arts expert advisor, promised to report back to us on how this program worked with her middle school students.

Ginny Spevak then briefly told us about her school's experience with a National Geographic sponsored telecommunications project. Ginny related how the subscription rates are rather steep, but like all National Geographic activities, the project is well-planned and well-thought out.

We Need You...

by Tom Witte

This monthly column, like the Volunteer Board on Conference 1 of the TCS, is an information exchange forum. A place for organizers of Pi activities to post requests for help and a place where members can look for opportunities to help. If you need help or would like to assist others, please leave me a message on the TCS or contact me at (703) 683-5871.

I am pleased to report that in our first month I have received much encouragement and support. Some of the suggested ideas that are being looked into are:

Volunteer Recognition - In addition to public recognition as the Volunteer of the Month mentioned here (picked subjectively and arbitrarily by me), we are investigating the possibility of giving our volunteers small tokens, such as pins, T-shirts, or ball caps that will identify them to all as the workers at our club sponsored events. Additionally, we would like to recognize significant or multiple acts of volunteerism with other small tokens such as tote bags, coffee cups or other similar items marked with the club's logo. If you have some ideas on other inexpensive items, please let me know. What items or kinds of items would you like to see sporting our logo be sold? It's not too soon to think about Christmas.

Graphic Designs - With reference to the club's logo, we are looking for designs to put on the aforementioned items. So you can easily earn the first of these items by submitting a winning design to me or the office.

Also, we are looking for an impressive design for the poster advertising the December Garage Sale. See your work published. Give me a call.

Apple II Editor - Are you, as Apple II, users concerned that there is not enough exposure in the Journal for your computer? Would you like to see specific products reviewed in the Journal? If so, your ship has arrived. After many months of excellent service, Rick Zeman is stepping down as Apple II editor. If you can help, call Deborah Hoyt at (703) 450-0714.

Apple II Users: Would you like to find out about more of the software that is out there? Would you like to see more written for the Apple user? If so, John Ruffatto would like to speak with you. He is looking for Apple users to test and write short functional descriptions of software submitted to the disketeria. This is an easy and fun job that does the club much good. If you can help, please give John a call at (301) 735-4259.

Mac Hardware Handy Types: Would you be interested in joining Jon Hardis and me in running a memory upgrade workshop? Could you lend us your torque wrench and grounding strap? Many members expressed a desire to add more RAM to their Macs. To have a dealer do this would cost at least \$50 per meg. In most cases the computer owner can, with a little instruction and supervision, do the job himself for about \$30 per meg. Jon volunteered to provide expert technical assistance at a week night or weekend workshop held at the office and to

write an article describing each Mac's potential. Is anyone interested in helping or being helped with memory expansion? If so, let me know what you can offer OR what time you would have available.

Other Opportunities and On-going Needs:

Office Helpers: Help in the Pi's office during work hours.

Skill Level: Novice to expert.

Time Commitment: Very flexible, one or many hours.

Typical Duties: answer the phones, take messages, refer calls to hotline experts, respond to mail request for membership, etc.

Bennies: See how the Pi really works. Meet club members.

Project Leader - Nancy Pochecko (301) 654-8060.

Disketeria: Work with our large shareware library.

Skill Level: Novice to expert.

Time Commitment: Very flexible, one or many hours.

Typical Duties: test programs, write descriptions of program tested, copy disks, help maintain catalog of software, etc.

Bennies: Get to check out and become familiar with all the shareware available for your computer.

Project Leaders - See Library volunteers box on page 4.

Tutorial Instructors: Share your computer or software expertise with others.

Skill level: Expert.

Time Commitment: Moderate.

Typical Duties: See tutorial section - page 43.

Bennies: The enjoyment of sharing your knowledge with others and earning a modest stipend.

Project Leader - Keith Malkin (703) 503-8591.

Adopt-a-Store: Maintain a supply of membership applications and WAP Journals in local computer stores.

Skill Level: Any

Time Commitment: About 1 hour per month.

Typical Duties: Drop off package monthly. Be the point of contact for the Pi with that store.

Bennies: Feel good for doing good, and excuse to shop.

Project Leaders: Teresa Drag (301) 897-5103 or John O'Reilly (703) 204-9332.

Journal Editors: Apple II and Graphics

Skill Level: Moderate to expert

Time Commitment: Flexible about 5 to 20 hours a month.

Typical Duties: Encourage members to submit articles for the journal. Assist authors, review and edit articles. Request products from software and hardware manufacturers for product review. Assign these products to members to write for review.

Bennies: Doing good, meeting people, adding to your résumé, getting to read the Journal before it's published.

Project Leader: Deborah Hoyt, (703) 450-0714.

The Pi Garage Sale: One Saturday in December. The exact date will be announced later.

Skill Level: Novice to expert.

Time Commitment: Very flexible, one or many hours.

Typical Duties: Set up location, set up promotions and advertisements of event. Set up or take down sales area displays, man ticket booths, sell memberships, run distress auction at end.

Bennies: Meet people.

The Pi Booth: FOSE (March 30-April 2)

MacWorld New York - TBD -

Skill Level: Novice to expert.

Time Commitment: Very flexible, one or many hours.

Typical Duties: Set up or take down booth, man booth, pass out Journals and membership applications.

Bennies: Meet people, receive free Exhibitor's Admission.

Project Leader - Open

VOLUNTEER OF THE MONTH

Lorin Evans, our new president, has responded positively to the challenges of his new position with action and hard work. For the last few weeks he has been working full time at the office. On behalf of all the membership I'd like to thank him for the hundreds of hours he has already donated and the thousands that he will donate in future months. I encourage everyone to work with him and support him.

Tom Witte can be reached at (703) 683-5871.

Exploring Typefaces -- 7

by Frank Potter

Interesting group of fonts this month: some are reasonably standard and some are not even close. But all of them have something worth looking at.

Bembo 1 & 2 (161, 186)

Bembo is, of course, a serif font and falls into the category of those with oblique serifs: the tops of the ascenders on the "b" etc., are angled slightly backwards. This may have something to do with the way one would go about cutting them into stone, but I doubt it—it seems far more likely that the designer thought that it would make the font more elegant. And in fact, it did and does.

The discriminating reader will also note that the stress on the letters is ever so slightly backward. Stop reading now and look at the "o" in Bembo and you will see what I am talking about.. Goudy, which I think we have already talked about, and Plantin, which we will probably look at next month, share this characteristic.

Bembo 1 comprises the regular and bold regular and italic faces, and retails for \$185;. Bembo 2 has the others and sells for the same price.

PMN Caecilia (216)

I will confess: I wanted a closer look at this font because my daughter's name is derived from it. And Now I have seen it, and I must say that I think it unlikely that I would ever use it as a text face. It is certainly noticeable enough to be used as a

display face—perhaps as advertising copy, designed to catch and hold your eye.

"Square and blocky" is how I would characterize it—you can look at it and assign your own adjectives. A real "no-nonsense" font, I guess you would have to say. Absolutely no oblique stress here—what you see is what you get. I have to say that I didn't like it much at first, but am finding that it kind of grows on you. At least it does on me.

The font is too new to have appeared in Adobe's Font & Function catalogue, but I would be willing to bet that it will go for the standard \$185.

Granjon (205, 209)

Granjon closely resembles Bembo, although the stress in the letters is more vertical, like Caslon and Galliard. It is a little less curly as well and the up and down strokes are just a tiny bit more pronounced. Like Bembo, this is an elegant font for text display and reproduces well in a phototypesetting environment. It does fairly well with low-resolution printers like LaserWriters.

The basic Granjon package gives you the Roman, Italic and Bold faces and lists for \$145. The Small Caps and Old Style Figures and those in italic and boldface come in a separate package, and I don't know the price for those. The Old Style Figures are frequently used in situations where many figures must be shown: Annual Reports and the like.

A characteristic of these figures is that they go below the baseline, which makes for easier reading— or so the theory goes, anyway.

Auriol (223)

This font is not likely to show up in any Annual Reports that may cross your desk, but it would certainly catch your eye if it did. It seems far more useful as a whimsical and provocative attention-getter. It might do very well, for example, in a book written for children.

Actually, the face evokes strong memories of some books that I read when I was a child (they really did have movable type back then, though I can hear the cries of denial!) But I can see the pen and ink drawings, highly stylized, of an artist whose name will probably leap out at me in the middle of the night; and the style of letters exactly suits him. Question of the Week/Month: Who was he, anyway?

Font & Function

Adobe sends this publication, free for the asking, to anyone who is sufficiently interested in its fonts. If you would like to be added to their list, write to Font & Function, Box 7900, Mountain View, CA 94039-7900 and ask for it.

Font Requests

If there is a font out there and you would like to get a closer look at it, drop me a line, c/o the Journal. I can't promise you that I can get hold of it, but I might.

Bembo

ABCDEFGHIJKLMNO

PQRSTUVWXYZabcd

efghijklmnopqrstuvwxyz

1234567890 &

ABCDEFabcdef—Bembo Regular

ABCDEFabcdef—Bembo Regular Italic

ABCDEFabcdef—Bembo Semibold

ABCDEFabcdef—Bembo Semibold Italic

ABCDEFabcdef—Bembo Bold

ABCDEFabcdef—Bembo Bold Italic

ABCDEFabcdef—Bembo Extra Bold

ABCDEFabcdef—Bembo Extra Bold Italic

There was nothing so VERY remarkable in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAIST-COAT- POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before see a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge. 10/10

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PMN Caecilia

ABCDEFGHIJKLMNO

PQRSTUVWXYZabc

defghijklmnopqrstu

vwxyz1234567890&

ABCDEFabcdefgh—Caecilia

ABCDEFabcdefgh—*Caecilia Italic*

ABCDEFabcdefgh—Caecilia Light

ABCDEFabcdefgh—*Caecilia Light Italic*

ABCDEFabcdefgh—**Caecilia Bold**

ABCDEFabcdefgh—***Caecilia Bold Italic***

ABCDEFabcdefgh—**Caecilia Heavy**

ABCDEFabcdefgh—***Caecilia Heavy Italic***

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well. 10/10

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well. 10/12

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well. 10/14

ABCDEFGHIJKLMNO

PQRSTUVWXYZabcde

fghijklmnopqrstuvwxyz l

234567890&

ABCDEFabcdef—Granjon Regular

ABCDEFabcdef—Granjon Italic

ABCDEFabcdef—Granjon Bold

ABCI234567890ABCDE — Gr. SMALL CAPS/OS FGRS

ABCI234567890abcdefgh — Gr. Italic/OS Fgrs

ABCI234567890abcdefg — Gr. Bold/OS Fgrs

There was nothing so VERY remarkable in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, 'Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAISTCOAT-POCKET, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before see a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge. 10/10

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Auriol

ABCDEFGHIJKLMN

OPQRSTUVWXYZab

cdefghijklmnopqrstuvwxyz

1234567890&

ABCDEFabcdef—Auriol

ABCDEFabcdef—Auriol Italic

ABCDEFabcdef—Auriol Bold

ABCDEFabcdef—Auriol Bold Italic

ABCDEFabcdef—Auriol Black

ABCDEFabcdef—Auriol Black Italic

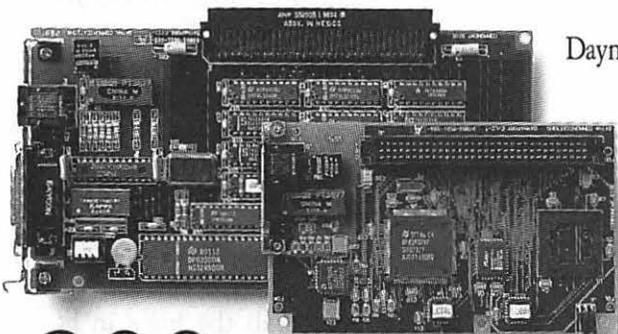
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Artists on exhibit

by Nancy Seferian

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: John McDougall is our WAP artist this month. This is the second time he has contributed to this column. He works for HFSI where he is a graphic designer, and where the entire art department has now "gone Macintosh." He was graduated from the Ivy School of Art in the Pittsburgh area, and has also studied fine art at NOVA (Northern Virginia Community College) and George Mason.

Tools: Mac IICI, Adobe Illustrator, Sharp Chromascan Scanner, and Interleaf.

Techniques: "Most of the art we create is for technical manuals, and proposals, and the content of the illustrations is the hardware that the company sells. We begin by having one of our photographers



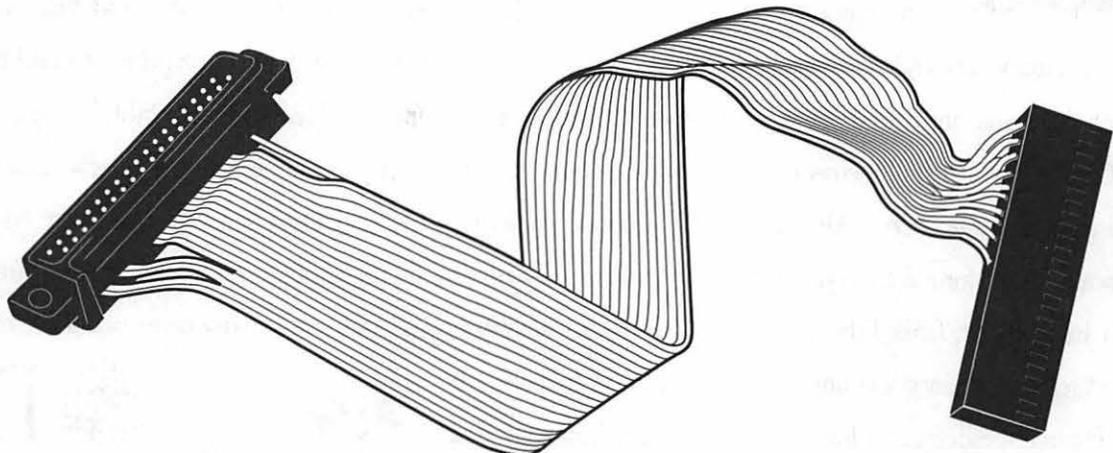
Accessories

take a picture of the piece of hardware the way the proposal producers want it set up. The photograph is developed in-house and an 8"x10" print is made. The print is scanned and we create the line art.

"We often work from art that is

already created in order to save time. For instance, on some of the drawings you see here, parts of them were already available in our library of in-house illustrations. We have a huge library that is a valuable resource for us.

"The *Ribbon Cable* illustration was for a technical manual for clients to show what the cable looks like and which slots it fits. To create it, I began with the pin connectors because they lend themselves to reuse in other illustrations. The part that's really nice about this drawing, of course, is the ribbon. It was done in three parts: the two horizontal parts on either end and the vertical middle part. I drew the ends of the ribbon first. Next I drew the top and bottom outside line of each ribbon part. Then I counted how many lines were in the middle and used the blend tool to evenly fill in and space all the lines in between. The blend command is prob-

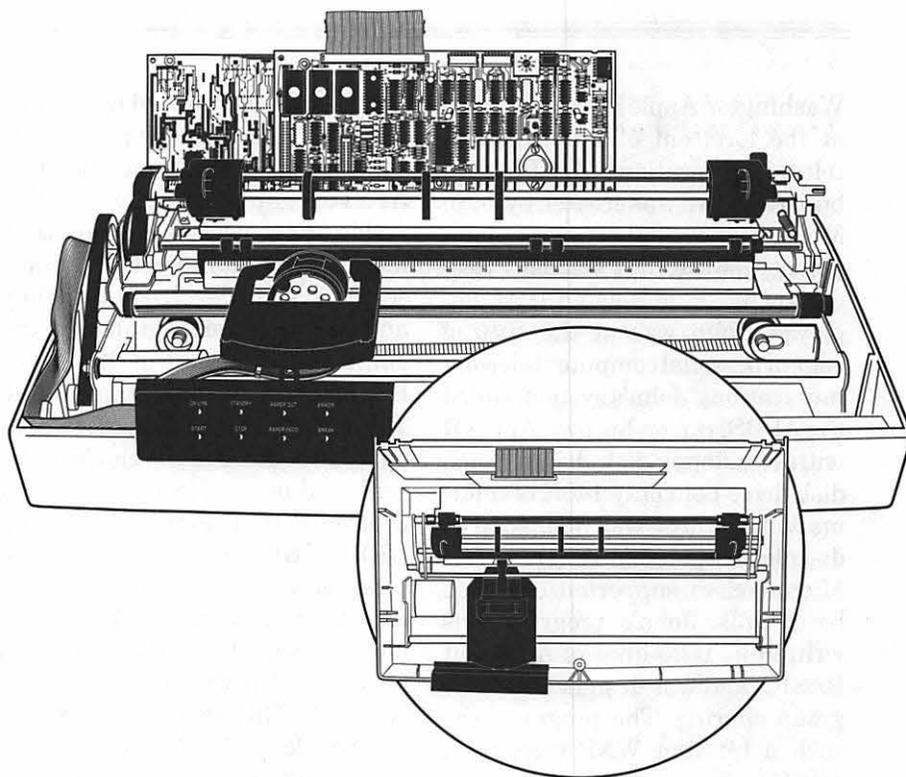


Ribbon Cable

ably most often used to create gradations, but it was perfect for these lines. I think this is an example of a good use of the blending process. This drawing took about three hours, and started with a good photo and a good scan.

The *Accessories* illustration used separate illustrations brought together for one composite drawing. This is an example of the advantage of creating line art over using photos for technical manuals. The pieces can be used many times over; scans don't print well and take up too much memory.

Airlifter's Logo was done for a trade show. They wanted a nice graphic for the sign up booth. It was to be 22"x28" and in full color. Logos are great on the computer. I drew in one half, duplicated it and flipped it. We specified the colors here on our Macs, then sent it to a color house where they separated the whole thing, and put the colors in. The colors were blue-green with accents of red stars. The font was Times and the stars were outlines of Zapf Dingbats.



ASPI Printer (disassembled)

"ASPI Printer (disassembled) was created for another trade show. The board in the back was drawn first as a large 11"x17" drawing which was eventually blown up to 30"x40" by a

photo house. If it had been done as a photo instead of line art it would have looked too grainy. It was also intended to stand alone as an illustration. It was then added to the printer to show its placement in the back of the printer.

"I organized this detailed drawing of the ASPI Printer by starting with objects that were going to be in the background, such as the ruler and rollers, etc., then built forward. With so many details it is important to have a plan of organization so that you don't click on or manipulate the wrong object. These two drawings took about three days to complete."



Airlifter's Logo

A History of the WAP Telecommunications System

by Lee Raesly, Copyright 1991

Washington Apple Pi has long been at the forefront of innovation in telecommunications. WAP's first bulletin board was created by John Moon in September 1980. John Moon was the first elected President of WAP, and as an IBM employee, John was at the cutting edge of personal computer telecommunications. John's system, called the ABBS, ran on his own Apple II with two floppy disk drives. Each disk drive held only 140K of information, so there was no upload or download capability. The DC Hayes Micromodem supported only 300 baud calls. John's program was written in 1600 lines of Applesoft BASIC, and was designed for user group sharing. The program was such a hit that WAP received a number of requests from other user groups to share the program, and it was formally added to our disk library.

The program had its problems. For example, if you hung up without using the G)oodbye command, the next caller would pick up in the middle of your session. (1) With the advent of the IBM PC, John resigned from WAP, and sold the ABBS to the Pi. Tom Warrick took over as SysOp and the system was moved to his house. Again, being SysOp was pretty much a one-man show. In fact, when other people volunteered to help, such as Paul Heller, they were turned away. As a result, Paul went on to create his own bulletin board, the Twilight Clone, which has attracted far more users than the ABBS ever dreamed of serving.

By 1984, the Pi realized that a one-line system could never serve the needs of our growing membership. As a stop gap measure, we tried to divide up the use between multiple machines. I volunteered to Sysop a second system devoted only to "buy and sell" messages beginning in the summer of 1984. Finally, Dave Harvey, then-Chairman of the Telecom SIG, chaired a task force to study the future of the club's bulletin board needs. He recommended that WAP use a new program called UBBS. UBBS permitted 8 separate message areas. In addition, to allow all of the machines to access a common message base, the task force recommended the use of a Sunol Network. This was a then-revolutionary idea - a local area network - which allowed any number of Apple II's to share a common hard disk server.

But the time came to implement the task force recommendations in 1985 when Tom Warrick took over as President. I was appointed to replace him as SysOp. In order to implement this ambitious plan, I realized that running the new system could not be a one-man-show. Rather, the creative efforts of as many volunteers as possible were needed. In fact, the system represents a true team effort with tens of thousands of man-hours invested in the development, maintenance and improvement of the present system. The first task I was assigned was to pick up the Sunol in Arlington, and deliver it to the PI Office. Then I tried to get it in operation, and was unsuccessful.

Dave Harvey came to the rescue, and in two days had it up and running! However, problems immediately arose. Messages would be written everywhere, including in the center of the program modules. We finally had to separate into 4 separate lines, each with its' own set of files and disk drives. We were offered a Corvus system, to replace the Sunol, and received it in April of the next year. The Corvus network offered a foolproof way of using multiple machines on a single hard drive, a technique they called Semaphores (aptly enough named!)

We chose to call the new system the TCS—Tele-Communications System. This was because we adopted a far bolder concept for the role of the system. We wanted it to assist in communications, through uploads and downloads of files, libraries, and even interactive messages, as well as the previous passive message base. The original members of the team were: Lee Raesly, Mike Ungerman, Rich Mlodoch, and George Kinal. We quickly realized that 8 message boards would not meet the ever-growing needs of the Pi. Rich Mlodoch expanded them to 32 Boards.

Within a few months it was evident that even 32 Boards were not enough. Rich came up with a clever trick which permitted us to greatly expand the number of message areas available. The 32-board message base was kept in a single sub-directory (folder), and the information about the Boards in 3 files. But if the computer could access one file

at a time from among a set of multiple files, the same program could be tricked into working with more than 32 boards. We called each set of 32 boards a "conference." When the user changed conferences, the file representing the old conference information was saved to the Corvus disk, and a new file was read in its place to permit the program to access a new set of 32 boards.

There is no practical limit to the number of 32 Board Conferences that could be added. In 1986, a considerable controversy developed regarding the future of the TCS. Some Mac owners wanted a separate board and cited the need for more Mac downloads. The disk library staff didn't want the TCS to have any downloads because downloads would reduce library sales. Paul Heller, by this time, had built up a huge collection of Mac downloads on the Twilight Clone and needed money for system expansion. He negotiated an agreement with his long-time friend, David Morganstein, to provide discount memberships on the Twilight Clone in exchange for WAP funding the hardware expansion.

After a great deal of debate, this was approved by the WAP Board, and money was collected from interested Pi members. Perhaps one of the luckiest points in the history of the TCS came when Heller withdrew his offer and instead the TCS remained as an important unifying force serving both Apple and Mac members. The TCS quickly added the additional hard disks needed to offer an extensive collection of Mac and Apple downloads. We now have 121 Megabytes of hard disk storage on line.

The next colorful episode in the history of the TCS occurred in 1986. One of the direc-

tors was questioning certain policies and his remarks were taken personally by some. A typographical shouting match ensued, the Lafayette Park board was shut down.

We have all gained more experience with the culture of on-line systems since that time, as shown by the similar controversy which the Prodigy system recently endured. Perhaps the best lesson which everyone learned from the episode was that censorship is counterproductive, and simply doesn't work. The TCS continued to grow. It evolved from the original four systems to the twelve lines that we have today. Modems have also been upgraded to 2400 baud, and we now have three lines with US Robotics 9600 baud modems. The reason this expansion and improvement was possible was the resolution which the Board and the Membership approved in 1988, establishing a separate fund for the TCS. The entire \$6 TCS fee has been credited to this fund to make such capital improvements possible. Next came the expanded protocols written by Andy Nicholas, with the BASIC programming done by Jon Thomason (who has done most of the programming of the various modules for the last several years.) We have virtually every telecommunications protocol available today: X, Y, and Z.

The final addition came in 1990,

when Dave Harvey installed a 13th computer running under the ProLine telecommunications system. With this computer calling up other ProLine systems, the TCS gained access to the international group discussions shared between all of the major computer networks. Jon Thomason programmed the interface between ProLine and the TCS, as well as the modified program needed to read these messages. Users can access this data on Conference 5 of the TCS. Along with the advent of this ProLine system, Paul Schlosser developed the Weather and Today modules that you see when signing on. Paul has also maintained the very popular football pool each fall. Throughout this history, Dale Smith has done a yeoman's job of maintaining consistent backups of the complete system on a weekly basis.

I have devoted a major portion of the last six years of my life serving the membership as TCS SysOp. It was an very educational and rewarding experience. I knew when I took on the job that it would only work if the TCS became a group activity, and the Pi is very fortunate that so many different people have responded to the challenge of building this system.

(1) "The SysOp Replies," by John Moon, 7/81 WAP Journal, p. 22.

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The Village Messenger

A Perspective on Computer Communications

by Jay Elkes

At its most fundamental level, your computer is a communications device. It listens to the keyboard, talks to the screen and printer, and does both with the disk drives. Computing is a translation process that converts an acceptable input into an acceptable output, but neither input nor output are possible without the underlying mastery of communications.

When you use your computer by itself you are specifying a scope of communications comparable to that of a medieval village. The attached devices are neighbors to one another, sharing information for the greater good (yours). Such a computer is self sustaining, self supporting and independent. The more devices you connect to a computer, the larger the village gets. This is true of disk drives, memory and, to a certain degree, printers and plotters. It is not true of a modem.

A modem is a link to the rest of the world, a village gate from which messages can be sent or received. It too is a communications device, linking your computer with another modem at some distance. A modem always talks to one and only one other modem at any given time. If your computer and mine were a few feet apart, we could use a cable in place of both modems - two neighboring villages which can communicate to each other by semaphore. When we depend on telephone lines to make the link, we each need a modem. Once we have them, we can talk to any other computer with a modem.

Using a modem is simple. One wire goes to the phone line, another to the computer's serial port. You control the modem, and the communications it permits, with a program. The hard part is providing the setup information for your modem. In principle, your setup needs to agree with those of the modem at the other end. The easiest way to do this is to ask the person at the other end what setups to use. Very briefly, the critical variables are discussed below.

Baud rate determines how fast data can be sent from one machine to another. Modems are sold with an advertised maximum baud rate, typically 1200 or 2400. Use the fastest baud rate both your modems can support.

Bits per character and stop bits define how data is to be interpreted. Bits per character is either 7 or 8, usually 8. Some mainframe computers require 7. Stop bits generally reflect a need that existed in older computers and isn't true today. If nobody tells you differently, try 0 or "Auto."

Parity is a primitive form of error checking that can be used, but rarely is. If you have no information, set parity to "None", as opposed to "Odd" or "Even". The only machine I've seen that wanted to check parity also used 7 bits per character.

The final typical parameter is called duplex or echo. This is the one instance where your modem and the remote modem must disagree with each other. Usually the machine

placing the call uses full duplex (remote echo) while the one answering the call uses half duplex (local echo). If you're using full duplex and your keystrokes don't show on the screen, switch to half duplex. If your typed keys appear to be typing ddoouubbllee switch to full duplex.

If you can order your modem to answer the phone, and most modems permit this, you can be a "host" for the purpose of establishing a link to a computer calling you. With yourself at one end and a friend at the other, you can pass messages back and forth. Protocols, which once again have to agree with each other, allow you to do something more useful, transfer files. After all, if all you want to do is pass messages when you're both near the phone, you might as well talk to each other instead.

Bulletin board systems (or BBS's), such as the one COACH is putting up, provide a number of useful services. First, they permit messages to be passed back and forth without arranging a convenient time. I can leave a message today and you can read it tomorrow. Obviously, time sensitive messages aren't ideal candidates for this medium. Likewise, files can be transferred first to the BBS and then to the intended recipient. When I get done with this article, I will load it to a bulletin board so somebody else can retrieve it later. Other files or programs can stay on the BBS for as long as the system operator (Sysop) chooses to leave them. The variety of things you can find on bulletin boards can be truly amazing.

The term bulletin board is used in recognition of its most useful feature. You can put messages on bulletin boards with no specific reader in mind and get responses from people you've never met. I recently found a solution to a problem I was having on my Macintosh by using the commercial bulletin board system America Online - from a source I wouldn't have thought to ask. I also found myself debating ethics with a fellow who admitted that he routinely tries to break into other computers - the village sneak thief. Would it surprise you to know that he used a pseudonym? He argued that he was providing a public service by making people more aware of the need for computer security. Hmm... If I want to make someone aware of that, I recommend they read the Cuckoo's Egg by Cliff Stoll.

Bulletin boards come in two forms: commercial and private. Commercial boards like America Online, CompuServe or Prodigy, have direct charges for their services. The first two charge by the hour. Prodigy has a low flat rate for a month of use and runs ads on the bottom portion of your screen. This may seem harmless - you can even order based on the ads you see. The cute part is that they keep very careful track of what you respond positively to and sell what they learn to practically anyone. You'll have to decide for yourself if that's adding to the value of the service they provide you, a harmless way of keeping their costs down or an invasion of privacy.

Private bulletin boards generally reflect the interests of the owner/sysop. He/she has committed a computer, disk space, time and one or more phone lines to what is probably a hobby. Some of these people hope to collect vast amounts of software for free by being a medium for uploading. Most use them to promote other interests they have, including (from actual examples I've seen) computing, astronomy and current events. Private bulletin

boards never charge for their time, but they may be intended for private use (such as for members of a club only). Some, though obviously not all, will try to confirm your real identity though you can use a pseudonym online.

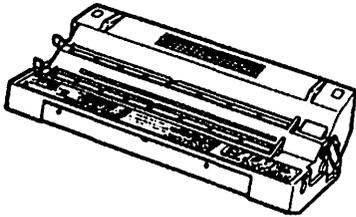
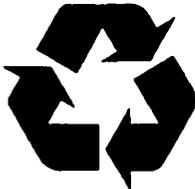
Bulletin boards can be an expensive hobby for the operator. Some systems are purely a hobby for the sysop, who has no interest in compensation outside of the comments you provide to the message system or the files you exchange. At the other end, some may have specific rules about how much service is provided for varying amounts of financial support. In the mid range are those sysops who will accept donations if offered. If I use a BBS regularly, I'll ask the sysop in a

private message if a certain amount is acceptable (something like \$25 a year doesn't seem out of line to me). It won't make the sysop rich, but it may keep a spouse from pulling the plug.

Modems, communication programs and bulletin board services are the means for connecting the "village" of your personal system to the "global village" that the world is becoming. You can probably hook a modem to your computer for \$100 or less, and you can get adequate software that is either free or shareware.

If you'll excuse me, I need to get this article on its way. Even with the electronic transfer, there are still deadlines to meet. Hope to see you around town.

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Connections: New Ways of Working in the Networked Organization

by Phil Shapiro

Authors: Lee Sproull and Sara Kiesler

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From the railroad to the automobile to the telephone, new technology always give rise to unpredicted social consequences. The railroad gave rise to urbanization; the automobile to suburban sprawl; the telephone, horror of all horrors, to "intrusive communication." (Imagine the gall of having to interrupt your precious work/family time to answer some telemarketer's plea.)

A fascinating new book, *Connections: New Ways of Working in the Networked Organization*, explores the social consequences, both favorable and unfavorable, of electronic mail. Written by two social scientists, this book is a must read for anyone interested in the psychological/sociological dimension of telecommunications.

The opening remarks in the Introduction frame the central themes of the book. "[Telecommunications networks] do not simply cross space and time; they also can cross hierarchical and departmental barriers, change standard operating procedures, and reshape organizational norms. They can create entirely new options in organizational behavior and structure. How will these technologies influence and change organizations? Does a computer net-

work make work groups more effective? What problems do these technologies alleviate—and what problems do they create?"

In conducting their research the authors visited a handful of well-established electronic communities within corporations, universities, and the financial industry. In the past fifteen years electronic mail has become a standard mode of communications at most large companies. So it's to be expected that most of the discussion in this book focuses on e-mail in the workplace (rather than on telecommunications in general).

The opening chapter of the book discusses how earlier technologies—the railroad, the telephone, the typewriter—brought with them significant changes in social interactions. For instance, the railroad allowed city workers the chance to live in the suburbs and commute, thereby creating a new social creature, the suburban family. Likewise, the typewriter greatly expanded the number of women in the workforce (albeit in a non-liberating work role). And the telephone spawned such social wonders as teenage chat-sessions and telemarketing.

What intrigues the authors is how the nature of the medium can influence the content of the message. Electronic mail tends to resemble the spoken word. Frankness and openness can be both a good and bad thing: "Electronic messages are often startlingly blunt, and electronic discussions can escalate rap-

idly into name calling and epithets, behavior that computer buffs call 'flaming.'" Within a company's e-mail network, people will send out public electronic notices in a "tone of voice" that they would never use for a printed memo. The authors explain that one explanation for this phenomenon is the perceived ephemerality of e-mail.

At another place in the book the authors explain how e-mail serves to both connect and buffer people from one another. How e-mail serves to connect requires little explanation. E-mail buffers people from one another by allowing people to read and respond to messages at their own convenience. Unlike the telephone, e-mail is a non-disruptive communications medium. But like the telephone, it can be instantaneously fast when needed.

Several pages of the book are devoted to analyzing how e-mail supplants the use of phone communication. Given the central role of phone communication in modern social and business practices, the authors could have devoted a little more attention to this topic. However, the bibliography cites several articles and books that probe this topic further. (See the JUICY SOUNDING REFERENCES at the end of this review.)

Yet another section of the book examines how e-mail can serve as a "broadcast" or "publishing" medium. E-mail messages can be sent to groups of people just as easily as to individuals. When technology makes it as convenient to broadcast

your ideas to three hundred people as to one person, a whole new question arises in the mind of a message sender: "Should I send this message out broadly or narrowly?" There could be many instances when widespread "broadcasting" of a message or notice would do more harm than good. But identifying those instances is no easy matter.

On the other side of the coin, receiving and dealing with broadcast messages is no piece of cake either. If you receive 80 internal company messages a day in your e-mail mailbox, you need to have a system of sorting thru the essential private communications from the less essential public communications.

One creative solution to this problem has been set up at Tandem Computers. Tandem has set up an e-mail system that parallels the U.S. Mail system, with your incoming mail being already pre-sorted into first-class, second-class, and third-class mail.

First class mail includes communications from your boss and close colleagues. Second class mail includes communications from people you don't deal with regularly or personally. And third class mail includes announcements of company social functions and the like. Taking a lesson from the disruptive effects of the telephone, Tandem's e-mail system only "delivers" second-class and third-class mail after 5 PM each day, so as not to provide any distractions from priority work-related communications.

Another solution to dealing with large volumes of incoming e-mail is to set up a "software filter," that will automatically sort the incoming mail into various folders. But knowing which folders to set up, and which mail to delegate to which folder is a judgment call that could vex even Solomon. (Assuming Solomon used e-mail to solicit views on what to do with the baby problem on his hands.)

Other topics touched upon in this book include how e-mail can help break down rigid management structures. The technology itself is an "equalizing" force, since anyone can easily communicate with anyone in the company. In a larger sense, computer networks can be liberating on a political level as well: "In a democracy, people believe that everyone should be included on equal terms in communication; no one should be excluded from the free exchange of information.... New communication technology is surprisingly consistent with the Western image of democracy."

This book provides a good overview and starting point for thinking about some of these issues. More detailed writing on some of these topics is sure to follow in the near future.

One of the most interesting facets of this book is its exhaustive bibliography listing books and scholarly articles relating to the general themes of communication technology's effect on social relations. There ARE close to 300 citations in the 18 pages of references.

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FrameMaker 3.0

by Paul Chernoff

To me, the first time I used FrameMaker I felt that I finally found the Holy Land. FrameMaker is not perfect and requires many computer resources to work properly, but it is a great help if you write long structured documents such as computer manuals. FrameMaker does not replace MS Word as my daily writing tool, but it my tool of choice for long documents. FrameMaker rewards those users who plan ahead through its many useful automation options. FrameMaker does lack some features such as outlining and a macro language but it is a genuinely useful and enjoyable tool.

Due to limited space I will review how FrameMaker makes my work easier, rather than try to cover every feature. Features such as formula maker, multi-user features, cross-platform options (FrameMaker runs on SCO UNIX, Sun and NeXT computers) and HyperText abilities will have to go unsung and uncriticized. But a focus on function over features should provide a better background before you decide to spend \$600-1,000 on this product.

I write computer manuals for my office and clients. It is important that I work quickly, create readable documents and integrate graphics with my writing. My main question is not "Can it be done?" but "How much work is involved?" I find that programs such as PageMaker are weak for writing and require too much manual tweaking. Sophisticated MS Word processor programs often fall short in page layout capa-

bilities. While both page layout and MS Word processor programs have greatly advanced since the days of MacWrite 1.0 and MacPublish, they still lack features important for long structured documents.

What I like about FrameMaker is that it combines the abilities I need from both classes of software, combined with graphics, automation features, speed and ease of use. I still use DesignStudio, MS Word and PageMaker, so FrameMaker is not the Holy Grail of software; it lacks true text wrap-around and outlining features. It likes a lot of RAM, hard disk space and screen. While its drawbacks prevent me from using it as an everyday writing tool (at least until I up my IIsi to 19 megs RAM), I still use it for all large writing jobs. I run FrameMaker on a Mac IIsi with 19 inch greyscale and 13 inch color displays and a QMS PS410 printer. I recommend a system with at least a 68020 chip and a full-page display, though a two-page display and/or multiple monitors is preferable.

FrameMaker is a package with more than its share of manuals and disks. A keyboard template is also included, which is useful especially if you like using function keys. The many manuals include a reference book organized by command name (alphabetical), a user's manual organized by subject, a tutorial book, a set-up book, a FrameMath book and books on FrameMaker's import languages. The manuals are certainly complete, readable and good examples of FrameMaker's capabilities; however, they can be con-

fusing at times. There seems to be too much manual. You are not always sure where to go to look up information.

Part of the manual problem stems from how Frame Technology expects people to use FrameMaker. They separate the world into writers and template creators. Writers only need to read the first 12 chapters of the reference manual while template creators need to be familiar with all 17 chapters. Due to this split the same information can be in more than one place and sometimes you are not sure where to look. While each manual is indexed separately, a separate master index would have been nice. FrameMaker also provides help in the form of a HyperText document, but it is not as comprehensive as other on-line help systems, such as that found in MS Word.

While the program is Mac-like and intuitive, I recommend going over the manuals. The heart of this program is the automation tools, which include master pages, styles and variables. It's unwise to jump into the program on a real project because you run the risk of missing out on many timesaving features.

The nine disks include the program, spelling and hyphenation dictionaries, sample templates, training documents, help, clip art, samples fonts and import/export filters. Copy protection is limited to personalizing the program after copying it to your hard disk. As you might guess, this program will not work in a floppy only environment. I have had



limited time to explore the templates and samples. I have learned from them, but most of my experience has been working on actual projects.

The feel of a program is a very important but subjective criteria. I like FrameMaker's feel very much. It is fast enough on a II class machine to use for writing. Its various elements are well-integrated with each other, as opposed to feeling glued together. The elements are also full-powered; you do not have the compromises made in Microsoft Works. The program is also relatively modeless; there is no separate graphics layer as in WordPerfect 2.0. Many of the dialog boxes can be kept open all of the time, making it easier to make changes if you have enough screen space.

FrameMaker rewards those who plan well. Before I start writing a new manual, I start by designing it, or deciding which previous work to recycle. FrameMaker has a number of features which aim at making recycling easier. In addition to allowing you to define your formatting through styles and master pages, the variable command makes it easy to recycle text. A variable is similar to MS Word's glossary, but in addition to holding text it also contains formatting command. For example, I will use a variable to

hold the name of the program I am documenting. I will have the variable not just type out the name, but also format it in StoneSans Semi-Italic and then revert the formatting to its previous state so I that do not have to do so manually.

Every document has 1-25 master pages. One sided documents will have a master page named Right and a double-sided document has two master pages, Left and Right. FrameMaker can automatically assign even and odd pages the appropriate master layout as you type. You might wish to create additional master pages for the first page of chapter or any type of repetitive page layout such as a list of discussion questions following each textbook's chapter. You can also redesign pages on an ad hoc basis, but a structured document will result in taking the least amount of time once the master pages have been set up.

In order to understand how to set up a master page it is important to understand the frame, which is the basis of FrameMaker's layout capabilities. There are two types of frames, text and graphics (I will describe graphic frames later). Anyone who has used Quark XPress, DesignStudio or Ventura Publisher should be familiar with the frame concept. Before placing text on a page, you set up a frame to hold it.

The frames can be linked together so text can flow from one frame to another. It is the frame which differentiates FrameMaker from word processing programs. In word processing programs you define the margins for a page and then the left and right margins for each paragraph (more accurately the distance between the page's margins and the paragraph edge). Text always flows from page to page, though there might be exceptions where a graphic image can be filled with text independent of the main body, such as in MS WordPerfect. Not all text frames need to be connected; Story A can start in frame 1 and continue in frame 3, and Story B flows from 2 to 4. On a master page you place text frames to control the flow of the text on the body pages. As you type a story, FrameMaker will automatically build new pages as needed, selecting the appropriate master page unless over-ridden by the writer. Other page layout programs requires you to manually add pages as needed. This feature differentiates FrameMaker from other page layout programs.

The master page can be used to set header and footers, including automatic page numbering. All of these features are easy to implement.

After setting up the initial master pages I then create the paragraph and character format catalogs, which are the same as styles sheets in other programs. The paragraph formats apply to entire paragraphs and contain all of the character format information plus paragraph formatting. The idea is very similar to styles in MS Word with a few refinements. In addition to defining alignment, leading, white space before and after each paragraph, tab settings, etc., you can also control numbering. The only other program I am familiar that has this feature is Ventura Publisher.

The numbering feature allows you to place any characters or numbers

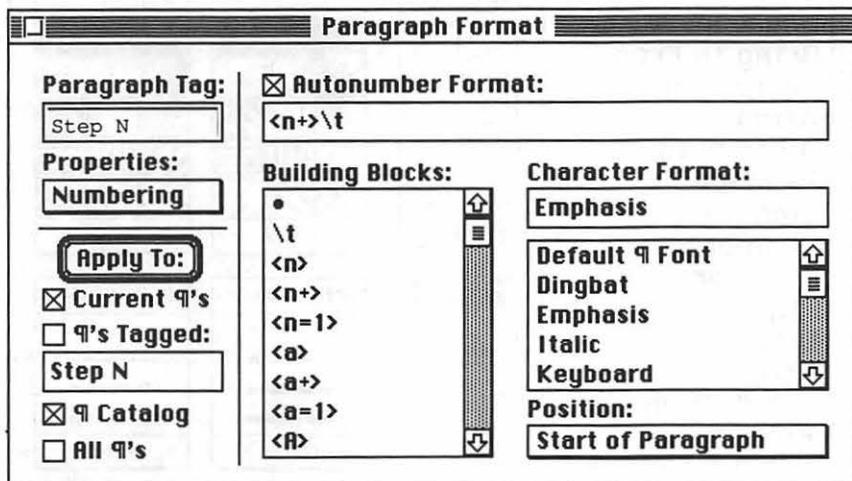


Figure 1. Paragraph Format Box



in the beginning of each paragraph. For example, you could automatically start each paragraph with a bullet (•) and a tab. Or you can start a numbering sequence, format the variable holding the number in a font different from the paragraph's default typeface, and then have the next paragraph start with the next number of the sequence. The numbers can be placed at the beginning or end of each paragraph. The power of the paragraph styles is important when importing text. Often in PageMaker I need to manually enter the • and tab, but in FrameMaker I would only have to format the paragraph from my catalogue. *Figure 1* shows how the paragraph box will start with a sequenced number (<n+>) followed by a tab (\t) and the paragraph's text. The only problem I have encountered with the numbering system is to get it to advance chapter numbering across separate files. Other than this one bug the automatic numbering options are superb under the user's control.

While FrameMaker paragraph definition does not have MS Word's borders command, it can be simulated by having a graphic image—often a line—to appear either above or below a paragraph as part of the catalogue definition.

The character format is a subset of the paragraph format—essentially the same as the default font page for paragraph format—allowing only for control over characters. This is a great improvement over Macintosh MS Word which only allows for paragraph style sheets. Defining the character format allows you to select typeface family, weight, angle and variation independently, in addition to size, color, spread and style. FrameMaker knows the difference between Outline and Bit-map fonts and tells you which type has been selected. In the case of PostScript typefaces it does not allow you to select a nonexistent font, such as Eras Italics (ITC Eras is available in 6 different weights and does not

include different angles or variations). When selecting Eras, you will see under weights the 6 different weights available rather than the simple bold and plain text commands. Even from the more conventional style option from the format menu you cannot apply a style to a font which is not part of the PostScript definition.

I usually write one file per chapter, so I then create a book document to coordinate the separate chapter files. To help coordinate your efforts FrameMaker has a special book document. The book document tracks the other files making up a 'book.' It is also a way of sharing styles, master pages, variables and other automation tools among different files. Creation of table of contents, indexes and other tables all tie into the book. The book document has a list of files which make up the book. The files are shown in printing order and can be re-ordered at any time. Some general aspects of each document, such as starting pages and sharing of style sheets can be controlled by the book document without ever opening the individual documents. Any document in a book can be opened either through the normal open command or by double-clicking on the file's name within a book. Use of the book

document is optional.

Files generated by the book document, such as table of contents, list of figures and index, have a † appended to the name. It is easy to update these files at any time. These files can also be manually changed by the user.

The most important part of my work is the writing. The advantage to all of this preparation work is that I do not have to concern myself with formatting. My master pages will control my page and I will select my pre-defined formats as I need them. Of course the world is not so simple and I usually alter and add formats and master pages as I work. But once I create a new method of automation it is there for future use.

The other time-saving feature is FrameMaker's graphic capabilities. FrameMaker is no Canvas but it has more powerful drawing tools than the original MacDraw. Line thickness can be adjusted and arrowheads, which can be customized, can be added to any open line including bezier lines. *Figure 2* shows the expanded tool palette which can be shrunk to save on room. The palette duplicates the graphics menu and has the advantage of being anywhere on the screen. Bit-map manipulation is lim-

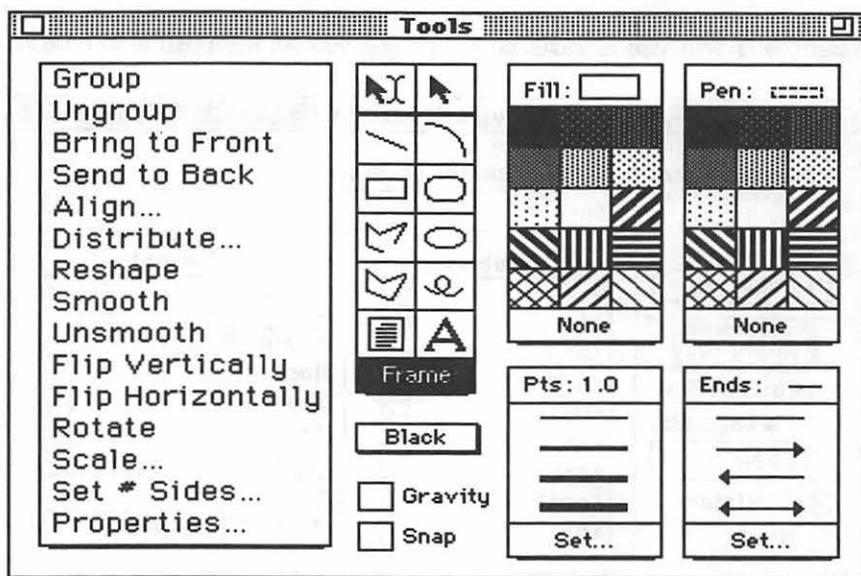


Figure 2. Tool Palette.



ited to import and resizing, but otherwise the drawing tools are complete and easy to use. The tools include straight lines, boxes, ovals, trapezoids, curved lines, text frames, free form text and a free form drawing tool which creates an object with bezier curves. Commands include group/ungroup, alignment, distribution, reshape, smooth/unsmooth, flip, rotate, scale and properties. Color can be assigned to objects in addition to fill and pen patterns. I often work by capturing an image with FlashIt, cleaning up the bit-map in Canvas and then importing the bit-map to FrameMaker. Once in FrameMaker I add the drawing elements.

Graphics may be placed directly on a page or within a graphics box. A graphics box serves three purposes. The first is for cropping; a graphic object placed in a box cannot extend out of it. The second is to group objects together without using the group command. The last purpose is the most important, which is the attaching of graphics to text.

The frames allow for integration of text and graphics. Graphic frames can be anchored to text. FrameMaker has many options for tying graphics to text. All measurements can be set either by typing them or by using the mouse to move or resize the frame. If anchored to the inside of a column, the graphic can float below the text or appear at the top or bottom of the column the text appears on. The image can be cropped at the column margins and can be automatically moved to the next page under certain conflicting circumstances at the user's discretion. Or a graphic can be tied to an insertion point. The last option is to have the graphic float outside or overlap the text frame. You can set the graphic to float on the right, left, inside or outside margins. Frame-

Maker is smart enough know how to handle left and right pages is they have unique layouts.

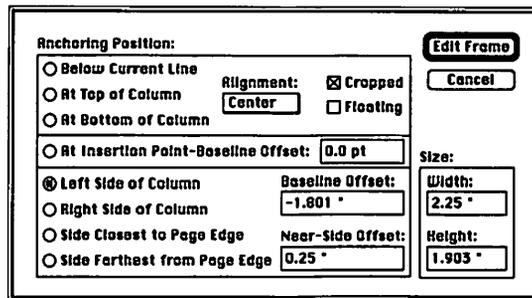


Figure 3. Anchor Graphic Frame

FrameMaker comes with the best table-making function I have encountered. It is like the MS Word table function but on steroids. What I hate most about MS Word's tables is that the thinnest lines seem so thick. Not so in FrameMaker where table lines are user-definable. See Figure 4 the Custom Ruling and Shading dialog box for a sample of the control possible.

Cells can be merged both horizontally and vertically, cells can hold graphics, cell contents can be rotated in 90 degree increments and cells can be shaded. Tables have their own style sheet settings making it easier to replicate types of tables. Tables are also broken into parts including a title, header and body. If a table cannot fit on a page, the title and/or header can automatically appear on the top of every page the table continues into. Fig-

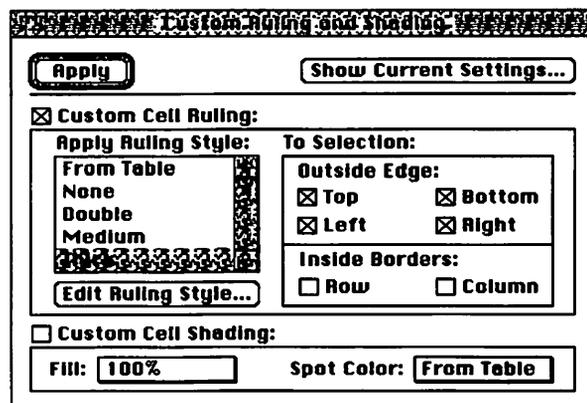


Figure 4. Custom Ruling and Shading dialog box.

ure 5 is a table showing some of the effects possible, including shaded cells and rotated text.

The big advantage of FrameMaker tables is that you have complete control over the table. By having separating headers and footers and titles plus special options for keeping certain rows on the same page, FrameMaker tables require less manual tweaking than other tables to insure that they look good.

FrameMaker has other features which are similar to anchored graphics in that they automate keeping the document up-to-date in the midst of editing. Automatic cross-references are an important feature and work in conjunction with character formats. You can have a number of standard cross-reference styles. They can point to a page, a specific figure or both. Another unique feature is that of conditional paragraphs. A paragraph can be tagged to be visible only under certain conditions in order to make it easier to reuse the same material for different purposes without having to make duplicate files.

On the down side FrameMaker lacks true text run-around graphics (which is Ventura Publishers' biggest advantage over FrameMaker). Text can run around a graphics frame but not around a graphic image itself. In addition, if a graphic frame crosses two text

frames—as in a graphic extending over two text columns—you will not get text wrap as you would expect. This is FrameMaker's weakest point in terms of page layouts. There are work-arounds, but they require manual tweaking. There is no elegant automatic solution to this problem.



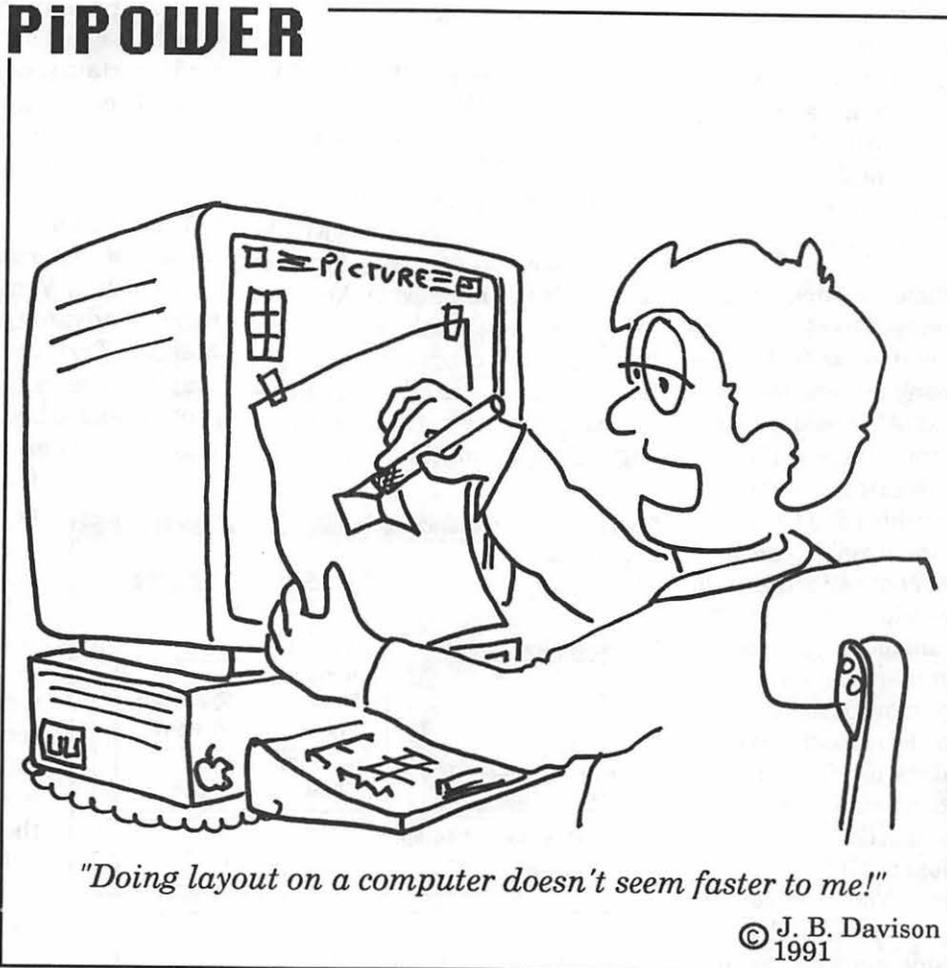
Table 1: Test of Table Functions

| Column A | Column B | Column C | Column D |
|------------------|-------------------------|-------------------------|----------|
| | | | |
| | This cell is shaded 10% | | |
| Rotate this cell | | | |
| | | Vertical straddle cell. | |
| | | | |
| White text | | | |

FrameMaker 3.0 is System 7 friendly. It supports True-Type but does not take advantage of other System 7 features, such as Publish and Subscribe.

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Figure 5. Sample Table.





Word Perfect 2.0

Take Heed and Put on Some Speed

by Douglas M. Bloomfield

Finally, Word Perfect really is "for the Mac." Version 2.0 has been significantly rewritten, giving it a newer and simpler interface and enormous power. All it really needs now is some speed. The company promises an update, v. 2.0.2, which should be out by Labor Day and that will be 25 to 30% faster for the 68000 and 68020 machines. The speed increase should be only slight for 030 machines.

I was a WP user on MS-DOS long before I got my Mac. WP/Mac came out about the same time, so the progression was only natural. Maybe I had not yet been spoiled by the Mac, so I was not as offended as the traditionalists by the new hybrid from Orem, Utah. I have grown rather fond of WP/Mac, particularly the way the company treats users. The manuals have always been clear and easy to use, and the 800-number technical support is fantastic. They are friendly people who are anxious to help, patient and know their stuff. It has created a lot of loyalty. Now, for those waiting for help, WP has its own live discjockey playing music, giving commercials and telling how many are in line for the service you want.

Mac purists who were offended by some of the DOS-derivative idiosyncrasies were unfair. But they should be happy now. The conversion—or evolution—to a genuine Mac product is complete. The new features and improvements are quite impressive. It is not without its faults and, so far, speed seems to be the greatest. And there are some features and improvements that

could make it more valuable; however, the pluses far outweigh the minuses, so let's take a look at some of the more noteworthy improvements.

Improvements

- The ruler is considerably more powerful, more flexible and easier to use. Features include tabs, columns (up to 24 per page, and 3 styles), line spacing, justification, margins and even changing the screen view from 50% to 400%.
- It provides a versatile assortment and range of style sheets. Unlike most other word processors, where styles are linked to individual documents and must be manually copied to other documents, WP 2.0 offers three options: 1) Styles that can be designed and designated for individual documents; 2) styles that can be designed and designated to be put in the private library and made available for all of your files; and, 3) styles that can be designed and designated for the common library used by networkers. A choice of style sheets is accessible from a pull-down menu.
- There is a 115,000-word dictionary and 100,000-word thesaurus. Both are easy to use and stay open while you are working in a document. There is no need to open and close them after each use. This saves time and aggravation, particularly because the speller is slow to open

initially.

- WP 2.0 has a powerful new and easy to use macro editor.
- Automated functions work better, including creating and updating tables of contents, indices, footnotes, endnotes and more.
- A strip of style buttons at the bottom of the screen are now an option that can be toggled on and off. It is particularly useful for mouse aficionados. Keyboard fanciers have a full array of commands at their disposal, and can create new ones with the macro feature.
- Most impressive is the built-in graphics and drawing package. It is very useful and flexible. It rivals true page layout programs for most jobs. Being integrated means no need to leave the word processor to work on graphics or vice versa. Users have the options of a variety of border styles and patterns, rotation of text and graphics, color support, style sheets and the ability to utilize graphics at three levels. Graphics can be used as a watermark in the background behind the text, as an overlay on top of the text or within a document, where it can be moved about freely and text can automatically flow around it.
- The mail-merge feature is even easier to use than before and a valuable tool.
- Password protection for files can



be helpful, but woe unto he who forgets his password, for without it the document is forever out of reach. This is one place where the WP help line can't help you.

- Still impressive are the well-written manuals, although previous editions were superior in some ways. There are five volumes, all characterized by clarity and ease of use. Volume 1: Getting Started does just that, but it would be more useful if it covered conversion from v. 1.x and the setting of defaults. Volume 2: The Workbook contains a very good tutorial, but it is a bit too superficial. It could offer much more without going beyond the capacity of non-technical types to grasp it. Volume 3: Drawing carefully explains how to use the graphics tools. Volume 4: Macros is over 400 pages long, ranging from the simple to the most complex. Volume 5: Reference is the bible. It contains over 500 very valuable pages and is relatively easy to use. I regret that these manuals are not loose-leaf and tabbed as in other WP versions. That format is easier to work with and make changes. Another regrettable change from earlier versions is that the on-line help (which is excellent) no longer contains page references for the manual.
- In 1.x the speller could also be used as an independent word counter, a valuable tool particularly for students or anyone writing for publication. Now an independent feature called "document information" gives not only the number of words, but also characters, lines, sentences and pages plus the average length of each word and sentence, etc.

Problems

The program is not without its

faults. Version 2.0 is rather sluggish, particularly in redrawing the screen, rewriting, bringing up attributes such as the speller and in the back-up. The latter is particularly frustrating for fast touch typists who can get ahead of the screen and lose text if a timed backup takes place while they are not looking. Some users have complained of problems with installation, though I have encountered none and the publisher assures me that most were taken care of in 2.0.1 and that the rest should be eliminated with 2.0.2.

Most upsetting of all is its tendency to crash. There have been published reports of this problem, although WP downplays the matter, saying it is unaware of anything widespread. However, random calls to tech support produce unsolicited confessions of a crashing problem with 2.0.1. It has been a persistent problem for this user. Generally this would happen when I copied text blocks without first saving my work. There have been frequent other crashes, but no other particular pattern that I have yet detected, with one exception. I upgraded Suitcase II to v.1.2.11 in preparation for installing System 7.0, and WP simply crashed every time I tried to open it. Once I replaced Suitcase with the older v. 1.2.9, the problem ended.

WP 2.0 is compatible with System 7, but it will not be System 7 savvy before v. 2.1 comes out. It is scheduled for this fall, but don't bet your lunch money on it. Until then WP does not offer Balloon Help and all the other new goodies. There is a flaw in the date-setting tool. It adds an unnecessary character that has resisted all attempts to remove; the result is the date appears as follows: AugustFriday, 1991. Tech support promised to fix it from 2.0 to 2.0.1, but it is still there; now they promise 2.0.2 will take care of the problem. Until then, the only remedy is to reinstall the program, and even then there is no telling when it

will reoccur. I've given up and simply made a macro in Quickeys.

One of the most widespread complaints on the TCS and elsewhere involves importing and exporting files with other word processors, particularly Word 3.0 and 4.0. Some of those problems were taken care of in the first fix and the company promises 2.0.2 will take care of the rest. It will include an RTF (rich text format) export to permit sending documents to Word, FullWrite, PageMaker and others. More attention should have been given to making the transition from 1.x to 2.x. It is not too late, though. Veteran users deserve special documentation not only for conversion of old text files but for re-locating old and familiar features that have been changed, shifted, dropped or replaced. Many of us have spent years building our own libraries in the speller and should not have to call tech support to find out how to retain and convert it for use with WP 2.0.

Room for Improvement

There are several changes I would like to see in future updates (and I am sure, as with most word processors, each user has his own list of suggestions):

- The ability to change the font and the type size in the same move rather than have to pull down the font menu twice for two separate actions.
- The opportunity to open more than one document at a time (other than at start-up), rather than have to go through separate actions for each.
- The ability to be able to highlight unconnected parts of text (words, phrases, sentences) at one time. For example, I may decide to boldface several words on a page, and it would be nice to avoid having to go through the motion several separate



times rather than do it all at once.

- The speller could be improved to capitalize words after periods, capitalize proper nouns, be case sensitive, insert proper spacing after periods, and more.
- The cursor is sometimes hard to find on a color screen, especially if you are using light print on a dark background.
- The speed of the program is too slow.
- The print-preview mode should at least allow for some minor editing to take place.
- The headers, footers, and footnotes should be visible, if desired, while working on a docu-

ment, rather than having to switch to the print-preview mode.

Conclusions

Critics have given WP 2.0 mixed reviews, and it deserves them. MacUser called it "a stunning turnaround" from 1.0 and said it has "a new look and formatting power that is unequaled by any other Mac word processor." It "offers more power" than any of its competitors. MacWeek was not so impressed. "There are plenty of rough edges," it concluded. Mac World faults it for awkward file import and sluggish performances but praises its "powerful macro editor."

All critics continued to take pokes at WP's system of hidden codes that

are inherited from its MS-DOS ancestry. Some of these criticisms strike me as nothing more than whining. Frankly, the codes are neither as difficult, nor as forbidding as they are unconventional. My assessment is generally a very positive one. I am particularly impressed by the graphics, the macros, the new ruler and the overall ease of use. There are more features than I could use if I had a full month off to do nothing but explore WP 2.0. But it is incomplete until it can pick up some speed and eliminate the tendency to frequently crash.

Douglas M. Bloomfield is a Washington lobbyist and author of a syndicated column on foreign policy. Word Perfect 2.01 Word Perfect Corporation Orem, Utah 84057 800/451-5151 List \$495 Street price: \$279

The Macintosh Toolbox

by Jean-Marc Rivas

The computing industry is by now in agreement that the Macintosh computer is like no other computer. The Macintosh is unique, and programming the Macintosh is also unique.

In developing applications for the Macintosh, we need to follow a certain set of rules. Inside Macintosh is the most widely used and respected source of reference information for programming the Macintosh computer system. You must have Inside Macintosh to program the Macintosh computer. This multi-volume work is available through most technical bookstores as well as through the Apple Pro-

grammers and Developers Association (APDA).

To use Inside Macintosh, you need to know a little about how the Macintosh computer is organized.

First, there's the hardware layer. Here we find the mouse, the CPU chip, the sound chip, the disk drives, serial ports, and so on. The software part of the system is located in the operating system and toolbox layers. These layers are located in the System File on any start up disk and in the computer's ROM. Finally, on top of the hardware and system software are application programs.

The toolbox serves as an interface between applications and the operating system. The majority of all the system routines that you need to create applications are located in the toolbox. The toolbox is a major subject of Inside Macintosh.

There are well over a thousand routines already and new ones are being created all the time. The routines are divided by function into groups called managers.

The most commonly used managers within Macintosh applications are the Memory Manager, the Resource Manager, Quickdraw, the Toolbox Event Manager, the Menu



Manager, the Window Manager, the Control Manager, the File Manager, and the Printing Manager.

There is a good deal of interdependence among the managers in the toolbox. Let's follow a toolbox call to see how managers depend on each other to do their work.

To create a window, an application might use the Window Manager toolbox routine `NewWindow()`. When the application calls `NewWindow()`, control is transferred from the application to the toolbox Window Manager. To create the window, the Window Manager must do several tasks that are not functionally exclusive to managing windows.

One function the Window Manager must perform is to obtain the definition procedures for the window. Window definition procedures are executable code segments stored in resources that define how a window will look and behave. The Window Manager must call routines in the Resource Manager to get the window definition code resources from disk or from ROM and put them into RAM.

The Resource Manager must call routines in the Memory Manager to allocate space in RAM for the window definition code. The Window Manager must also call the Memory Manager to allocate space in RAM for the various data structures which

describe the individual window for the system. The window definition procedures must call routines in Quickdraw, the manager that deals with drawing, to draw the windows on the screen.

We can infer from this example that the interdependent functionality results in a hierarchy of managers. Lower level managers like the Memory Manager and Quickdraw are called upon frequently when an application makes calls to higher level managers like the Window Manager.

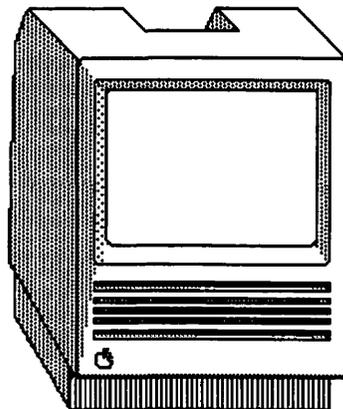
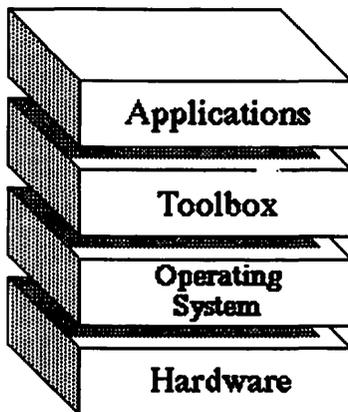
The order in which the original managers are described in the first three volumes of *Inside Macintosh* is loosely based on this hierarchy with the most fundamental managers being described first. As new managers were created and old ones extended and revised, more volumes of *Inside Macintosh* were published to describe these changes.

Because of this continual updating, chapters discussing a given manager may be found in several volumes. To obtain the most recent information about a manager, first, refer to the last volume which contains a chapter and then work your way back through the other volumes until you've found all the information you need.

Apple Computer has produced several books that explain the hardware and software of the Macintosh

computer family. The volumes of *Inside Macintosh* are still considered the noble tomes covering the Macintosh Toolbox and Operating Systems.

Jean-Marc Rivas is an independent Certified Apple Developer and a Senior Systems Engineer working with Computer Data Systems, Inc of Rockville, Maryland.



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Apple Licenses MODE32!

by Paul Schlosser

Much to the surprise of the Macintosh community, Apple has quickly found a way of answering the many complaints they had been receiving about the "dirty ROMs" contained in several models of the Mac lineup.

A bit of history first. Every modular Mac built since the original Mac II has had the hardware necessary to use 32 bits for memory addresses. Until recently only the first 24 bits have been used by the Mac operating system, limiting available memory to 8 Megabytes (Mbytes). With the introduction of the Mac IIfx, and its 32 bit clean ROMs, this 8 Mbyte barrier was removed. Any Mac II model released since the IIfx is capable of addressing up to 128 Mbytes of random access memory, by running System 7 with 32-bit addressing turned on. Since the Mac II, IIfx, IIfx/ci and SE/30 did not have 32-bit clean ROMs they were stuck at the 8 Mbyte ceiling.

With the advent of System 7 many, many owners were complaining to Apple about this matter, requesting a ROM chip upgrade to solve the problem. The most substantive argument sent to Apple was that the specifications for these Macs claimed to be able to address 128 Mbytes of memory. A grassroots letter writing campaign was begun, but Apple remained silent on the matter, saying that the problem was being considered.

In June 1991 Connectix released MODE32, a unique software solution to patch the ROMs in affected Macs, enabling these owners to enjoy the benefits of 32-bit clean

ROMs. MODE32 listed for \$169, and quickly enjoyed rave reviews from its purchasers. On September 5th Apple announced that it had licensed MODE32 from Connectix, and would distribute it free of charge to Macintosh owners (via dealers, user groups and online services). You can download a copy of MODE32 from the TCS, or purchase a copy from the WAP Disk Library.

In a further surprising move, Apple will reimburse those owners that had purchased MODE32 before the September 5th announcement. Without a sales receipt Apple will refund \$100, with a sales receipt they will refund the full purchase price, up to \$169 (plus tax). All requests for refunds must be post-marked before 12/31/91. Apple is recommending that users that have already installed MODE32 replace it with the Apple-distributed version, as the Connectix copy protection has been removed, and you'll save some room on your hard drive.

Apple will answer any MODE32 installation or use questions on the Apple Customer Assistance line, 1-800-776-2333 (between 6 am and 5 pm Pacific time). Many Macintosh owners reported that they received the complete MODE32 package in the mail from Apple, because they had taken the time to send a letter complaining about the dirty ROM problem.

Does this mean that we'll never see the requested ROM chip upgrade? Probably. Apple has announced that a future release of the Macintosh

operating system will have the capabilities of MODE32 built-in.

Apple Embraces Type 1 Font Technology!

Speaking of future releases of the Macintosh operating system, Apple recently announced that they will soon make it easier for owners to use Adobe Type 1 fonts on their computers. By including the Adobe type rasterizer in the operating system, Type 1 font jaggies will be eliminated on the screen and non-PostScript printers.

Apple did not announce the release date for this new feature, but will make the Adobe Type Manager font utility (and some Type 1 fonts) available to owners sometime this fall. Some Macintosh owners are wondering if this move signals the end of the TrueType font technology. Apple spokeswoman Patty Tulloch commented "TrueType is not dead. We're committed to evolving TrueType and committed to including it in our future products."

Apple To Replace Defective Hard Drives!

Apple has quietly begun replacing defective 20 and 40 Mbyte hard drives installed in certain SE, SE/30, II, IIfx, IIfx/ci and IIfx models. While Apple refused to identify the hard drive manufacturer, these drives were rumored to be made by Sony. The problem involves contamination of the disk media. Owners of these drives have experienced head crashes, data corruption and stiction. In some cases these drives



give off the smell of burning oil. The affected 20 Mbyte drives are model number SRD2020, the 40 Mbyte drives are model SRD2040 (although not all 40 Mbyte drives had these problems). The replacement program runs until 8/15/93. For details write to: The Apple 20MB/40MB Hard Drive Repair Extension Program, P.O. Box 172243, Denver, Colo., 80217. Or phone 303-297-2321.

Hard Drive Manufacturers Face Red Ink!

Continuing on the topic of hard drives, several manufacturers are in trouble financially. Rodime has announced that they are liquidating their inventory, and will remain in existence solely as a technology licensing company. Jasmine Technologies has been shut down, for the second time in two years. This closure looks likely to be the death knell, as Jasmine's parent company is rumored to be wary of stepping in again to provide financial assistance. Maxtor Corporation, suffering huge financial losses since absorbing MiniScribe Corporation a year ago, has put their marketing subsidiary (Storage Dimensions) up for sale. They're hoping to raise much-needed cash by this move. The president and co-founder of Seagate Technology resigned recently, after profits fell 98 percent in the last fiscal quarter. Seagate stock has dropped 58 percent since April.

Tidbits

Apple recently made their \$399 Mac IICI Cache Card standard equipment, speeding up IICI performance by 20 percent. This move has angered third-party cache card manufacturers. The PowerBook models scheduled to be announced on October 21st are predicted to be in short supply until early 1992. The new Classic II, as well as the Quadra line, are expected to be available in sufficient quantity to satisfy demand. AppleShare version 3.0 is

scheduled to be released on October 14th, at the NetWorld '91 show in Dallas. Early reviews say that the new version feels much like the current one, but sports a variety of small interface and informational enhancements. Apple and IBM signed a historic agreement on October 2nd, announcing their intent to cooperate on future hardware and operating system enhancements. New products that result from this agreement aren't expected on the market before 1993. The latest beta-release of Apple's QuickTime technology includes a new Scrapbook that can play movies, as well as a new version of TeachText that can include movies in documents. It's rumored that Apple has won a piece of a Department of Defense contract to provide up to 300,000 microcomputers over the next three years. Don't miss the essay by Douglas Adams on page 213 of the November 1991 MacUser.

New Files on the TCS

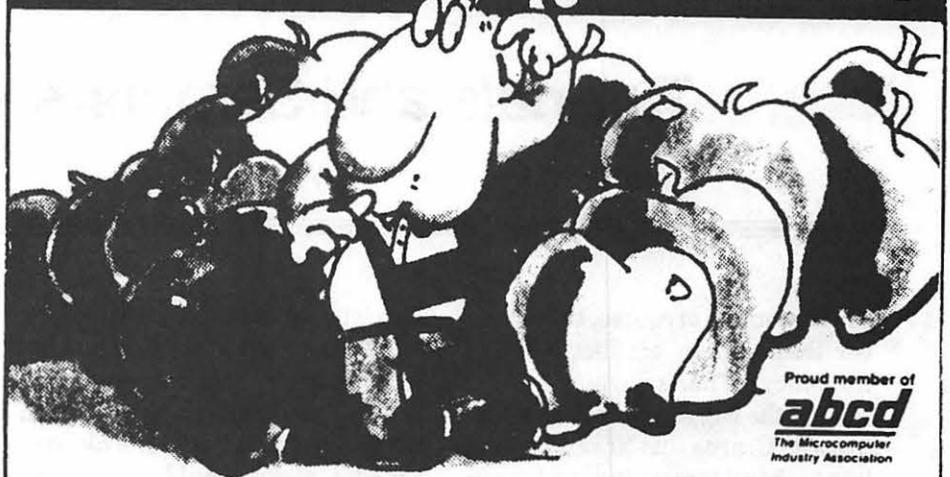
The following files were uploaded to the Macintosh File Transfer areas on the TCS during the last thirty days. This listing represents only a small portion of the files available for downloading. Call the Pi Office at 301-654-8060 for information on signing on to the TCS.

File area 13 - Mac Fonts
 MON-OTONY...CPT Monotony(tm) monospaced type1 font
 FLINT-STONELWF.S Laser Font. Looks like chiseled stone
 NEUSANS-BLAC.CPT NeuSansBlack — TrueType font
File area 14 - Mac Games
 EVOL-VEAR Genetic algorithm source/exe
 GANGWARS.SIT Save the city from crooks, just like
 DC OIDS.DEMO.SIT A demo of the Oids game
 SDR0WK CAB sdrow-kcaB turns everything Backwards!
 STELLA.CPT Real 3-D!! Arcade game. Freeware!
 MACAMUG.CPT Very fun mug-shot demo
 OIDS-GALA.SIT Some OIDS worlds I downloaded from AOL
 STORM.-0.9B1.CPT Tempest-like arcade game
 OIDSBB.SIT Three OIDS galaxies for fans

OIDS.-GALAXY.SIT Oids levels
File area 15 - Mac Graphs
 CANVAS.-RTC.TXT Canvas 3.0 RTC from GENie -9/17
 WASHINGTON.-SIT PICT graphic of George Washington
 CHROME.GIF Chrome Mask from Mona Lisa Overdrive
File area 16 - Mac HyperCard
 TNGGUIDE.CPT Episode Guide to Star Trek:TNG, updated
File area 17 - Mac Technotes
 TIDBIT84.SIT TelePort ADB Modem
 TIDBIT83.SIT TidBITS for 23 Sept., 1991
 TIDBIT82.SIT The System Heap explained
 TID-BIT81.SIT TidBITS for 16 Sept., 1991
 TIDBIT80.SIT TidBITS for 09 Sept., 1991
 TIDBIT79.SIT TidBITS for 02 September, 1991
 TIDBITS7.SIT TidBITS for 26 Aug., 1991
 TIDBIT77.SIT TidBITS for 19 Aug., 1991 C
 PASCAL.CPT D.Mark's THINK C & Pascal Updates
File area 18 - Mac Utilities
 DEHQX200.CPT Batch process BinHex files in background
 SPAM-101.CPT Programmable Apple Menu(s)
 APLSLICE.CPT Give Apple Menu submenus.
 PRO.-PLUS.CPT Pro Predictor for the Mac Plus
 SOUND-MASTER.CPT SoundMaster v1.7.2
 FLASH.-IT.CPT Flash-It version 2.2.1 P
 RO.PREDICT.CPT Predict NFL game winners
 GENAPP.SIT Mac-User's GenApp for budding programmer
 THEFONDLER.2.1 the-FONdler 2.1
 MCASM.SIT McAssembly v7.3 (Asmbler)
 KILROY.SIT Kilroy. System 7.0 cmptible
 SLOTGTOR.CPT Slot Investigator v. 3.0
 FAB-ULOUS.STARTU Startup Screens for B&W Macs!
 SODCON-VERTER.1. sndConverter 1.2.1
 PSYCHO.SHOWER.C The sound from the Psycho shower scene
 MVE..SCUSE.ME.C Sound clip from Blazing Saddles
 POP-CHAR.1.9.SIT PopChar v.1.9
 TERMULATOR.2.03 latest v. (fixes bugs)
 FINDERHA.01 System 7 Menu Extention -
 HOT! COLUMNBO.SEA Columnbo v2.1 text processor
 SUPER-CLOCK.CPT SuperClock! v3.9.1
 MACWOOF1.CPT Great Shareware Fido Point System!
 PLUME.-CPT Nice utility for Sys 7 aliases

DESKTOPP.SIT Color Escher
desktop pattern
NETBUNNY-25.CPT NetBunny,
version 2.5
SCSI.INFO.CPT Scan SCSI port for
devices
SWITCHBO.SEA Select a startup
system at boot time!
SCSIPROBE.CPT. SCSIProbe 3.2
now supports Balloon Help
SET-PATHS.1.1B2 Shrink your
system size with SetPaths
DCHARGE.CPT Change pixel
depth of screen.
SC.MAKER.CPT Create empty
suitcases for Sys 7
TYPE-BOOK-232.CPT theTypeBook v.
2.32
SYSPICK1B10.SIT SysPicker-1.0b10:
Switch between Sys6 & 7
ESCAPADE131.CPT Keyboard equiva-
lents for dialogs
QUIT-FMNU.CPT. FMENU to patch
Finder to allow quit
RESEDTIP.-CPT HMG ResEdit
Primer5.0
COMPACT131.SEA Compact Pro 1.31
pkg. Update.

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Tutorials and Seminars—November

by Keith Malkin

There is more, of course, to November than turkey, cranberries, and the Macy's Thanksgiving Day Parade in the Big Apple. You can stay in the D.C. area this November and learn about computing with your Mac. Start with our usual three-part introductory Macintosh tutorial (on schedule), along with excellent sessions on the exciting new release of Deneba Canvas (taught by Clint Hyde), the Dvorak keyboard, HyperTalk and scripting, introductory Excel, fonts, and Filemaker Pro. Continue with our series on Quark Xpress, taught by Robin Henry, An Introduction to Quark Xpress, Part 2, Graphics and Other Elements, in early December.

David Mudd has announced an exciting series of tutorials offered by the HyperTalk SIG on scripting and programming in HyperCard. These tutorials will be held on the first, third, and fourth Saturdays in November at the Fairlington Community Center, just off I-395 (Shirley Highway) on Quaker Lane, near King Street. (Fairlington is in Arlington County, very close to the Lincolnia and Skyline areas and right on the border of Alexandria; it's a convenient location for all of Northern Virginia, the District, and most of suburban Maryland. Please call John O'Reilly at 703/204-9332 or David Mudd at 703/683-1746 for directions or information.)

With the exception of the HyperTalk sessions, all class sessions are scheduled for three hours and will be held at the WAP office in Bethesda. We

urge you to bring your computer with you to tutorials because we have none for you to use at the office. If you can't bring your own computer, you'll have to look over someone else's shoulder. You will not need to bring your Mac for the Dvorak Keyboard or All About Fonts seminars. For the Canvas or early December Quark Xpress, Part 2 workshops, you may bring your Mac with Canvas or Quark installed, or just come and enjoy the classes.

Occasionally, the WAP class schedule changes due to conflicts or other circumstances beyond our control. (I want to apologize personally, on behalf of the instructor, and Washington Apple Pi for any inconvenience caused by a change in last September's Introduction to the Macintosh series.) As I write this, we are making additions to the class schedule that will be completed after the Journal must go to press. Classes on FileMaker Pro, All About Fonts, and Macintosh Programming are in the works. Please call Bob Morris at (301) 963-3129(h) or Keith Malkin, at (703) 503-8591. Bob can answer any of your questions on the latest WAP class schedule, instructors, and the like.

However, he cannot take your registration over the phone. For registration purposes, directions, and general information call the WAP office. Please call the office at least one business day before the class date to confirm that your class will be held as scheduled. We cannot call you! We sincerely regret any inconveniences that may arise due

to scheduling changes.

Coming Attractions: The second of our series on Quark Xpress, Part 2, Graphics and Other Elements, will be held in early December; call me or Bob for the latest scheduling. Additional courses on FileMaker, HyperCard, and typography are planned for November or December.

Payment for Courses

The fees for most sessions (unless otherwise indicated) are fifteen dollars (\$15) for members, twenty dollars (\$20) for non-members. Please register well in advance for the class or classes you wish to take by either sending in the registration form (which can be found at the end of this article) or by phoning your registration into the office with a credit card. If you've signed up for a class and need to cancel, please do so two (2) business days before the class begins, otherwise your money can not be refunded.

Volunteers and Instructors

We need your ideas, comments, or suggestions. Please call or write me, Keith Malkin, at 9505 Draycott Court, Burke, VA 22015-3253, (703) 503-8591. We must have your enthusiastic support and creativity to make the Washington Apple Pi Education and Training Program a success. The Membership Survey at the end of this article makes it easy and convenient for you to let us know what you would like.

If you have expertise in any area of



Macintosh or Apple computing, your fellow users and WAP members need you! You don't have to be a computer jock or digital wizard. A working graphic artist or designer can share DTP or prepress secrets with desktop publishing novices, likewise accountants, writers, artists, typographers, broadcasters and video producers, photographers, educators, lawyers, sales reps, business managers, musicians and composers, and enlightened parents have knowledge and perspective on computing that would benefit other members or the community. Teaching is fun, rewarding, and you get paid for it! Please call Bob Morris (or me) with any idea you have on teaching a class or seminar.

Many of you have asked about tutorials, workshops, and seminars for the specific programs. These are listed in the survey at the end of this article, please look at it. If you are knowledgeable in any of these areas, please consider instructing; your fellow members need you! If you have any subject or software package you would like to teach, please call Bob Morris at: (301) 963-3129(h) or (202) 501-7814 (o). (Instructors are compensated for their time, effort, and expense.)

We want to increase class registration and improve and expand our training program. We need to publicize and promote the wonderful, low-cost training we provide to WAP members and the community at large. If you are a graphic designer, commercial artist, illustrator, desktop publisher, editor, ad copywriter, or just an enthusiastic WAP member, please give us a hand with publicity. (This could be a wonderful opportunity for self-promotion, if you are a freelancer or entrepreneur.) We do not need a heavy time commitment, just a few hours each month. Call me at (703) 503-5369, (9AM—6PM) or (703) 503-8591 (9AM—10PM). We also need facilities for tutorials and workshops. If you know of a public or private facility (with Macs or Apple

computers we may be able to use) in the metro area, call me.

Macintosh Tutorials

Introduction to Microsoft Excel (Course #ME101191). For the beginning Excel user or those wishing to brush up on fundamentals. Topics covered are: the many uses and applications of Excel, Excel window and tools, menus and menu commands, keyboard shortcuts, advanced features, System 7 savvy Excel 3, exercises, etc.

Materials required: Your Macintosh, external drive or hard drive, startup disk, and a copy of Microsoft Excel, preferably 3.x, or 2.2

Course Date: Monday, November 16, 1991, 9 AM—12 NOON.

Workshops

Computer is optional; bring it and appropriate software only if you can.

Introduction to Canvas (Course #CA11191). This class is designed for the user or potential user of the powerful graphics (draw and paint) program, Deneba Canvas, now in release 3. Clint Hyde will cover the fundamentals, similarities to (and advantages over) Claris MacDraw II and Pro, and the more exotic features of one of the most powerful and popular Mac graphics programs.

Materials required: (optional) Your Macintosh, external drive or hard drive, startup disk, and a copy of Deneba Canvas, preferably 3.x, or 2.1x.

Course Date: Monday, November 16, 1991, 9 AM—12 NOON.

Introduction to Quark XPress: Part 2, Graphics and Other Elements (Course # QX21291). The powerful graphics capabilities of Quark, including importing, cropping, scaling, runarounds, color and spot color, separations, native graphics creation, and other topics will be covered. For scheduling and other de-

tails call me at (703) 503-8591 or Bob Morris at (301) 963-3129.

Materials required: (optional) Your Macintosh, hard drive, and Quark XPress, preferably 3.x.

Course Date: early December, call.

Seminars

Classes do not require you to bring your computer.

The Dvorak Typing Method (Course # DV101191) From Michael and Ginny Spevak comes a welcome relief to all of us who have learned to hate the QWERTY keyboard and all of its awkward finger positions, a class on the Dvorak keyboard arrangement. The Spevaks write:

"The Dvorak keyboard was successfully designed to be faster, more efficient, and easier to learn than the QWERTY keyboard. The American National Standards Institute (ANSI) has officially recognized it as an alternative standard keyboard arrangement since 1982. It can be used with most computers (including all Apple products) via readily available software (the Dvorak arrangement is integral to Windows 3.x, for example) and by modification of the keyboard device. In the tutorial, we will demonstrate materials and get you started using Dvorak on Macs and Apples."

This is going to be an interesting offering, so register.

Course Date: Saturday November 2, 1991, 9AM—12NOON.

Other Educational Opportunities

The Eastman Kodak Center for Creative Imaging in Camden, Maine

The campus of The Eastman Kodak Center for Creative Imaging is located in a beautiful Maine setting, with more than 27,000 square feet of high-tech workspace in a four-story, neo-Gothic complex. The Atlier, as Kodak calls it, is full of



digital imaging resources including over two dozen Mac IIx-based workstations, the Kodak Prophecy digital color separation system, Nikon slide scanners, Kodak scanners, the Kodak PhotoCD system, prototypes of the Kodak Megapixel electronic, still-frame video camera, and Kodak XL7700 dye-sublimation printers.

Courses are on the pricey side, even for high-tech corporate training, and transportation and lodging are extra. These include electronic photography, digital imaging, multimedia, electronic prepress, along with such applications as Adobe Photoshop, Kodak Colorsqueeze, and PhotoYCC. The intended audience include professional photographers, art directors, editorial illustrators, magazine publishers, electronic publishers, printers, service bureau operators, computer artists,

and any other interested parties. For schedules and course information call the Center for Creative Imaging at (207) 236-7400 or fax to (207) 236-7490.

Other educational resources include:

- The Apple-AFI Computer Center for Film and Videomakers. To receive course descriptions and mailings from the center, which is located in Los Angeles, call (213) 856-7664. For info on joining the American Film Institute, call (800) 999-4AFI.
- The Corcoran School of the Arts offers a series of Macintosh graphics courses for adults, teens, and kids at its Georgetown campus. For info and mailings call (202) 628-9484.

•The Sony Video Institute (The Sony Institute of Applied Video Technology, 2021 North Western Avenue, P.O. Box 29906, Hollywood, CA 90029) is offering a number of workshops that may be of interest to Macintosh publishers, digital photographers, film and video makers, multimedia creators, and animators. Workshops: Introduction to Electronic Photography and Publishing and Computer Graphics, Video Animation & Digital Effects Systems (the latter will deal with multiple platforms including, but not limited to Mac systems). For info call (213) 462-1987, then #*.

Future Journal issues will announce new offerings, especially those coordinated by the Pi SIGs and Slices.

Membership Survey

In an effort to better meet the needs of the WAP membership, the following questionnaire is presented. Please take the few minutes necessary to fill it out and mail it to the address below.

Keith Malkin
9505 Draycott Court
Burke, VA 22015-3253

or call
Keith Malkin
(703) 503-8591

or

Bob Morris
(301) 963-3129 or (202) 501-7814

1. What courses, seminars, or workshops you would like to see offered? (Place an "O" before the appropriate program.)
2. Which subjects or software packages would you like covered in a tutorial? (Place a "X" before the appropriate program.)
3. What days and times are convenient for you to attend a class? _____
4. Where is the most convenient area for you to attend a class? _____
5. What course, seminar, or workshop would you like to teach? (Place an "I" before the appropriate program.)

- | | |
|--|---|
| <input type="checkbox"/> Desktop and Electronic Publishing | <input type="checkbox"/> Macintosh Programming (MPW, Pascal, C, ResEdit) |
| <input type="checkbox"/> Small Business Management with the Mac | <input type="checkbox"/> Aldus Freehand 3.x |
| <input type="checkbox"/> Introduction to the Macintosh | <input type="checkbox"/> Aldus Pagemaker 4.x |
| <input type="checkbox"/> Apple-series instructors | <input type="checkbox"/> Aldus Persuasion |
| <input type="checkbox"/> Claris FileMaker Pro | <input type="checkbox"/> Adobe Illustrator |
| <input type="checkbox"/> Claris MacWrite II (MWP Pro version soon) | <input type="checkbox"/> Adobe Photoshop |
| <input type="checkbox"/> Claris Hypercard 2.x | <input type="checkbox"/> Adobe Postscript, Postscript Level 2, and Postscript programming |
| <input type="checkbox"/> Microsoft Works | <input type="checkbox"/> File Transfer and Translation (Between Macs, Macs and PCs, Macs and other platforms) |
| <input type="checkbox"/> Timeworks Publish It Easy! | <input type="checkbox"/> Other (Please specify) _____ |
| <input type="checkbox"/> Quark XPress 3.x | |

Dvorak Tutorial for Apples and Macs

by Michael Spevak

The Dvorak Keyboard will be featured in a hands-on workshop at the Washington Apple Pi office, Saturday, November 2, 1991. My wife Ginny will conduct the tutorial which will last from 9 a.m. to noon. As usual, participants are expected to bring their computers.

The Dvorak keyboard, after languishing for decades, received a new lease on life in 1982, when it was accepted by the American National Standards Institute as an alternate standard keyboard arrangement. The QWERTY keyboard, its intentional inefficiency paradoxically necessary to market successfully the original, mechanically clumsy typewriter, unfortunately achieved universal dissemination in the English-speaking world. However, several factors have contributed to the recent proliferation of the ergonomically efficient Dvorak keyboard: Computers' keyboards, unlike those of typewriters, are readily programmable, so the dictum of "1 machine, 1 keyboard arrangement" does not apply. Businessmen, students, executives and professionals increasingly do their own typing, depending less on their secretaries for that purpose. These new typists are more likely to exercise the option not to suffer the wear and tear of QWERTY than employees hired just to type. Ignorance about the Dvorak keyboard arrangement persists, though, as shown by Thomas Wheeler's comment in his 1991 *Professional Workstations*: "Using the best design from engineers and recommendations by psychologists, the keyboard retained the same general layout."

Studies have repeatedly shown that people on the average acquire a usable level of proficiency on the quite natural Dvorak keyboard in

about 18 hours, a third the time it takes with QWERTY. Using the time-motion studies introduced by his colleagues of *Cheaper by the Dozen* fame, Frank and Lillian Gilbreth, August Dvorak Ph.D., Professor of Education at the University of Washington, demonstrated that a typist's fingers travel approximately 16 miles in 8 hours with QWERTY, 1 mile with Dvorak. Seventy percent of Dvorak keystrokes are performed on the home row, in contrast with some 32 percent on QWERTY. In designing the keyboard with his graduate student, Dvorak provided rhythmic stroking, with the hands alternating and with the fingers of each hand tending to be applied from pinky towards index, reproducing the anatomically efficient strumming motion.

The delay in popularization of his design resulted from its Depression-era introduction (labor-saving, capital-intensive devices were understandably unwelcome), from Dvorak's unhappy business decisions, and from the usual human resistance to change. Nonetheless, its dissemination proceeded sufficiently, so that the two organizations formed to help it along (the Dvorak International Foundation and *Dvorak Developments*) disbanded several years ago when DD's editor, Randy Cunningham, and DIF founder, Virginia Russell, were convinced that sufficient momentum had finally been attained. (Mrs. Russell, addressed the Pi monthly meeting on April 26, 1986.)

Apple Computer has long been a supporter of the Dvorak Keyboard. The IIC is only the most obvious example, with its toggle switch on top. The IIE's motherboard requires only the simple modification, described by Bruce Field in his September 1985 Q&A column, this journal 7(9)12, to release the designed-in Dvorak keyboard arrangement (oddly, there is no software toggle available either for the IIE or for the

Apple II portion of the new Macintosh LC). The IIGS control panel contains it already. The Macintosh requires software, which has been available for years, to do the job. Electric Dvorak is a public domain program, available on a Mac disk or on the TCS for down-loading, with the add-ons needed to control whether the command-key combinations are Dvorak or QWERTY. A public domain Control Panel keyboard configuration program/Keyboard Switcher is also available. Paragon Software's new version of MacQWERTY (available at stores locally) is System 7-compatible, available for \$15 to all pre-May 15, 1991, registered owners (free to recent owners). Windows 3.0 for MS-DOS machines has Dvorak built into its control panel, and there has long been Dvork conversion software for probably all other computers. There are available on the local market switchable keyboards, one of which is designed for use with both IBM's and Macs. Many Dvorak typists find the use of key-cap covers with both Dvorak and QWERTY keyboards advantageous.

There are some Dvorak software incompatibilities: the shareware telecommunications program ZTerm 0.85 remaps the keyboard to QWERTY when opened, but it has a setting that prevents this from happening; however, Termulator cannot be stopped from doing it.

Michael Spevak, M.D., a psychoanalyst and child psychiatrist, has used the Dvorak Keyboard since 1985.



Washington Apple Pi Tutorial Registration Form

Washington Apple Pi
7910 Woodmont Avenue, Suite 910
Bethesda, Maryland 20814
301-654-8060

| Basic Information | | Course Numbers |
|---|--|---|
| Name _____ | | |
| Address _____ | | Please fill in the course number of the class you wish to take... |
| City/State/Zip _____ | | Class # 1 _____ |
| Phone (day) _____ (Eve) _____ | | Class # 2 _____ |
| Member <input type="radio"/> Number _____ Non-Member <input type="radio"/> | | Class # 3 _____ |
| Number of Classes _____ x Class Fee \$ _____ = Total Fees \$ _____ | | Class # 4 _____ |
| Check/Money Order <input type="radio"/> Credit Card <input type="radio"/> Card Number _____ | | Class # 5 _____ |
| Card Expiration _____ Signature _____ | | Class # 6 _____ |
| WAP Form #CL006 (mod. 7-90) Mail registration and payment to the above address | | |

MacWorld Expo

by Dana Schwartz

Washington Apple Pi once again had a successful showing at the Macworld Expo in Boston last August. It takes the hard work of many people to support our appearance at such a show, and I would like all WAP members to join me in expressing our appreciation for the efforts of the dedicated crew who made this one happen.

During the four days of the show, over twenty WAP members assisted at our booth. At the risk of missing a name, they included: Hisham Abboud, Dick Byrd, Nancy Byrd, Manny DeVera, Bob Fimiani, Charlie Froehlich, Tim Helsing, Ken Knight, Lee Larsen, John O'Reilly, Tom Parrish, Rick Pekar, Chase Ridgely, Vaughan Risher, Catherine Vaughan, Gene Velazquez, Chris Whatmore, Tom Witte, and Pete Yared. These were the people on the front lines who

persuaded visitors to join our club and buy our disks.

Those of you who may have seen our display at Boston may have noticed the attractive red draping around the tables which was made for us by our Office Manager, Nancy Pochevko. Look for it and us at the next show. Very impressive, Nancy!

By far the most tiring and time consuming of jobs was that of transporting our materials to the show site. Chase Ridgely and Charlie Froehlich accomplished this task, towing a trailer all the way up to Boston. Without their efforts, WAP would not have had an exhibit at the show!

Most of all, I'd like to thank Tom Witte. Tom was always available to cover for me at the booth while I was actually seeing something at the show, and I could always depend on him to substitute for any last minute changes in our booth schedule. A dedicated and valued volunteer, Tom deserves special acknowledgment from all of us at WAP!

Thanks again to all of you who helped make WAP's participation at Macworld a success!

[This article was run last month on page 12 and attributed to John O'Reilly. The author is Dana Schwartz.]

My deepest apologies to Mr. Schwartz-ED]



Apple II/III

Apple II*

GENERAL

Dave Harvey (days only) (703) 578-4621
 John Wiegley (after 2:15) (703) 437-1808
 Leon Raesly (days; 9-5) (301) 220-3113

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) 220-3113
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 10pm) (703) 758-9660
 Gary Hayman (301) 345-3230
 Leon Raesly (days; 9-5) (301) 220-3113
AppleWorks Database
 Morgan Jopling 1 (301) 721-7874
 Roger Burt (301) 424-6927

COMMUNICATIONS

ProTerm
 Alan 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) 220-3113

Profiler 3.0

Barry Fox (717) 566-6709

HARD DISKS

General

Wayne Meckling (301) 463-2153

CMC (not CMS)

Barry Fox (717) 566-6709

Corvus & Omninet

Tom Vier (12N-6PM) (703) 860-4810

Corvus

Leon Raesly (days; 9-5) (301) 220-3113

Sider

Jaxon Brown (301) 350-3283

Otis Greever (615) 638-1525

LANGUAGES

Applesoft

Louis Biggie (301) 967-3977

Peter Combes (301) 251-6369

Leon Raesly (days; 9-5) (301) 220-3113

John Love (703) 569-2294

Integer Basic

John Wiegley after 2:15 (703) 437-1808

John Love (703) 569-2294

Machine

John Love (703) 569-2294

Pascal

Michael Hartman (301) 445-1583

C and TML Pascal

Harry Erwin (before 10pm) (703) 758-9660

OPERATING SYSTEMS

Apple DOS

John Wiegley after 2:15 (703) 437-1808

CP/M

Art Wilson (301) 774-8043

ProDOS

John Love (703) 569-2294

John Wiegley after 2:15 (703) 437-1808

ProDOS 8 and 16

Barry Fox (717) 566-6709

RWTS, Disk structure

John Wiegley after 2:15 (703) 437-1808

Print Shop

Thomas O'Hagan (301) 593-9683

SPREADSHEETS

General

Walt Francis (202) 966-5742

MagicCalc/SuperCalc2.0

Leon Raesly (days; 9-5) (301) 220-3113

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) 220-0717

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) 220-3113

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*

Paul Tarantino (before 10pm) (703) 451-5608

Neil Laubenthal (703) 691-1360

A.D. (Bill) Geiger (703) 237-3614

GENERAL

Barry Fox (717) 566-6709

Ile Upgrade

Morgan Jopling (301) 721-7874

APW

Andy Gavin (703) 734-3049

Leon Raesly (days; 9-5) (301) 220-3113

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

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

Wayne Meckling (301) 263-4053

Apple II printing

Bob Sherman 1(305) 944-2111

Apple III*

GENERAL

Jim Jutzin (703) 790-1509

Dave Ottalini 9:00-10:30 P.M. (301) 681-6136

3 Easy Pieces

Robert Howe (916) 626-8198

David/Joan Jernigan before 9 pm (703) 822-5137

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 (201) 782-6492

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

Allan Levy (North Potomac) (301) 340-7839

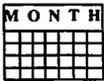
David Page (301) 599-7630

Don Avery (Bethesda/DC) (202) 362-1783

VIRGINIA

Kenneth De Vito (Alexandria) (703) 960-0786

Neil Laubenthal (703) 691-1360



CALENDAR

NOVEMBER

Meeting Notices

4 Monday
7:00 PM PI-SIGoffice

6 Wednesday
7:30 PM dPub SIGPEPCO
7:30 PM Mac Programmersoffice

7 Thursday
7:00 PM Columbia Slice Mt. Hebron HS
7:30 PM GameSIG office

9 Saturday
9:00 AM Annapolis SliceSeverna Park
10:00 AM Frederick SliceFrederick

13 Wednesday
7:30 PM Board of Directors Meeting office
7:00 PM Telecomm SIGoffice
7:15 PM Mac Databases SIGISS, Inc. (Fairfax)

14 Thursday
8:00 PM Stock SIGoffice

20 Wednesday
7:30 PM Excel SIGoffice
7:30 PM Fed SIGcall
7:30 PM HyperTalk SIGArlington

21 Thursday
7:30 PM AV SIGoffice

22 Friday
 **Writers' Deadline—January Issue**
 **Ad Space Deadline—January Issue**

23 Saturday
8:00 AM AppleWorks SIGcall
9:00 AM WAP General Meeting Holiday Inn
..... Bethesda

25 Monday
7:00 PM Apple IIGS SIGcall

28 Thursday
7:30 PM Ed SIGoffice

30 Saturday
 **Editors' Deadline—January Issue**

Annapolis Slice—2nd Saturday; Severna Park Library on McKinsey Road (off Rt. 2) Severna Park, MD, 9:00 AM.

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

Apple III SIG—Meets informally quarterly; please call SIG chair for details

AppleWorks SIG—just prior to the regular WAP meeting at 8:00 AM.

AV SIG (arts and video)—3rd Thursday; WAP office, 7:30 PM. May be subject to change; call Nancy Seferian (202) 333-0126, to confirm.

Columbia Slice—1st Thursday; at Howard County Board of Education, at the Building, Route 108, Columbia, MD, 7:00 PM..

dPub SIG (desktop publishing)—1st Wednesday; PEPCO Auditorium at 1900 Pennsylvania Ave., N.W., 7:30 PM

Ed SIG (Educational programs)—4th Thursday; 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.

WAP General Meetings

Monthly General Meetings are generally held on the fourth Saturday. We are still looking for a semi-permanent "home" for the General Meetings. Requirements: two meeting rooms; one holding around 50 people and the other around 250 people. Anyone with suggestions please contact Nancy Pochepko at (301) 654-8060.

Come as early as 8:30 AM to join, buy public domain disks, schmooze. Attend the Q&A sessions for personal help and to hear the latest news. The main meeting begins at 9:30AM.

November

| SU | MO | TU | W | TH | FR | 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 at 7:30 PM.

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

Macintosh Databases SIG—Second Wednesday each month of 1991, 7:15 PM start (until about 9:30 or 10:15 PM); at the demonstration room of Innovative Systems Solutions, Inc., Suite 300, 3702 Pender Drive, Fairfax, Virginia; just around the corner from the interchange of U.S. Route 50 and U.S. Interstate 66; absolutely free parking.

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.

Stock SIG—2nd Thursday; WAP office, 8:00 PM.

Telecomm SIG—2nd Wednesday, WAP office, 7:00 PM.

Virginia Slice—Pi members interested in having a VA Slice Users' Group will meet on Monday, October 21 and on Monday, November 18 at a location near Fair Oaks Mall or Arlington near the Ballston Metro. Call 703-818-9626 for more information.

Garage Sale—The Pi's Annual Garage Sale is tentatively planned for December 7, 1991. It will be held at Eleanor Roosevelt High School in Greenbelt, Maryland. A map and directions to the sale will be included in the December Journal. For further information, please call the office 301-654-8060.

Notice: Anyone having information on changes to the WAP Calendar is requested to call the Calendar Editor, Peter Cook, at (301) 585-7651, or Nancy Pochecko at the WAP office, (301) 654-8060.

DECEMBER

2 Monday
7:00 PM PI-SIG office

4 Wednesday
7:30 PM dPub SIG PEPCO
7:30 PM Mac Programmers office

5 Thursday
7:00 PM Columbia Slice Mt. Hebron HS
7:30 PM GameSIG office

7 Saturday
9:00 AM Annapolis Slice Severna Park
10:00 AM Frederick Slice Frederick
TBA Garage Sale Eleanor Roosevelt HS
(The time and location are tentative) Greenbelt, MD

11 Wednesday
7:30 PM Board of Directors Meeting office
7:00 PM Telecomm SIG office
7:15 PM Mac Databases SIG ISS, Inc. (Fairfax)

12 Thursday
8:00 PM Stock SIG office

18 Wednesday
7:30 PM Excel SIG office
7:30 PM Fed SIG call
7:30 PM HyperTalk SIG Arlington

19 Thursday
7:30 PM AV SIG office

20 Friday
 **Writers' Deadline—February Issue**
 **Ad Space Deadline—February Issue**

21 Saturday
8:00 AM AppleWorks SIG call

23 Monday
7:00 PM Apple IIGS SIG call

26 Thursday
7:30 PM Ed SIG office

28 Saturday
 **Editor' Deadline—February Issue**

December

| SU | MO | TU | W | TH | FR | 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 |

WAP General Meeting

Because of the Garage Sale and the proximity of Christmas, we do not have a General Meeting in December. As of right now, the January General Meeting is scheduled to be at the Holiday Inn in Bethesda, Maryland.



Macintosh

GENERAL

Jeff Alpher to midnight (301) 630-2036
 Shabtai Klein (301) 270-2250
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
 Paula Shuck bef.10pm (301) 740-5255
Helix
 Jim Barry to midnight (703) 662-0640
 Harvey Levine (301) 299-9380
Double Helix
 Paula Shuck before 10pm (301) 740-5255
MS-File
 John Love (703) 569-2294
 John Spencer (301) 730-1084
 Mort Greene (703) 522-8743
Omnis 3 & 3+
 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) (703) 768-5315
ReadySetGo
 Jim Graham (703) 370-5737
 Marty Milrod (301) 464-5981
 Freddi Galloway (V/TTY) (703) 768-5315
PageMaker
 Mort Greene (703) 522-8743
Quark Xpress
 Ron Mann (202) 333-3409

GRAPHICS

General
 Bill Baldrige (301) 779-8271
 Jay Rohr (301) 655-0875
Adobe Illustrator
 Ling Wong (703) 378-5102
Canvas
 Bill Baldrige (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
Inside Mac
 Jon Hardis (301) 330-1422
 John Love (703) 569-2294

LANGUAGES

Pascal
 Michael Hartman (301) 445-1583
MS BASIC
 John Love (703) 569-2294

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 (703) 370-5737
 Dick & Nancy 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
MultiPlan
 John Love (703) 569-2294

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) (703) 768-5315
 Kirsten Sitnick (301) 750-7206
ThinkTank-More
 Jim Graham (703) 370-5737
 Tom Parrish (301) 654-8784
Hebrew Word Processing
 Tim Childers (301) 997-9317

WriteNow

Bill Baldrige (301) 779-8271
 WordPerfect—Mac
 Curt Harpold (202) 547-8272
Microsoft Works
 Amy Billingsley (301) 622-2203

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
SoundEdit
 Jamie Kirschenbaum (eves) (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) 220-3113

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 | Apple II, GS |
| Dick Grosbier | (Frederick) | 898-5461 | Apple II, GS, & Mac |
| Harold Polk | (Frederick) | 662-6399 | Apple II |
| Tony Svajlenka | (Frederick) | 694-6209 | Apple II |
| Doug Tallman | (Frederick) | 663-3268 | Mac |
| Scott Galbraith | (Monrovia) | 865-3035 | Apple II & GS |
| J. Russell Robinson | (Frederick) | 739-6030 | Mac |

CARE AND FEEDING OF YOUR COMPUTER[©]

Part I: Rodent Hygiene or Pest Control: The Story

by T.M. Witte

The goal of this article is to help the novice better understand and use his/hersystem, and maybe help him/her deal with problems when they occur. Video and HyperCard stack available on request.

More than anything, the mouse is what distinguished the Mac from computers which came before. It is fundamental to its operation. It makes many things easier, but like every great sword this wonderful tool cuts both ways. If it is not working properly it can be very frustrating. Mouse problems sometimes sneak up slowly, sometimes suddenly, but eventually, they will happen to everyone. First it seems that the cursor sticks a bit, then it will barely move in one direction. Without a mouse you find that you are extremely limited. On some models you can't even shut it down. When you have reached this point what is to be done? Call a rodent control expert? Run to the dealer and exchange a lot of your hard earned money for a new mouse and hope it never happens again? Or maybe you should buy a trackball - neat, but not cheap. Fortunately, even the least technical computer user can tame a misbehaving rodent. Before we get into the instructions on mouse hygiene, a few words on how a typical mouse or pointing device works are in order. This description is important in case your mouse is not exactly the same as the one that I describe and you have to interpret some of the directions.

The mouse converts the physical motion of your hand into a set of

electrical signals which the computer uses to position the cursor on the screen. In most cases a mouse uses a ball and cage mechanism similar to the diagram at the bottom of page 52. The ball, which is mostly inside the cage, rolls on the table top/mousepad when you move the mouse. The rolling ball moves the drag wheels which project from inside the mouse through the wall of the cage. The drag wheels are on a shaft with a wheel-like disk. The disk has spokes which interrupt a beam of light emitted by a tiny LED as it turns. The receiver, on the other side of this wheel like disk, converts these pulses of light to electronic signals that the computer operating system software uses to position the cursor on the screen. Anything that interferes with this process can make your relationship with your mouse miserable.

The most common problem is dirt. Dirt or grunge on the drag wheels and on the ball and cage interfere with proper motion. The next most likely problem is a speck of dirt which has gotten inside the mouse and is blocking the light from passing through one or more of the spokes of the wheel. Other possible, but less likely, reasons for problems are operation system file corruption or a break in one of the wires of the mouse cord (did your pet get hungry? Or perhaps a young assistant has tried to use the mouse cord as a carrying strap?). What to do when your rodent misbehaves:

Step One: Peeling Rubber

This is almost completely safe and

foolproof. The thing to fear is losing the ball. (Don't laugh! I have heard of someone who dropped his, and it was eaten by the dog.) In my experience I find this maintenance is necessary about once a month, depending on use and how clean I keep my mouse pad.

Turn off your computer (optional). Turn mouse upside down. Remove the ring or collar surrounding the ball. A gentle quarter turn counterclockwise should do it. Turn mouse right side up, catching ball and ring. Look inside the cage. If the drag wheels look like they have a dark, rubber band like friction coating, then you found the problem. That is the gunk that is messing things up. The drag wheels should be smooth shiny metal or plastic. Carefully remove ALL of this grunge. Take care not to push it back into the inside of the mouse. Make sure you that clean all 360 degrees of the drag wheel. It will seem to want to only show you the clean side. I found that holding the wheel from turning with something like a toothpick while scraping the wheel clean with another worked well. An agile finger and fingernail work too. Again, try to keep the residue from getting inside. Re-assemble and test.

Step Two: Sticky Mouseball

This too is simple and low risk. I have only had to do this a couple of times. I've not figured out if it was due to something being used to clean my desk or some hand cream I sometimes have to use.

If Step One failed to completely



resolve problems, again remove the ball and the ring that hold the ball in the cage. Wash them with warm soap and water (don't use solvents or harsh detergents). Dry them completely and reinstall. Clean the mouse pad and or the area of the desktop where your mouse wanders.

Step Three: Problems with Interspace

This is still very safe. The interior components do not come loose when you remove the top. With your machine powered down, there is no chance of you shorting out something. If you intend to touch the chip or small wires inside (there is no need to) and it is a dry, static-charged day, you ought to make sure you are grounded. Remember, in all these cases the worse thing that can happen is that you end up where you started, with a bad mouse.

Turn off your computer (this is NOT optional). Turn mouse upside down and unscrew and remove the four phillips screws in the corners. No don't remove the ball or ring. Turn mouse right side up, separate the top from the bottom. Put top off to one side. Look for bits of dirt. Blow, brush or wipe dirt away. Don't forget to look at the inside of the top half. Blow at wheels and, while it is

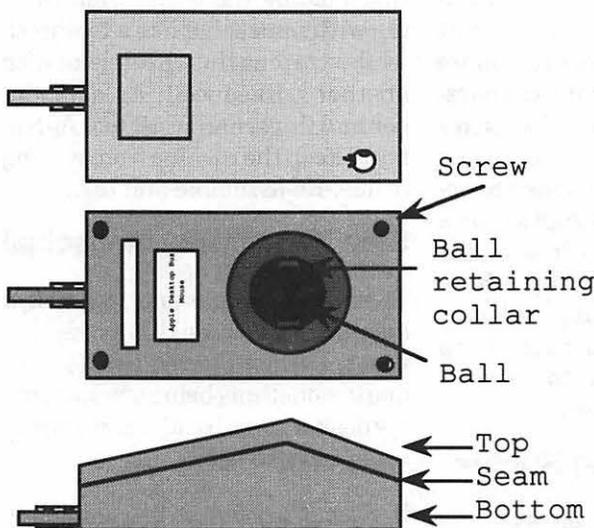
on its side, tap/shake the bottom half to dislodge grunge that might be blocking any of the tiny holes in the disk between the LED light and its receiver. When you think that you have it cleaned, temporarily place top back on, taking care that the mouse button is in the right spot, restart and test. Compare ball movement to screen cursor movement to determine which wheel is the one with the problem. In my case I had to do this about four times before I finally used a small brush to dislodge the tiny speck that was causing my problems.

Step Four: Screwy Instructions (Not me, the OS)

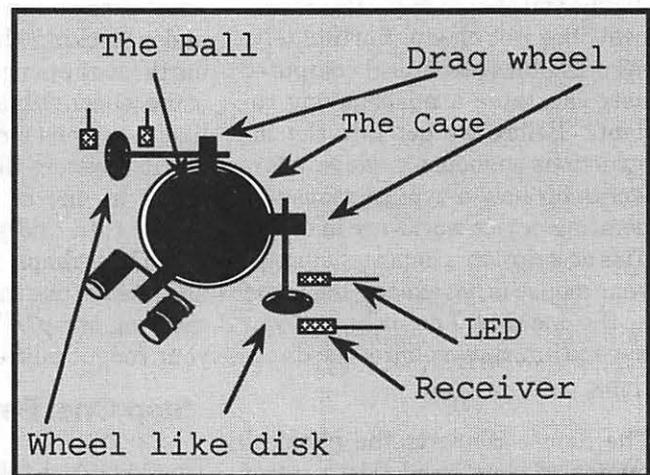
Every computer has a set of instructions that tells it how to behave. Behavior includes how it should respond to signals from the mouse. Because these instructions can be composed of millions of single bits of information that are routinely transferred on start up from a storage device to the computer's CPU, it is not surprising that eventually some errors are encountered. Combine this with the effects that cosmic rays, magnets, heat, viruses and other environmental hazards have on storage media and it seems surprising that it works as well as it does. [Speaking of computer viruses, you should be using Disinfectant. It is an excellent FREEWARE anti-

virus program. If you do not have it installed, get it from our disketeria and use it. Safe computing is important!] In any case, on occasion some of these instructions get garbled. So if the mouse appears perfect, yet your problems continue and you don't have another machine or mouse to swap test, then you ought to consider reinstalling all or at least part of your system software. (You did keep the locked original disks in a safe place just for this eventually, didn't you?) Note, the earlier System 6.x Mac software install program, does not really install a fresh version if a copy, no matter how badly corrupted, of that version is already there. It only says it installed it. So move all the goodies (DA & Font) that are stuffed in your system file out into suitcases. Reboot from a floppy. Trash the suspect system files and reinstall your operating system.

I hope that your machine never has serious problem. However, if you do encounter problems with your mouse, these tips should help. If you have other difficulties, remember help is usually available on the TCS and via our wonderful volunteer experts who man the Hotline. (See pages 47 and 50 for the Hotline listing.)



Tracking Mechanism





Magic It Says — Magic It Is!

by Leon H. Raesly , Copyright 1991

It works like magic, so it must be Magic. Nope, just a very clever concept implemented with UltraMacros by Gary Hayman.

The Magic File Cabinet requires AW 3.0 and UltraMacros 3.1 to run. It is software, a series of macros, and a concept. It is a paired set of files, a database and a word processor file. Magic File Cabinet comes as two task files to run under UltraMacros. It has many examples and a well written (and humorous) tutorial. It can be ordered in both 3.5" and 5.25" disks and comes with all necessary instructions.

You will first have to copy the two task files into the sub-directory where you store AW. UM requires all Task files to be there to operate. Next, copy the sample files to the sub-directory where you keep your working files. Also, copy the tutorial and Read.me files to the same location. Now print the Read.me and tutorial files to your printer. To best understand the concept, DO THE TUTORIAL.

The database serves the same function as the "Home Card" of a Hyper Studio stack in Magic File Cabinet. Think of the category as a "button" which you "click on" by depressing Option-F (OA-F) This immediately takes you to the corresponding data in the Word Processor file.

To illustrate: suppose you have in your database a mailing list of family and friends. George Abernathy is listed in a distant town. Depress <Option-F> anywhere within that record, and

instantly you are taken to his record in the Word Processor. Here you might have the directions to his house, notes about your next visit, the names of his wife and children, and much other relevant data about Joe. And no searching through other disks, or even in the desk drawers

for scraps of paper with notes about him. It is all collected into one central, instantly accessible location.

There are many examples that Gary gives in his sample files, and it is important to read them to understand the breadth of the

USES

Once I had purchased MFC, I soon began to set up EVERY database I created as a MFC pair. Although I may not foresee how at the time, I find that in the end I am always using the features of MFC with my databases. I have a model stored for each of the pair as MFC.MODEL and W.MFC.MODEL. All Categories are names in the Model, with the MFC Reference number <".0000"> in the first category, and the asterisk as the second. Next, I assign a field named CODE, and another called SUB (sub-code), followed by: FIRST NAME, LAST NAME (so that I can always sort on last name), ADDRESS, CITY, STATE, ZIP, HOME TELEPHONE, WORK TELEPHONE, and the rest numbered X-1, X-2, etc.

A few of its many uses are given in the samples which come with it. I'd like to mention two of the many uses to which I put it. One of my difficulties is writing letters. I usually call someone and respond to what they wrote to me, especially in my business. I make notes on scraps of paper which get placed here or there, or get lost, etc. With MFC, I scan the received letter and transfer it into the MFC in the WP files. (Using OA-F, of course). Then, while I am talking to the individual, I make my notes in the file. After I am through with the telephone call, I expand my notes. If I wish to send a confirmation letter, very little is needed to transform the notes that I made into such a letter.

The second special use I have for MFC concerns my graphic disks. I have 40 megs of DHR graphics, which I use for a Newsletter that I publish for a Radio Control club. I have tried keeping a database of these with each file as a single record. It's less cumbersome to keep each record as the name of the disk, and then use the Public Domain program CAT.ALL.OG (By Jon Thomason - It is in the WAP Disk Library) to create a two column text file of the contents of each disk. This I place in the Word Processor file (using OA-F). Because there are exactly 48 files on each disk which are kept together by the subject of the graphic, I have created a handy quick reference to these files.



concept that Gary has brought us in Magic File Cabinet.

I like to also think of Magic File Cabinet as a bottomless database, with instant access to the key words in the database. All of the normal AW commands are still active in AW, of course, so searching the database for the key word you want uses the regular AW F)ind command. By using the appropriate key word along with a simple move to the specific record and then <OA-F>, you have your expanded information about that topic.

The two files you are using have the same base name, with a "W." as the prefix to the Word Processor file. For instance, if your database file was named "MY.LIST", the companion Word Processor file would be called "W.MY.LIST" (both without the quotes, of course). Therefore, you can have up to 13 characters as your base file name, with the last two reserved as the "W." prefix that the word processor file needs.

There are a number of commands available in the Magic File Cabinet. All of the usual AW commands are also there ready to be used, but The Magic File Cabinet greatly extends their usual abilities. Let's look at each of the Magic File Cabinet commands and see what they do.

<OA-F> we have already seen; it is the button command to take you from the record that you have selected to the relevant portion of the related Word Processor file. Just as <OA-F> gets you quickly to the Word Processor file, <OA-G> takes you back to the database file. And it takes you to the actual record where you had been when you triggered the button to go to the supplemental data. When you return to the database, Magic File Cabinet automatically places an asterisk in the second column, thus reminding you that you have data in the Word Processor.

Tutorial

Magic File Cabinet has a very complete and interesting Tutorial. I won't spoil it for you here by explaining it in detail, but it is very important that you complete the tutorial. It has some deliberate errors in it, so that you get a better understanding of how it works. The tutorial is an AW file on the disk, and it is best to print it out so that you can read and follow it while doing the requested actions on the computer.

Design

Magic File Cabinet uses a special format for the ID of related information. It must be in the first category of the database. It is designed so that you are very unlikely to have such information in either file, other than this use. The format is: ".nnnn where nnnn represents numerical characters. Usually you will number your first record as ".0001. However, I always number my first record as ".0000, and then in this record store the actual names of the categories I use. This makes it available for quick reference.

So that you don't have to do this renumbering manually, Magic File Cabinet contains a command to do it for you: both-Apples-N, with the double caveat that the Reference Category is the first one in your tables layout, and that there be one entered reference number in the correct form in the any record. The both-Apples-N command will automatically move it to the top. Incidentally, this reference number need not be ".0001, or even, ".0000. It can be any number. Magic File Cabinet will number starting at the value of that Record. Conversely, when renumbering a Magic File Cabinet database, it will add the new numbers starting with the highest number currently there. Thus, you can have holes in the reference number sequence. If you have deleted a record (or more likely,

moved it to a new set of Magic File Cabinet files), the auto numbering still works fine. It will automatically sort, then increment from the highest number.

Samples

Many sample files are included with Magic File Cabinet, such as: a teacher's student log, a telephone log, a recipe index, a collection sample, memo minder sample, an appliance log sample, a genealogy log, a correspondence log, magazine subscription log, and an investment file sample. These are easy to use and are designed to increase your understanding.

All in all, I find this an extremely useful product and well worth the modest \$15 charge.

Commands

<OA-F> F)inds the Reference Number in the Word Processor file and moves it to the top of the screen.

<OA-G> G)oes back to the database at the same record that it left it.

<OA-H> Displays the H)elp screen.

<Ba-D> D)eleates the selected record and its corresponding Word Processor reference.

<Ba-E> Takes you to the E)nd of the Word Processor reference.

<Ba-L> Launches the original Macro set.

<Ba-N> activates the auto N)umbering.

<Ba-P> P)rint database cell.

<Ba-R> Emergency R)eturn while in the numbering mode. Returns you to the database

<Ba-S> Saves both the database and Word Processor files in to their original directory.



Byts and Pyces

by Gary Hayman

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

Odds and Ends

The Kiplinger Washington Letter tells us that "computers without keyboards will make a splash early next year, when several manufacturers will introduce portable 'notebook' models. You use a pen to enter data...helpful to nurses in hospitals, salespeople, delivery men, inspectors and others who now use clipboards. Early models will read only print, run on batteries and cost \$3500-\$5000. Also [there will be] growth in voice-activated computers. They listen to you...understand up to 30,000 words or respond to millions of voices and accents and NEVER talk back. [They will be] popular at phone companies and in emergency rooms."

The IEEE Spectrum, Institute of Electrical and Electronics Engineers advises that the best monitor position lets the user look down at

the display at an angle of 10 to 20 degrees. This range helps prevent back and neck strain. Also helpful: The ability to tilt the monitor so that the display is perpendicular to the line of sight. Important: Room lighting should not be reflecting off the screen into the user's eyes.

You can donate old computers to a nonprofit organization in need. "Bottom Line" publication suggests the National Cristina Foundation, a computer clearinghouse (800-274-7846). Computers must be in working condition, and a fair market value receipt is supplied for tax purposes.

Non-Proportional Fonts

The characters of non-proportional fonts (also called mono-spaced fonts) are all exactly the same width, so the character "1" is the same width and takes up the same space as the character "8." Non-proportional fonts are used to make lists, mathematics or statistical documents, and for applications that contain aligned columns.

Printed in a non-proportional font, the lowercase z will line up exactly beneath the uppercase Z in these lines. The numbers are all the same width:

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

0987654321

Most Apple II fonts are proportional;

however, these existing Apple II fonts are of the non-proportional type: Andover, Courier, Digital, Dover, Elite, Flow II, Hood River, IBM Klone, Inomal (Lamoni), Kendall, Keosaqua, Lamoni, Monaco, New Monaco, Pica, Santa Monica, Tiny Font, Washington DC. Non proportional fonts are best used to mimic typewriter printing, word puzzles, column printing, special effects, etc.

Gifts from Cadieux

Beverly Cadieux, writing in 'Texas II' gives us these AppleWorks and TimeOut gems:

- <OA-S> will exit to AppleWorks from any level of almost any TO accessory.
- Almost any character can be used in the name of a TimeOut accessory; MouseText too. Enter MouseText in the name with ProSel's Block Warden.
- FileMaster will copy files in the order you specify, using control keys.
- PowerPack's Line Sorter will sort on any Word Processor <TAB> column.
- PowerPack's Help Screens now uses Bold and Underline commands for "!" and "I."
- TextTools SuperFind: An <OA-?> help screen is at the "Replace what?" prompt.
- UltraMacros: Print\$ Z will type the hex value of a number, Z.
- SuperFonts: Inverse characters



on the screen will yield <x2> commands, MouseText will give <x3> equivalents.

- Graph: Always configure for white against black, and use a box or border.

TimeOut FileMaster's OA-RTN command at "Exit to AppleWorks" will change the AppleWorks path to the last path used in FileMaster. There are many other ways to use OA-RTN to make FileMaster avoid the unnecessary "Do you really?" questions, the "insert the source/destination disk" prompts, and to change to another disk drive or directory. Some users simply run FileMaster in "perpetual expert mode" by always pressing OA-RTN. Additionally, OA-A will sort a file list by name, size, type, and date, OA-R will select by rules, and CTRL-I(TAB) and CTRL-S commands will sort and copy files in any order you specify. Interesting? Go back and read the FileMaster manual today!

The UltraMacros Hilight command has four parameters for inverting a section of the screen: left, right, top and bottom. It's a little hard to remember the order in which the parameters should be listed. The simple solution is: To think about it running CLOCKWISE - starting from the left, and HIGHLIGHT left, top, right, bottom. To de-select, make the first parameter a zero.

Here's a tip to help you to get the Highest Quality Printing from TimeOut SuperFonts: Make sure the font size is twice as large as the font you wish to use is in the fonts location. For example, the font Courier.12 printed in High Quality will get the font Courier.24 from the disk, and squeeze it down to half size; the result is much nicer than the font Courier.12 printed in High Quality, if the font Courier.24 was absent from the directory.

Similarly, you can cut any font down to half-size (Flowscript.18, for example) by printing in high quality

mode. Specify the Load Font command as <1=/SF/FONTS/Flowscript.18>. There is NO SUCH FONT ON THE DISK. IF you print in high-quality, however, SuperFonts will get the font Flowscript.36 and reduce it by half: the result is an 18-point Flowscript...a non-existent font, but available to you nonetheless! This trick works ONLY with the high-quality printing mode.

For highest quality results, put a new ribbon in the printer for dark print. A boldface begin-command will do wonders for a thin, jagged-edged font. A slow ImageWriter I will do a better job printing with SuperFonts than the faster ImageWriter II, and the draft quality button on the IW II will perform better than the letter quality setting.

Easter Eggs

Even more intriguing than obscure, undocumented, or difficult-to-remember program commands and features are programming "Easter Eggs."

What's an "Easter Egg?" An "Easter Egg" is a surprise, a note, or other message that a programmer has included in his or her software. It is usually personal, and has nothing to do with the program itself; the fun part is hunting them down. There are a couple of Easter Eggs under the "About Companion Plus" selection of the main menu of Beagle Bros' newest release.

Boot the Companion Plus disk, and select "About Companion Plus." If you press <OA-N> when it says to Press Space Bar, you'll get a list of project names — "Liberty!" was the code name for Companion Plus. But, that's not all...press a key, and you get another list of the author's favorite music groups!

Pressing another OA-command while in the "About C+" screen gives the source of inspiration for it all.

I've also heard that this name could change with new versions of Companion Plus.

The original UltraMacros Easter Egg can be found when you first install TimeOut UltraMacros, and the task file Ultra.System is created. This default macro file happens to include a pre-defined message in \$0 ("string zero"). If you create a new file from scratch and then press SA-0 (solid-Apple-0), the author's message is typed on the screen. It says, "Go Chargers." [GH: You learned that from my recent column]

You can use a similar trick to put your own secret messages into your AppleWorks documents or macro program files. Some Kingwood files (and all issues of Texas II) contain a note at the end to "Press <OA-shift-period>." Why? The OA-> key is the UltraMacros RECALL command, and it lets you read a secret message that has been stored in a hidden area of the file. You can place any message in this area with the UltraMacros STORE command, OA-<. Save the file, and the next time you pull it up, RECALL the message with OA->. Above from 'Texas II'

Computer Donations

Phil Shapiro, our Ed SIG chairman writes, "A big thanks to Paul O'Connell, Jr., and Dr. Bernard Heckman for donating their original 48K Apple II's to the After School Tutorial Program (ASTP) sponsored by the John Wesley AME Zion church in downtown Washington DC. With these two added computers, the ASTP now has six Apple II's to use with the at-risk children who participate in the service. For some of these kids, an extra hour on the computer can be real moment of joy in their week. If other Pi members have an older Apple II they'd like to donate to a worthy cause, please contact the director of ASTP, Ms. Corliss Grimes, at (202) 547-5546 (home)."



"Incidentally, ASTP is always looking for volunteers to help in their computer lab. Located near Q and 14th St, NW, this community service has achieved remarkable success in the past five years. Besides giving the kids time on the computer, ASTP gives them a nourishing after school snack, along with supervised assistance with their homework. This past summer, ASTP expanded to offer a summer camp as well."

Look! Up in the Sky! It's SuperDrive!

Don Hanson started it with his question about the new Applied Engineering [Super] drive. Others joined in this thread on the TCS. Let's eavesdrop (or is it 'eyesdrop' a little....)

[Hanson]: "Does anyone out there in Computerland have one of these things? I have heard somewhere that some people are disappointed with them. I know that you can't boot from them because some sort of software has to be loaded to get them in the HD mode."

"My questions: Will the HD drive revert to the 800K mode automatically and act just like an Apple 3.5 [drive] to: boot from, read an 800k disk, write an 800k disk, work with the PC Transport (on the apple smart port side) etc?"

"In other words, will it perfectly replace the Apple 3.5, and additionally read/write and backup/restore with ProSel in the 1.6 meg mode? What are the down side quirks, other than not being able to boot from a 1600K disk?"

[Dale Smith]: "I don't know whether the AE HD drive will revert, but the Apple SuperDrive will apparently operate as an 800K drive — and when System 6 comes out with drivers for the SuperDrive it will operate as a 1.44 Meg drive too. Logically, I expect that a software driver would leave this drive in the same

fix as the AE - unable to boot from a 1.44 Meg disk because the driver to read it isn't there. However, if there were to be an interface card with the SWIM chip on it, that could change the picture.

"... but don't forget this is looking toward the future, except for the current 800K capability of the drive."

The SYSOP of the TCS's Apple IIGS Miscellaneous Board, Jon Thomason, entered the thread with, "Yes, Dale, not to jump TOO far to conclusions, it's a good idea to invest in an Apple SuperDrive because it costs the same as an 800k drive and does just as well for current needs. Later on, it appears likely that either software or (my current guess) an interface card will make this drive 1.44k-capable in ProDOS, Mac and MS-DOS formats. [I never said this. How could I have, if I don't spread rumors? :)]"

Following on his heels, Stan Palen contributed, "I have an AE HD drive and it works fine as a standard 800K drive. It checks to see if a hole is present in the disk opposite the write protect hole and if it is not present it treats the disk like an 800k. If the hole is present it treats it as a 1600K disk. Great for backups. True you can't boot from a 1600k. It needs drivers installed before it will work."

"I use it as you mentioned - standard 800k disk for most things; 1600K for backups. However, if you lose both the hard disk and the AE HD, you will be hard pressed to access your backups. You can boot with a 3.5 with the AE driver installed and then work from the 1600K mode. It does not have to be from a Hard Drive. Hope this helps." [GH: Yes Stan, it does. And thanks]

Cable

Kate Davidheiser had inquired about a needed cable [original message lost]. Two Pi champions came to her rescue with the following:

[Lorin Evans]: "Kate, there are three ways of handling your cable needs. First, you can purchase the cable from Quality Computer for \$25.00; second, you can buy one from Magnavox which they 'say' will work for \$17.00; or third, you can make your own from the pin layout I can give you."

[Bobby Freeman]: "Kate, check out Dalco Electronics at 1-800-445-5342. When it comes to cable needs they are the best I've found...price and service both. Their catalog should be in everyone's kit."

Two good examples of how you can get quick answers on the TCS for your problems. At only \$6.00 per year, it's a bargain.

System 6.0 Info

Dale Smith was kind enough to furnish some information posted by K.FLYNN on GENie. This may be old hat by now since Apple "seemed to promise" that System 6.0 would be available in September [GH: I am writing this well before that time.]

[Kev Flynn]: "What I can remember from KansasFest that hasn't been said? Well...With Sys 6.0:

- The version number of the system now shows up on the splash screen. No more guessing what version of system software you are running!
- Disk insertions are now detected by the system and you no longer have to press return when GS/OS is asking you for a disk. Just put it in!
- The old Program Launcher has been made a part of GS/OS and will be executed if there are no more programs to run when an application quits instead of re-executing the same program.
- BASIC.Launcher has been built into GS/OS and P8. BASIC.System checks the Message Center itself for a startup file.



- The control panel works more like the Mac's System 7 because each Control Panel (not the CDev) comes up in its own window as if it were a DA. Among other things, this means that authors will have more room available for their controls because the windows can be larger.

- The Time Control Panel has been redone. No more pop-up menus with 0 - 59 seconds!

- Some Control Panels have been consolidated (most of the AT printer CDevs are now incorporated into the Net Printer Control Panel; the Mouse—and something else that I can't remember—was put into the General Control Panel).

- Universal Access on ALL GS's, not just ROM 03: CloseView - Magnifies the screen up to 12 (or is it 24) times, Video Keyboard - Same as what you type on, except that it's on the screen and you use some other pointing device (such as the mouse) to "type" on it, and Easy Access - allows for one finger typing of multi-key combinations by making the modifier keys "sticky" and for emulating the mouse from the keypad.

- There are eight Preferences options under the Finder: four to control list views of Finder's windows (FileType, Date/Time, Size, and a double height Info Bar to allow Volume statistics to show up), and four general options (Color Icon's background, Show Invisible files, Check the 5.25" drive on Finder Startup, and Save Finder Info).

- Finder's Cleanup command has been greatly sped up. No more going out for pizza while the Finder counts the files in your Font folder... unless, of course, you are like some people [unnamed] that have thousands of files!

- Scrolling in List views has been sped up by a factor of ... well, a lot!

Installing GS/OS

Reaching out for help on the TCS

was Mark McDevitt stating, "I'm leaving a message here because I can't seem to figure out what my problem is, and I'm hoping someone here will. I recently bought a hard drive for my GS, and I'm using it with the Apple High Speed SCSI card and it works fine. There's one problem: I can't run ProDOS 8 programs (ProTERM, Inwords, etc.) from the Finder. I'll click on its icon, and it'll begin to load but then gives me the message, "This version of ProDOS is not compatible," and I have to reboot. I'm using GS/OS 5.04 and I seem to remember something about a new version of ProDOS 8 not being compatible with GS/OS, but I'm not sure. Could I copy an older version of P8 over the new version to make it work? Any help is appreciated."

Taking a break from school, Jon Thomason replied, "I'd recommend using the System 5.04 Installer because copying individual files seems to be what got you into trouble in the first place. I recently gave that up myself because all sorts of problems come into play."

And when Jon speaks...(long pause as people's heads turn with interest. [silence])...everyone listens.

Speed Contest?

I had made the following statement on the TCS, "Because of the way the OS works, the general rule of thumb is for every 1ms of IIGS you need 4ms of Mac."

Jon Thomason came back with an interesting message that shed some light on the apparent speed topic. Because of the apparent restriction and the value of his thoughts, I asked him if he would allow me to insert this into the Journal. He responded, "You're welcome to reprint any of what I said in public, of course, but for me to be adequately represented I'd appreciate your including the following comment: As far as I'm concerned, it's all voodoo. After all the interrelated variables

have been factored in, the only numbers which make any difference are real-world performance tests in real-world applications."

Now on with his original message. [Jon]: I hope that no one actually reads and believes this — and that it doesn't make its way into the Journal. Accelerate a GS to 7 MHz or above and you'll blow the doors off a Mac Plus just like any other Mac will. Leaving hard drive access time alone, the 65816 is more efficient than the 68000 and will do more instructions in less time. It has fewer instructions to choose from, however, leaving the 68000 more useful for more platforms. Due to the way the micro processor works, a 1 MHz 65815 would compare well to a 4 MHz 68000.

"Now, the toolbox routines, i.e., the drawing routines and the applications which call them, have become very efficient. This is because it takes a lot of time and expense to get a program to run adequately on a 2.5 MHz GS (and you'll note that all the major multiplatform software houses know this.) The GS System Software engineers have done some incredible work to get common toolbox routines to run faster in certain situations, but they can only do so much. The software designers need to hear that most GS consumers now own accelerators and can run more complicated software at reasonable speeds.

As for the operating system and disk access, you're absolutely right. A RAMFast will make a very dramatic difference in all disk accesses. Unfortunately, there aren't any real numbers to back this up — your loading times are as good an example as any of the real-world difference that anyone would see, and there are comparisons made — it's just a matter of tracking them down. This particular benchmark can only be made on a GS, however, and I'm not sure I've seen any disk access comparisons to a Mac's. They'd be



interesting, no doubt, but I'd want to wait for an HFS FST first — ProDOS is very elegant, but inefficient and otherwise limited."

ProSel 16

John Fuller commented, "I read on the BBS that someone who had seen System 6.0 was so impressed with it that he was going to switch from ProSel to System 6.0."

Jon Thomason contributed, "ProSel isn't system software. That message was about the new Finder 6.0, and how much improved it will be over the current Finder 1.3. For some, their reason for buying ProSel was that Finder 1.3 was too slow and clunky for them. For others, ProSel's optimizing, repair, backup and restore functions were considered vital. Yes, I'd take a look at System 6.0 first, and decide what features you're lacking. If I read the rumors correctly, there'll be some sort of rudimentary hard disk backup program shipped with System 6.0, etc. Not only should you wait to see what System 6.0 has to offer, I'd recommend waiting until System 6.0 is out before seeing what Glen Bredon has to offer in response! (Bredon is the author of ProSel.) If you can, drop by a GS SIG meeting and ask around — you may be overwhelmed by the information you'll receive!"

Accelerators

Keith Carpenter's questions stimulated a lot of good comments. First, the questions, "I am considering purchasing an accelerator card for my IIGS, which is a IIe which has been upgraded to GS, and has a GSRAM card (1.5m). I have one question about compatibility, and one about the cards available.

"The second one first: how do the various cards available rate, quality wise; which one is the best buy? I would like a comparison of TransWarpGS, ZipGS, and any other cards available, from some-

one who has explored this.

"My other question: will one of the GS accelerator cards speed up data retrieval in ClassicAppleWorks and in OA-F searches in DB or AWP?"

Here's that guy again. He should have his own help column. Jon Thomason advised, "I have a 7 MHz TransWarp GS and would recommend you go with the Zip GS. It runs cooler, with less power, blocks less air flow, and, most importantly, it has a spare slot to hold your existing 65816 chip while you're not using it. They have more options, a higher top speed if/when faster microprocessors come along, and they're easier to spell.

"The question is sometimes a religious one among GS advocates: whether to buy Applied Engineering and hope never to have to deal with their 900 support number or their slow repair turnaround time, or to buy from Zip and hope yours is one of the boards they decided to put in the mail somewhere near when they said they would.

"If you're keeping a technological eye on the future, the Zip is the better bet for now. They were able to engineer that board to answer all the criticisms of the TransWarp GS at the time (the TransWarp came out much earlier.)"

Mr. "Owns Everything," Kim Brennan, contributed, "I'll add my feelings to the excellent ones already presented. I've used both the TransWarp GS and the Zip Chip GS. Some early TransWarps did have a problem with DMA but that shouldn't be a concern for you now, unless you buy one used (the upgrade for full DMA compatibility is very easy and doesn't require you to send the board back to AE).

"The TransWarp GS is however a loaded board and will draw a lot of power and produce a lot of heat. It does work and there are no incompatibility problems with the cur-

rent version. The Zip Chip GS has a cleaner design, and it draws a lot less power and produces a lot less heat. Upgrades have been available for it from the beginning. The bad part about Zip is their service department which is terribly slow in turning around boards sent in for service (or upgrades). I suggest ordering from a reputable mail order firm (TMS is a good choice, Roger Coates is also) and get the largest cache you can afford, right from the start. Highest speed too.

"The major problems with the Zip have been AppleTalk compatibility—there is a patch on the TCS for that) and slow turn around in the upgrade/service department (I still haven't gotten mine back 6 weeks after I sent it in, but it did ship last week).

"The cache is what is primarily responsible for the speed up in an accelerator. The accelerator replaces the standard CPU with its own CPU that runs at a higher clock speed. However, without a cache the only increase in operations with a high speed CPU would be operations that do not take place in memory.

"On a GS most operations do take place to and from memory so the advantages of a non-cached accelerator would be minimal. The TransWarp can have up to 32K of cache (which is really just high speed memory). The Zip Chip can have up to 64K (technically the Zip can go higher, but it would require quite a bit of hardware modifications to add more than 64K).

"Operationally, an accelerator works something like this: The accelerator reads in a portion of your GS's standard memory and begins to execute it. At the same time that it begins to read it in, it also puts a copy of the memory in the cache. As it continues to execute the code, it reads from the cache (instead of the slower standard memory) and experiences a dramatic increase in operational speed. As the cache is



emptied, the accelerator card automatically reads more standard memory into the cache. All this occurs pretty much invisibly to the computer user (other than the extra speed noticed).

“On the Zip Chip, there is an increase in speed up to 32K of cache. The differences between 32K and 64K are negligible unless you have put in (or bought) the split cache modification. On a standard Zip, only the READ side of memory is cached. If the CPU/accelerator is WRITING to memory, it does so directly like a standard CPU would (no increase in speed); however, if you have enough money, you can get the split cache. It caches the WRITE side as well as the READ side of the accelerator (it writes to the cache and main memory simultaneously, but if your program then reads from that written to memory location it gets it from the cache, which is much faster).”

Disk Recycling?

Robert Wydro tells us that Nancy came across this article in the local newspaper:

Q: Someone told me that you can recycle used floppy discs. Can you suggest a source for this? Our company has hundreds of them sitting in boxes because no one knows what to do with them, and we don't want to throw them away.

A: Covenant Recycling Services in Butler, N.J., salvages about 50,000 discs a month. They take old ones and magnetically erase them. Covenant pays a small amount for the discs and asks that half of that amount go to charity. Many school districts and nonprofit groups buy the recycled discs and save money. Covenant Recycling Services can be reached at (201) 838-1336.

ZipGS Revisited

Keith Carpenter is back. Now he has his Zip Chip. Let's listen in ...

[Keith]: “I just got my ZipGS, and I'm not having a good time yet. Problem #1: After installing it, it does not give me the lightning speed that I expected. By the way, it is a Zip GSX 1800, 9mhz, 32k Cache. When I loaded a database that normally can be searched in 10 seconds, it now searches in 4 seconds. An improvement, but I expected better. Problem #2: It tends to crash very easily. This is serious. Problem #3: The cursor speed in AppleWorks 3.0 is too fast. When I go to the control panel to change the speed, it does not seem to respond. Problem #4: After having it connected for a while, it will not even allow me to get into the Control Panel. Every time I try, the computer crashes. Problem #5: I have an AE Datalink modem using Dataterm software, and it does not want to work now. The software boots up, but it seems to have problems communicating with the modem. In fact, to use the modem, and to at least get back to normal, I have removed Zip from the computer, and installed the original chip. Problem #6: After the computer was on for a while, Zip got hotter than any other thing in the computer.”

Wow! What a list! Who can help? Look! Here comes Kim Brennan.

“Well, I'll try to help. 1) What version of the ZipChip GS do you have? From the speed, I assume you have a v1.02 board. Do you? If not, that could be part of the problem. The search speed sounds like it is in the ball park. Consider 9Mhz is three (and some fractions) times faster than the stock GS speed. An error of one second (or a fraction of a second) would mean that your database search time is just about three times slower at standard speed than it is zipped. 2) Crashing. Not good. It shouldn't. There are several reasons why it could crash and several of them would still not implicate the ZipChip as the reason. Is the memory in your GS DMA compatible? How many boards does the GS

have? If you have a lot, you could be going beyond the bounds of a stock GS power supply. 3) Blinking cursor is a function of speed. Not much to say here. There is a Appleworks Classic patch, I think, that changes how the cursor blinks. 4) Looks just like another symptom of Problem 2. 5) Modems. Have you set slot 2 to slow? Are you running with the ZipTalk Init installed? Have you PROPERLY set the ZIPinit to reflect the necessary settings on boot? 6) Do you have a long cable from the Zip board to the CPU socket (3-6 inches) or one of the short cables (1-2 inches)? The long cable has problems.”

I would like to add that when I first got my ZipGS 1600, I had problems. After a call to Zip Technologies, I resolved them by changing the location of the card from slot 4 to slot 2 and changing the connecting cable size from 4 inches to 2 inches. Zip sent me the new cable for about \$5.00. It seems, that “sometimes” the longer cable picks up spurious electrical signals. Apparently you are safer with the shorter cable. Since making the change, I have not experienced any problems. I love my Zip and really notice the improved speed. For example, I have very large spread sheets that would take the 2.8 GS to re-calculate, 45 seconds. With the Zip active I am now looking at 10 to 15 seconds.

The author is currently Chairman of both the AppleWorks and Apple IIGS Special Interests Groups. and is published frequently in the WAPJournal . He is also a Beagle Buddy and a Seven Hills Partner 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 nationwide.



Getting the Most Out of an Original 32K Apple II

by Phil Shapiro

I had an interesting challenge presented to me. Two generous persons in the Washington Apple Pi club donated their original 32K Apple II's for use by a church-sponsored after-school program for "at-risk" kids. The kids just adore spending time using computers. But what educational software runs on a 32K original Apple II? (As a historical footnote, the original Apple II preceded the old Apple II+ model. It dates from between 1977 and 1979.)

A lot of software from the early 1980's is able to run on "any 64K Apple II." This means that it will run on an Apple II+ with a 16K language card (the original Apple II+ came with 48K of memory), or any Apple IIe, IIc, IIGS, or IIc+. Included in this category of "any 64K Apple II" software are such educational classics as Reader Rabbit, The Print Shop, and Facemaker.

None of these old classics can run on the 32K Apple II. But that doesn't mean the 32K Apple II can't be used to run other programs. Many of the old DOS 3.3 PD and shareware programs are able to run in 32K of memory. I was happy to find that the shareware program Math Invaders, an arcade-style math drill, runs on an original Apple II. The game uses high-resolution graphics and animations to drill kids on basic addition, subtraction, multiplication, and division math facts.

Another useful educational game that runs on a 32K Apple II is Keyboard Invasion, a public domain keyboarding drill where letters come raining down the computer screen.

Kids shoot down the letters by typing the letters before they reach the bottom of the screen. Keyboarding skills are helpful for all other computer activities, so Keyboard Invasion is sure to see some good use at the after-school tutorial classes.

A third program that runs on a 32K Apple II is the public domain game Miniature Golf. This fun little game has a modest educational component, as kids need to estimate how hard to hit the golf ball to get it near each of the ten holes on the golf course. I justify using this game in the classroom by saying it helps introduce the kids to elementary concepts in physics. The kids think of it as a "reward program" for good work on other educational software.

I didn't have a chance to test the other software before the computers were delivered. For spelling practice, for instance, there's a nice public domain game called Spelling Bee. And it shouldn't be too hard to find some public domain programs to drill kids on double-digit and triple-digit addition and subtraction.

Some ProDOS programs could possibly be translated back to DOS 3.3 so that they'll run on the original Apple II's. The "Toddler and Preschool Gameroom" PD disk has a very good "Simon" memory game on it. Using the Apple II System Utilities disk, this game could be transferred back into DOS 3.3 format for use on the donated computers.

As far as word processors go, there's no possible way to get AppleWorks to run on a 32K Apple II. (Any

ProDOS-based applications require at least 64K of memory.) But an old copy of AppleWriter should be able to run on a 32K Apple II. Apple no longer publishes AppleWriter, but sometimes you can find a second-hand copy at the WAP semi-annual garage sale. (Come to think of it, is there any good reason why Apple can't release AppleWriter into the PD at this point? They haven't sold it since 1985, or before.)

Chances are the church won't be using these computers to do word processing, since that would involve purchasing a serial or parallel printer card. But the fact that word processing is an option for these computers is nice to know about.

The donated computers came with monochrome monitors, but the church could hook them up to color monitors. Every Apple II ever built has color capability built into the hardware. That was one of the great appeals of the Apple II in the early days of microcomputers.

In these days of multi-megabyte, multimedia machines, it's amazing to think that a 32K Apple II could still be appealing and useful in an educational setting. I was surprised, myself, at what these old veteran computers can do. Obsolescence is more a state of mind than a state of machine.

The author is the founder of Balloons Software, a new Apple II educational software company. Copies of the disks mentioned in this article, along with instructions for using them, can be obtained by sending \$3 in stamps to: Balloons Software, 5201 Chevy Chase Pkwy., NW, Washington, DC 20015

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Crosstalking

Communicating Between an IBM Clone and an Apple IIGS

by Brian Mason

I am so excited! I just transferred files from my son's Tandy laptop to my Apple IIGS. And after a few false starts, it went smooth as silk.

I ran across this Tandy at the Washington Apple Pi Garage Sale, and I couldn't pass it up. It is a Model 1100FD which I bought for \$200. What a deal! It didn't come with any software, so I've spent another couple hundred for software and a maintenance contract since then, but I still consider it to be a bargain.

The software one usually gets with the Tandy computer is called "Deskmate" (Radio Shack, Fort Worth, Texas 76102). It is a package of software that contains a text editor, a small spreadsheet program, a database program, a drawing (as opposed to a painting) program, and a telecommunications program. There is also a calendar, an appointment program, an address book, a hangman game, and "PC-Link", a program like America On-Line for Apple computers which is a front-end to a Bulletin Board system for IBM-type computers.

My son took his computer to the beach with us, so during some time while I was just relaxing, I sat down and began using the text editor to start hammering out the drafts of a couple of articles for the Journal. After I got home, I wanted to connect the Tandy with my IIGS and transfer the documents from one computer to the other so I could finish them up on the IIGS.

The only hardware you need if you are going to do the same thing I did

is a cable with an male 8-pin DIN connector at one end for the IIGS and a female 9-pin connector at the other for the serial port on the Tandy. Well, that is pretty impossible to find, so what one usually settles for is an 8-pin connector at one end, a 25-pin connector at the other, and then a 25-pin to 9-pin adaptor connected to that.

The software to use is the telecommunications part of Deskmate on the Tandy and I am using ProTerm (InSync Software Inc., Phoenix, Ariz. 85028) on my IIGS, though any capable software will do.

The cable is connected to the serial port on the Tandy and the modem port on the IIGS. It is safer to do the connecting while both computers are turned off.

Next you need to configure the Tandy to talk to the IIGS. I set up both computers to work at 2400 baud, 8 bits, 1 stop bit, no parity. I might have been able to use a faster speed; ProTerm supports baud rates up to 19200 and Deskmate supports baud rates up to 9600. I don't think it really matters what you set the computers to in terms of parity and stop bits, etc., however, both computers must be set up with the same configuration. You don't even need to know what all this means. You just have to make sure that what you do on one computer, you do on the other.

To set up the Tandy, I first created a batch file to tell the serial port what I expected of it. In case you are not familiar with the IBM world, a

batch file is a small program that you have to create and run to set the parameters under which the computers ports will run, what subdirectories the computer is expected to look through to find files, etc. The batch programs do much the same thing as we do when we set things up using the Control Panel on the IIGS by pointing and clicking with our mouse. I'm not sure how important this step is, but I did it and it worked, so I'll just pass it along. I called the batch program "autogs.bat," and it contained the following lines:

```
cls
echo off
mode com1:2400,n,8,1,p
desk
```

I then ran this program by typing "autogs" at the DOS prompt to set up the parameters for the serial port. The last line of the little program launches Deskmate.

The modem port should be set up the same way on the IIGS. You go into the Control Panel by pressing the <Control>, <Open Apple> and <Escape> keys simultaneously, hitting <Return> with "Control Panel" highlighted, moving the highlight to "Modem Port" and making sure all the settings are set to the default setting (the setting with the check mark beside it) except for the baud rate which can be set to 2400 baud.

Now we have one more thing to do to the serial port on the Tandy. We have to go into "Setup". This is where you can change the mouse settings (if you have a mouse), the date and time, the "colors" on the screen and the communications settings. What



you want to do is tell the Tandy that you will be communicating through the COM1 port and that you will be using a "Direct" connection.

Now get into the telecommunications program on the Tandy. Because you have said you will be in the "Direct" communications mode, you have been put right into the communications mode and you will have to press

<Alt>-C to get the menu bar back.

This program has a section called "Commands" which has such choices as "Set," "Call," "Wait," and "Transfer." Choose "Set" and here you find where you can set the baud rate (to 2400), the word length (to 8 bits), the parity (to none), the stop bits (to one) and flow control (set it to Xon/Xoff). You can save these settings to an autolog file which will run if you choose the file on the drop down menu under "File". Otherwise, you just press <Control>-E to execute the command or choose "Execute" on the drop-down menu under "Commands".

While we're working on the Tandy, let's set it up to transfer our file to the IIGS. In one of the two (the drop-down menu under "Commands" choose "Transfer," or the drop-down menu under "Options" choose "Transfer file"). The difference is that under "Commands" you prepare a command which can then be executed or saved to a file for later execution. Under "Options" you set up things so they will be immediately executed. A window is opened which allows you to choose the file which you will be transferring. You also set a button indicating that you will be sending (rather than receiving) the file, and whether you will be using straight ASCII or XModem protocols while sending the file. There are other choices which are valid for straight ASCII files, but since we will be using XModem, they are irrelevant. Your cursor is now placed on the OK button, ready to send the file.

Now we move back over to the IIGS. The first thing you have to do in ProTerm is go to the "Install" choice on the menu. Now, working our way through the menu tree, we choose, "Hardware," "Modem," "Port," (where we select the Apple IIGs Modem Port) and then "Null Modem Driver." When you exit, ProTerm sets itself up as a terminal on-line with the other computer. You should see "On-line" on both computers. If you don't, check the cable to be sure it is plugged into the serial port on the Tandy and the Modem port on the IIGs.

Now press the <Open-Apple> key on the IIGS to bring up the ProTerm menu, and choose <R> to receive a file. This brings up a window which will allow you to choose which protocol to use. Select the "Christensen" protocol. This is the same as the XModem protocol selected on the Tandy. (You must use the same protocol on both machines.) Don't worry about the maximum errors. You can leave the default alone. You should also indicate that it is a file (rather than a "batch" of files) that you will be receiving, and that it is a text file. After pressing return, another window comes up and asks you the name of the folder or directory in which to save the file and the name to save the file to.

Now get ready.... Press <Return> on the IIGS to receive the file, then press <Enter> on the Tandy to send it. You are permitted to giggle as you watch the block count go up on the Tandy and on the IIGS at the same time as one machine sends its file to the other.

Nooo problem (except when you have to set everything back so you can use your modem again to communicate with the WAP TCS). If you need to do something similar and have given up or are having problems, just make sure you have followed all the steps. To summarize: You need to open up a communications channel between the two

computers (the cable); make sure they know which channel it is that they are supposed to be communicating through (the ports); be certain that they are talking, remember, they expect to hear the same language (word length, stop bits, parity); make sure that they are talking and listening at the same speed (baud rate); And, be certain that they have agreed on the method that they will use to indicate when the listening computer has understood what the talking computer has said so the talking computer can continue talking (protocol). If you need more help than this, I am home weekends and might be able to help you over the phone if you will call me at (301)-869-3240.

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APPLE II HISTORY

THE APPLE I: DEVELOPMENT

At the Homebrew Computer Club in Palo Alto, California (in Silicon Valley), Steve Wozniak, a 26 year old employee of Hewlett-Packard and a long-time digital electronics hacker, had been wanting to build a computer of his own for a long time. For years he had designed many on paper and had even written FORTRAN compilers and BASIC interpreters for these theoretical machines, but a lack of money kept him from carrying out his desire. He looked at the Intel 8080 chip (the heart of the Altair), but at \$179, he decided that he couldn't afford it. A decision to NOT use the 8080 was considered foolhardy by other members of the club. Consider this description of the microcomputer "world" as it was in the summer of 1975:

That summer at the Homebrew Club the Intel 8080 formed the center of the universe. The Altair was built around the 8080 and its early popularity spawned a cottage industry of small companies that either made machines that would run programs written for the Altair or made attachments that would plug into the computer. The private peculiarities of microprocessors meant that a program or device designed for one would not work on another. The junction of these peripheral devices for the Altair was known as the S-100 bus because it used one hundred signal lines. Disciples of the 8080 formed religious attachments to the 8080 and S-100 even though they readily admitted that the latter was poorly designed. The people who wrote programs or built peripherals for 8080 com-

puters thought that later, competing microprocessors were doomed. The sheer weight of the programs and the choice of peripherals, so the argument went, would make it more useful to more users and more profitable for more companies. The 8080, they liked to say, had critical mass which was sufficient to consign anything else to oblivion.¹

Another chip, the Motorola 6800, interested Wozniak because it resembled his favorite minicomputers (such as the Data General Nova) more than the 8080. However, cost was still a problem for him until he and his friend Allen Baum discovered a chip that was almost identical to the 6800, while considerably cheaper. MOSTechnology sold their 6502 chip for \$25, as opposed to the \$175 Motorola 6800. Wozniak decided to change his choice of processor to the 6502 and began writing a version of BASIC that would run on it. A friend over at Hewlett-Packard programmed a computer to simulate the function of the 6502, and Wozniak used it to test some of his early routines. When his BASIC interpreter was finished, he turned his attention to designing the computer he could run it on. Except for some small timing differences, he was able to use the hardware design he had made earlier on paper for the 6800.²

To make the computer easier to use, Wozniak favored a keyboard over the front panel switches that came on the Altair. He also made it simple to use a television for a video terminal. (Recall that at this time the most common mechanism used

by Steven Weyhrich

for input/output was a teletype, which consisted of a keyboard, typewriter, and, if you were lucky, a paper tape reader/puncher). Functionally, it was a television terminal attached to a computer, all on one printed circuit board (another enhancement over the Altair). Wozniak used two 256 x 4 PROM (programmable read-only memory) chips to create a 256 byte program (called a "monitor") that looked at the keyboard when the computer was turned on. This monitor program could not do much more than allow entry of hex bytes, examine a range of memory, and run a program at a specific address.³ (The Altair needed such "bootstrapping" instructions to be entered by hand each time the computer was turned on.)

Because there were no cheap RAMs available, Wozniak used shift registers to send text to the TV screen. Consequently, his video terminal was somewhat slow, displaying characters at about 60 characters per second, one character per scan of the TV screen. (This speed would be similar to watching a computer communicate via a modem at 1200 baud). It's slow by 1991 standards, but it was an advancement over the teletypes that could only type 10 characters per second. The computer had 8K of dynamic RAM. You could load BASIC into 4K of memory and have 4K left over for your own programs. It had a video connector, but you had to connect a monitor on your own. You also had to buy the keyboard separately and wire it into a 16-pin DIP connector.



The power supply had to be connected to two transformers to get 5 volts and 12 volts for the motherboard. There was no speaker, no graphics, and no color. There was a single peripheral slot, and when it was first released there was nothing available to plug into this slot. It was entirely contained on a single printed circuit board, about six by eight inches in size (most hobby computers of that time needed at least two boards), used only 30 or 40 chips, and because it could run BASIC programs it got people's attention.⁴

The Apple I: Marketing

Let's adjust our time circuits for 1976, and jump forward in time. By now, Steve Wozniak had completed his 6502-based computer and would display enhancements or modifications at the bi-weekly Homebrew Computer Club meetings. Steve Jobs, a 21-year-old friend of Wozniak's, was also a visitor at the Homebrew Club. He had worked with Wozniak in the past (together they designed the arcade game "Breakout" for Atari) and was very interested in his computer. During the design process, Jobs made suggestions that helped shape the final product, such as the use of the newer dynamic RAMs instead of older, more expensive static RAMs. He suggested to Wozniak that they get some printed circuit boards made for the computer and sell it at the club for people to assemble themselves. They pooled their financial resources together to have PC boards made, and on April 1, 1976 they officially formed the Apple Computer Company. Jobs had recently worked at an organic apple orchard, and liked the name because "he thought of the apple as the perfect fruit—it has a high nutritional content, it comes in a nice package, it doesn't damage easily—and he wanted Apple to be the perfect company. Besides,

they couldn't come up with a better name."⁵

Jobs approached the owner of a new computer store in the bay area called "The Byte Shop." This businessman, Paul Terrell, expressed an interest in the Apple Computer (later to be known as the "Apple I") but wanted only fully assembled computers to sell. If they could provide this, Terrell told them that he would order fifty Apples and pay cash on delivery. Suddenly the cost of making (and selling) this computer was considerably more than they expected. Jobs and Wozniak managed to get the parts on "net 30 days" (30 days credit without interest) and set themselves up in Jobs' garage for assembly and testing of the Apple I. After marathon sessions of stuffing and soldering PC boards, Jobs delivered the computers to the Byte Shop. Although these "fully assembled" computers lacked a power supply, keyboard, or monitor, Terrell bought them as promised. In July of 1976 the Apple I was released and sold for \$666.66, which was about twice the cost of the parts plus a 33% dealer markup.⁶ Two hundred Apple I computers were manufactured, and all except twenty-five of them sold over a period of ten months.⁷

Although the Apple I was easier to begin using than the Altair (thanks to its built-in ROM code), it was still a time consuming process to set it up to do something useful. Steve Wozniak would have to type in about 3K of hexadecimal bytes before BASIC was ready to use. He could do it in about 20 to 30 minutes, but he almost knew the code by heart. The typical user was more limited in ability to use BASIC on the Apple I. To broaden the appeal of the Apple I (at the insistence of Paul Terrell), Wozniak designed a cassette interface. It was mounted on a small two-inch-high printed circuit board and plugged into the single slot on the motherboard. The card sold for \$75 and a cassette tape

of Wozniak's BASIC was included with it. The advertisement Apple included with the card stated, "Our philosophy is to provide software for our machines free or at minimal cost." The interface worked, but worked well only with cassettes running on expensive tape recorders. To further try to enhance sales, the Byte Shop stores found a local cabinetmaker that made some koa-wood cases for the Apple computer (so it would no longer be just a "naked" circuit board).⁸

Interestingly, although most of the action in the micro world was going on in Silicon Valley, news of the Apple I made its way east. Stan Veit, owner of the east coast's first computer store, bought an Apple I and took it to a meeting of the Association of Computer Machinery. Those attending were quite skeptical that a REAL computer could fit into a small briefcase; they were sure that the machine was just a portable terminal, attached by a hidden phone line to a mainframe somewhere!⁹

References

- ¹ Michael Moritz, *The Little Kingdom*, p. 123.
- ² Moritz, pp. 124-127.
- ³ Williams & Moore, p. A69.
- ⁴ Gregg Williams and Rob Moore, "The Apple Story, Part 1: Early History", *BYTE*, December 1984, pp. A68-A69.
- ⁵ Frank Rose, *West of Eden: The End of Innocence at Apple Computer*, p. 33.
- ⁶ Moritz, pp. 138-144.
- ⁷ Williams & Moore, p. A69.
- ⁸ Moritz, pp. 147-149.
- ⁹ Chien, Philip, "Apple's First Decade: A Look Back", *THE APPLE II REVIEW*, Fall/Winter 1986, p. 12.

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 (PART 2—THE APPLE I)[v1.0: 18
 Sep 91]



Apple II Ramblings

by Ken De Vito

Wow! Apple II Vice President of the Washington Apple Pi....sounds neat. A lofty position to which I never thought I could/would ascribe. Needless to say, I'm proud to step into the shoes of Lorin Evans who recently rose to be President of the WAP. Lorin is a Apple II fanatic and I'm not only pleased to know him as a friend, but I'm especially excited about how he is going to bring the club from where it is now and want to do everything I can to help him. His interest in the Apple II side of the equation will surely carry over into a revitalization effort for all of us. As for qualifications, I have a total of four operational Apple II series computers at home right now: my original 1982 IIe with Sider Hard Drive in my den (which Mama calls a "pit"), a II+ with every slot taken that I use to test other computers and my son uses when he keeps me company in the basement. I also have a IIGS that I'm still trying to figure out and Mikey has a old II+ in the family room that he uses to play games using the 27" color TV as a big, and full screen monitor!

I used to be perfectly happy doing AppleWorks in the early days of that great integrated program. It is nice to see Gary Hayman carrying on the job so very ably... Gary quickly surpassed my AppleWorks capabilities and is doing a great job with the AppleWorks SIG, which he now chairs.

Speaking of great volunteers—WAP needs more! And especially in the Apple II areas. I'm talking about

volunteers for the Hotline (which has recently been revamped and should be here in the Journal real soon now!), the Journal Editor and writers of articles and also volunteers to do demonstrations for SIG and regular membership meetings. Give Tom Witte or myself a call if you have the slightest interest in returning to the club a little bit of the expertise which you have developed. We are both listed on the masthead of the Journal.

I plan on trying to write these column every month. If there is something you'd like to see discussed here or even mentioned - let me know and I'll add it to the Ramblings...

Ramblings comes from a club I used to belong to in high-school. There were only 9 of us in the club in a school of almost a thousand. But, we felt special and made a significant impact. (Appropriate, no?)

In Search of...

The WAP Journal is looking for someone to serve as Editor for the Apple II portion of its monthly publication.

If you are interested—and we don't see why anyone wouldn't be—then please contact Rick Zeman at (301)-604-0939 for a full and exhaustive listing of the job requirements.

We look forward to working with you and feel confident that you will enjoy working with the WAP membership, as well.



ON THE TRAIL OF THE APPLE III

by David Ottalini

Third Apple Users Club News

For years, one of the major supporters of the III was TAU, the Third Apple Users Group. Even when they moved on to emphasize the Macintosh, TAU continued to run III articles and accept new III PD donations.

Now, I'm sorry to report, some major problems with the TAU group could mean its demise, at least in its current form. Their fine publication, the TAU Journal, has ceased publication and dues are no longer being accepted.

TAU Chairwoman Lavona Rann says she's simply run out of time to produce the newsletter due to personal problems and attempts to finish a book (Macintosh related) while getting a new business operating. Helpline calls continue to be answered and their local corps of members continue to meet, however.

Lavona recently told me that she mentioned the name and address of TAU prominently in her book and hopes to give it a try again. She adds:

"One thing that is even more a reason to try is that I have a basement of Apple III parts and manuals that belong to my company and might a) have a little resale value, and b) be of value to people now that Sun does not even want to talk about the Apple III (They give everyone my phone number!) The way things stand, I think it is likely that we'll work out something with a local group that has a similar problem

and is being run almost totally by another one of the TAU core groups. Sort of share a number of articles and disks. If we do that, it seems that maybe an Apple III classifieds page might be worthwhile (free listings to paid up members), since it is getting harder to find things for the III."

In spite of the problems, I hope TAU can work something out so that it can continue in some form into the future. If you would like to send encouragement, you can write to Lavona Rann at: 1113 Wheaton Oaks Drive, Wheaton, Illinois 60187.

And as for Joe Dobrowolski

Yes, he continues cleaning out his closet. I thought that he had found just about everything there ever was for the III, but he continues to surprise me! This latest contribution is largely software, with some new titles I hadn't seen before. You'll see some of that material this month, in fact. IIIer David Craig's Pascal programs have made up three great double-sided disks for us. Please see the accompanying disketeria article for more information.

Bob Consorti Notes

Heard a rumor recently that On Three's Bob Consorti was jumping the Apple ship completely and heading into the land of Messy-DOS. A quick conversation on CompuServe confirmed he's started learning PC, but has not entirely given us up either:

"If I get any more contracts on the

Apple II I will do some more Apple II work but I'm not going to waste my time anymore. I've purchased a 33 mhz 486 clone and am learning to program it with the anticipation of work from the people I contracted my last two Apple II projects with. They really like my work but they just don't have enough Apple II work to keep me busy so they suggested and I agreed to learn PC programming. GOBack may be done but that is completely up to how much work they throw my way over the next few months.

Note that I don't intend to leave the Apple II market at all. Heck, I'll always have a III (somewhere) but I need to survive and the Apple III died, the Apple II died and I don't want to risk going to a Mac."

GOBack is the long-awaited backup utility that would be a boon to all hard disk users on the III. If you are interested in seeing this project completed, I would urge you to call On Three and place an order for the program (you will not be billed until it is, in fact released). On Three's phone number is 206-334-8001.

TCS Notes

Motor City IIIer Paul Campbell continues his efforts on behalf of our Sara. He recently noted on our TCS Board that:

"I'm about halfway finished with the next article that includes laser printers on the III in a business environment (yes, in 1991). BTW, did you catch my post to Jim about SARA's workout the other day?"



That was the day my III wound up producing all the material for a business meeting including a schedule and two full pages of graphics. The person called back to say that the meeting went very very well, and that they needed the schedule revised and extended all the way to 1993 (the previous stopped at August 1992). The schedule was created with an EZP spreadsheet and printed on the Panasonic KX-P1124 at 17 CPI and 8 LPI which resulted in 3 months per page for a total of six pages. The spreadsheet covers over 10 thousand cells and I just finished creating a test calendar that goes to June 1994 and covers almost 22 thousand cells. Sorry Tandy, DeskMate will have to sit this one out."

We Get Mail ...

From former IIIer Robert Howe, who reports SIG members Dave and Joan Jernigan were recent visitors to his home in Placerville, California (outside Sacramento). Robert reports that:

"They (the Jernigans) are nice folks; my wife and I (and the kids too) had a nice long conversation about computers, work, children, living back east vs. the west, traveling, and plenty of other subjects. I, of course, got to show off my Mac...but even it failed to win over Joan since she is a quick typist and even my fast screen draw wasn't fast enough for her. It just goes to show you that even to this day the good ol' III compares favorably to the mac in some respects for some people."

REPAIRS

Our friend Roger Caldicott in the Boston area has been having some major problems with his III and a cranky Epson printer. After numerous calls to me and a futile search for a company that could really find out what was wrong, he finally hit a goldmine. "AAA Computer Repair" is based in Framingham, Mass. and special-

izes in the repair of older computers and printers. Roger says they really like Apple IIIs:

"Don Conaghan, the president, told me that if he couldn't fix my problem, then no other outfit in the country could. He guaranteed to have it repaired in three hours and he did. This is a very large service center and Don took me through a tour of his facility and showed me the latest in test equipment. I was impressed by the warehouse loaded with Apple IIIs including brand new boards and parts in original boxes.

If you know anyone who is looking for components, new boards or restored instrumentation or is in need of service, I found the goose that laid the golden egg. This outfit has skilled, courteous staff who have it all together."

Wow! You couldn't ask for a better recommendation than that. I hope to have talked with Don Conaghan by the time you read this and will report on that conversation next time. Meanwhile, you can contact these folks directly at 88 Waverly St., Suite B1, Framingham, MA. 01701. Their phone number is (508)-872-8499. Fax is 508-872-9677.

HOW DO I?

Ever wonder how to change the "\" key on your III to make it a delete key (like on the III+ in 3EZ Pieces?) Barry Downes offers the solution:

"Sholes B" is a small Pascal program that allows the user to easily change his/her keyboard setup on a standard Apple III so that the "\" key found on the upper right corner of the keyboard will work as a destruct (delete) key. This is how the key already functions in 3EZ Pieces and the Apple III+. By using System Configuration one can quickly install this alternate keyboard into programs such as Word Juggler where it should prove to be a valuable addition. When making such a change on any boot disk it is always

wise to have a backup copy of the disk available should you mess up somehow in the installation process. Basically it's quite easy.

A quick review of the procedure for installation -

- a) Boot system utilities
- b) Select "S" system configuration from the main menu
- c) Select "R" Read a Driver and read the SOS.Driver from the disk into which you want to install this alternate keyboard
- d) Go back to the main menu and select "C" Change System Parameters
- e) Select "4" Keyboard Layout
- f) Place disk with file "SHOLES.B" in .D1 or .D2 and at prompt at bottom of screen, type in .D1/SHOLES.B or .D2/SHOLES.B
- g) A message at the center of the screen should now confirm that you have loaded in SHOLES.B as your keyboard layout
- h) Escape back to main menu and select "G" Generate New System
- i) Follow the standard steps for generating a new system on the disk you want the new keyboard on.

One additional note: Since you have now changed the "\" key into a destruct key you may still need to type in the actual character in certain documents.

You can do so by holding down the Control Key when you press the key.

"Sholes B" will be uploaded to the Apple III TCS Library by the time you read this, and will be on our "How Do I" PD disk.

Meantime take care and I hope your Thanksgiving is a happy day filled with love from family and friends.



The Apple III - Deathbed or Newfound Life?

by Paul Campbell

The first Apple III I ever saw sat on a cart in the back of the storeroom where I worked, equipped with only 128k of memory and two floppy drives. It was waiting to be sent to the warehouse for storage and then disposal. At the time I was only interested in it because I needed something at home to fool around with, and it was so different from the scores of MS-DOS machines that seemed to be everywhere.

I bought the computer after it sat around for a while, was given one piece of software and sent happily on my way. My next job, after getting more familiar with the system, was a shopping trip to load up on software and supplies. At the time I only had one application, Quickfile, and was using it for everything, even forcing it to do word processing (a two-field data base, with one field for text and the other for line numbers, yes,... I was desperate!).

I recall the following visit to my local area computer store. When I was greeted by a salesperson who asked what type of system the items were being purchased for, he immediately burst out in laughter and suggested that I get a "real" computer. Being the new Apple III owner back then, I was a little discouraged by the statement. How could anyone compare a little 128k computer with nothing but floppy drives, to one of the ominous MS-DOS monsters sitting in the showroom?

But things change, and with that first Apple III no longer a bare bones computer, the shoe can often find itself on the other foot. Imagine a

salesperson stepping defensively in front of a 286 computer after hearing what an Apple III can do, and claiming the comparison unfair!

This actually happened and I was told by the manager that I should go to another store to continue my comparison with the "Top of the Line" model, which I did. For some reason, most people have a perception of the Apple III as a useless computer that is best used as a door stop. So let's have a look at some real world comparisons.

Something old, Something new,
Something borrowed, Something blue....

I'm sure most of you have seen the ads that tout Tandy's DeskMate as the Friendly Face in the crowd, being both easy to use and powerful. All this is true and DeskMate has received good reviews in such publications as Home Office Computing, but what about a face to face confrontation against a similarly equipped Apple III with it's Desktop Manager - III E-Z Pieces environment?

As I sat down with my notebook at the Radio Shack Computer Center, it was rather ironic that the very helpful and friendly person who assisted me remarked that DeskMate was Tandy's "answer" to AppleWorks. I smiled and proceeded to put DeskMate through its paces.

DeskMate's graphics are nice and you can paste an image into a document for printing, which is something that you must use a separate utility for on the Apple III. But the

battle goes downhill from there for the IBM compatible Tandy because the Apple III reveals itself to be faster, more powerful, and easier to use on virtually all counts.

Spreadsheet capability is where the most glaring differences occur. A person who has used III E-Z Pieces will find DeskMate's numbered columns and rows much more difficult and complicated to use. If you like large spreadsheets, III E-Z Pieces has 126,873 empty cells, 16,400 of which can be filled with formulas at the same time. Running your Apple III under a program switching utility and The Desktop Manager at the same time decreases the number of filled cells to 13,066. DeskMate has 9,801 cells, period.

You must also tell DeskMate that you are entering a formula or it will not recognize it as such. The Apple III automatically recognizes formulas, values, and labels as you enter them, and formats each cell according to the Standard Values which can be set differently for each spreadsheet if desired. You can also change the format of individual cells.

In some cases the shortcomings of DeskMate seem like oversights, like the lack of global search and record copying in databases, and no spreadsheet sorting - functions which I use frequently in my business. And when you ask for help, that's a good time to get a cup of coffee.

It should be mentioned that these tests were run against the best computer offered by Tandy. It should also be mentioned that the Apple III was equipped with an old 5 Mega-



byte Profile with a 180ms access time. There are new SCSI drives made for the Apple III that are well over 100 Megabytes in size and faster than hard drives found in brand-new 486 machines. On Three Inc. will even build a custom SCSI drive for you.

I adore the Apple II. I've owned both a II+ and a IIe, but SARA (code name for the Apple III) is nearly twice as fast and has eight times the power. Having only four expansion slots in the Apple III is not quite the disaster that some believe it to be. It would take no fewer than ten slots on an Apple II to match the Apple III system that I'm typing this article on right now, and what would ProDOS8, which can only recognize two hard drive partitions, do with the five hard drive partitions currently in use?

I've spent many hours doing benchmark tests with both machines side by side using almost identical programs and the Apple III just walks away from the IIe in every test, no exceptions.

The Commodore 64 has only 38K of memory left for program space and files after booting, compared to over 400K on most Apple III applications, and yet there is a vast world of software available for the Commodore 64, even in some department stores. This gives us a clue to the reason why software companies would create programs for some smaller computers and ignore the Apple III. The answer is money. Commodore 64 and Apple II owners buy new products; many Apple III owners don't.

The Case of the Hungry Hardware.

To encourage you when considering the purchase of something new for your computer, it may help to know that a 512K Apple III computer still commands a higher price than an IBM PC, IBM XT, or even an IBM AT. There already are some great

applications out there. For example, the Graphics Manager for the Apple II has been called the best printing utility ever. The III version is even better, but nobody is going to continue making the truly neat software for us if nobody is going to buy it. On the other side of the coin, new software products will increase interest and buyers.

Take a look at the limited emulation modes on SARA. What is their sole purpose? To run software that is not otherwise available to us in the natural Apple III environment. It would be nice to have a word processor with graphics capability if not an entire desktop publishing program (if Apple IIe hardware can do it, SARA can do it better). It would be even nicer if some software company like Claris Software

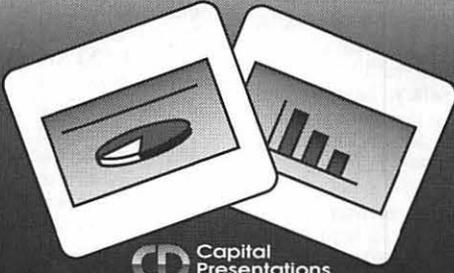
(nudge nudge) would modify versions of AppleWorks 3.0 and other programs to run in the native Apple III mode. This alone would open a whole new marketing niche with just a few modifications to an already existing software package.

In closing, we can support what is available for our computer and look forward to renewed interest, some new products, and maybe even a few full blown applications that really use some of the advantages of the Apple III. Or we can let one of the best computers made by Apple die a slow death in basements and closets around the world while lesser systems live on. From this Apple III users standpoint, remember that, although the "Meek shall inherit the earth," the weak shall not inherit my computing tasks!

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VOLUNTEERS NEEDED

Your Users' Group needs you!! Washington Apple Pi needs volunteers to coordinate and/or help with the following tasks:

- Tutorial Coordinator
- Apple II Tutorial Coordinator
- Apple II Disk Librarian
- Hotline Volunteers
- Apple II Disk Annotators
- Hotline Volunteers
- Apple II Disk Duplicators
- Graphic Artists
- Apple II Journal Editor

If you are interested in lending us a hand, please call Nancy at 301/654-8060.

HELP WANTED

PageMaker, Word-Corporate strategy consultant in Georgetown looking for support and training in PageMaker, Word and other Mac programs; help with production work on occasion (brochures, presentation materials). Also act as technology advisor for new software, typefaces, file management, etc. Responsibilities could broaden to other administrative areas. Hiring on "as needed" basis initially. Flexible hours. Competitive hourly rate. The Hawthorne Group. 202/242-5842.

Production Manager - Did you attend an art school? Do you have three years experience in a computerized graphics or publications department? Have you managed two or more computer artists, and have you interacted with vendors and clients, pricing jobs and producing results? If you can answer yes, we want to meet with you to discuss a career at Back Office Support Services. Our company will challenge your capabilities daily, and will reward your results through a combination of base salary, benefits and bonuses. If you are up to the challenge, and feel you qualify, call Mr. Rossi Bonugli for an appointment at (301) 948-2175.

Secretarial, Office Organizer-Startup firm needs self-directed, Mac-literate help. PT to FT, flex hours, near metro. Send resume and list of known Mac applications to: Decision Dynamics Inc. P.O. Box 10479 Silver Spring, MD 20914

Apple II+ Consultation-Anyone with experience using Apple II+ as TNC for ham radio. Contact N3JTQ P.O. Box 1314 Lusby MD 20657.

Mac Typist Wanted-To enter data into FileMaker and format Microsoft Word text. Work part time in your home. Will supply software. Non rush, easy work. Will negotiate reasonable rates. Mike 703/768-7521.

Customer Support-Entry level position, 30-40 hrs/week. Provide tech support for a Mac software product. Requires a person with excellent human relations skills and experience using Mac applications. Must have communications knowledge (if you don't know what a modem does, save your stamp). Send resume to: Digit Software P.O. Box 1425 Silver Spring, MD 20915 (Fax 301-593-2201).

EQUIPMENT NEEDED

Computers, Printers, Fax-Non-Profit Research group promoting non-interventionist hemispheric policy seeks computers, printers, fax. Call COHA at 202/393-3322.

Keyboard with Mouse, Hard Drive-Apple IIGS user needs keyboard with mouse, hard drive (20mb - 40mb) and ImageWriter II. Call Dick 202/332-4626.

Macintosh Plus/512, Working/Non-Macintosh Plus or 512, working or broken; also floppy drives, logic/power boards. Jan 703/631-6319.

FOR SALE

ImageWriter II Printer, Monitor, etc.-ImageWriter II Printer \$300 obo, Apple RGB Monitor \$200, 2 x 3.5" drives \$75 ea., 2 x 5.25" drives \$30 ea., Mouse \$20, High-quality joystick \$20, System Saver Fan \$15. Over 300 programs (WP, games, utilities, etc.). Call Danton at 202/965-1893.

Hardware-Macintosh Portable 40 meg HD (carrying case, excellent condition) \$1500. Radius FPD monitor (needs Radius board) \$300. LaserWriter (works well) \$650. Sharp SF 7200 copier (works well) \$350. 2 Line Telephones (4) \$18 each. Agfa color stat processor \$100. Calcomp Macintosh "Kurta" tablet \$50. Macintosh 800k internal and external drives \$20 each. Network punchdown blocks \$10 each. Thunderscan \$25. Clip art books \$25 each. Polarizing filter for 13" monitor \$25. Call Rossi 301/948-2175.

Mac II, Color Monitor, etc.-Mac II - 5 megs of ram, 40MB HD, Apple RGB moni-

tor, 8-bit color card, 2 drives, keyboard - \$2,850 call 301/437-4325.

Macintosh Personal LaserWriter-Macintosh Personal LaserWriter LS, 3 mos. old, box/manuals, \$700. Macintosh SE, 5 years old, new 40 Meg HD, \$700, \$1200/both. Lars 301/983-5316.

Software-30+ Apple II+ programs with manuals, Kensington System Saver Fan, Assorted PCB, etc., \$50. 301/942-8547.

Software-MacWrite II for Macintosh. \$89. New in box! Call Peggy 301/365-8110

Modems-The Washington Apple Pi TC S is selling four US Robotics modems. Three of the modems are the US Robotics Courier HST model. These modems are capable of 300, 1200, 2400 and 9600 bit per second operation. When communicating with another HST-capable modem speeds of 1100 characters per second can be obtained. The fourth modem, also a US Robotics model, has all those features plus the capability of V.32 operation. These modems will be sold to the highest bidder. One modem per member. All bids must be received by December 1, 1991. Mail bid to: TeleCommunications Systems Officer Washington Apple Pi, Ltd. 7910 Woodmont Avenue, Suite 910 Bethesda, MD 20814

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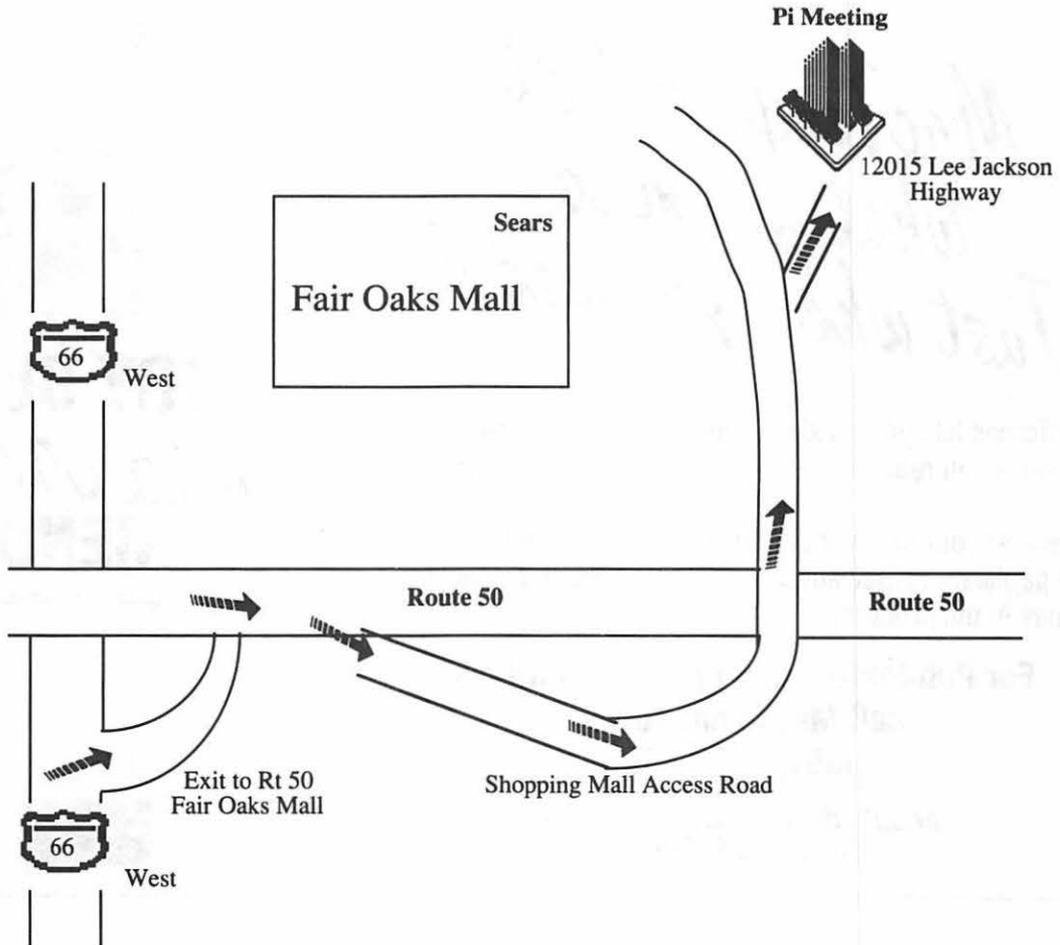
NOW! Apple Authorized Macintosh Developer Training in the DC Area! Offered by the University of Maryland, in conjunction with Apple Developer University. A hands-on, multi-media course on Macintosh application development using C. Course objectives range from developing a partial graphics editor application with an event loop, menus and windows to a full multi-window, scrollable graphics editor application. The structure and content for this course are identical to the one offered at Apple Developer University in California. Macintosh Programming Fundamentals Next Date: November 4-8 Cost: \$1150 Call Nita Roberts at 301/405-2956

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Directions to October General Meeting, Saturday, October 26

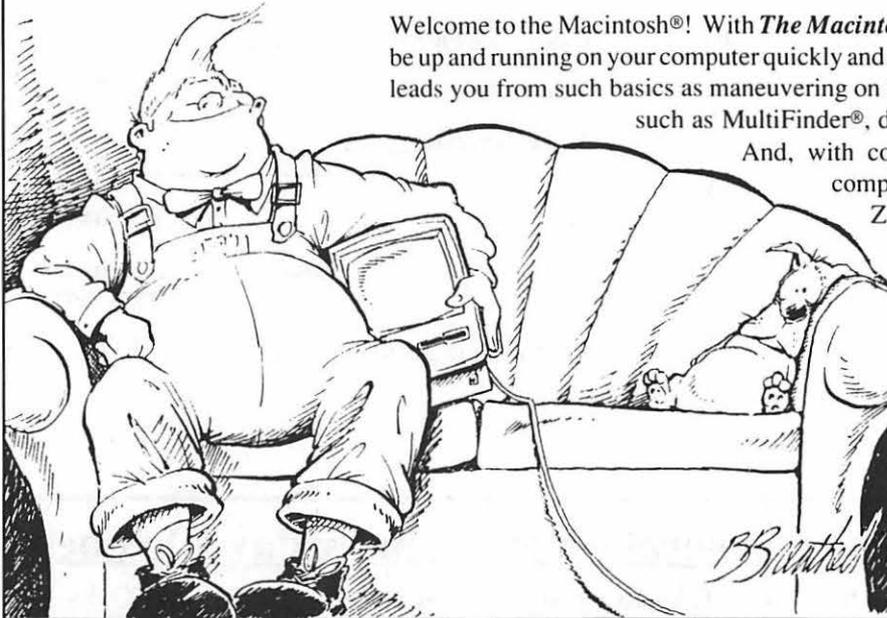
Directions to October Pi Meeting Site: Take Route 66 West and exit at Rt 50 (Fair Oaks Mall). Stay in right lane and take the ramp that says "Shopping Mall." Stay on the access road and proceed straight ahead until you pass the Sears Service Center. It will be on your left. Across from Sears is a single multi-story building near a wooded area and a large parking lot.



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Sharon Zardetto Aker



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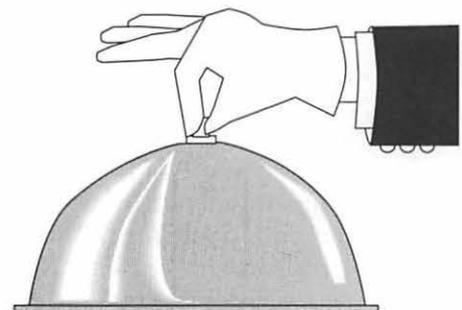
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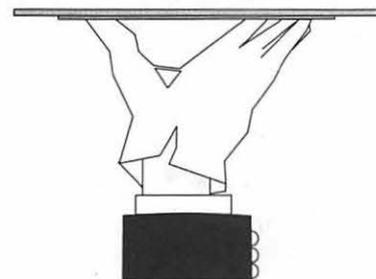
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Macintosh Disk Library

Dave Weikert

Dave Weikert is on vacation and did not submit a new Disketeria article. In its place we have reprinted last month's offerings.

The Best of the Pi Series

To showcase our library at the recent MacWorld Expo in Boston, we created a new series of 10 disks which is called "The Best of the Pi." We selected the most popular programs from our extensive Macintosh Disketeria to create this set of disks for your use and enjoyment.

The programs in this disk 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 #25.01 through #25.10 include approximately 17 Megabyte of material. (Wait a minute folks, how can we get over 20 disks worth of stuff on 10 disks? Answer—Compactor Pro was used to compress the files.)

To decompress them, copy the CptExpand 1.0 f (on the first disk) to your hard disk along with any ".cpt" files you want to decompress. Then double click each ".cpt" file and it will automatically be restored to its original configuration. You will be asked if you want to delete or save the archive (.cpt file); you

should probably delete it since you will still have the original ".cpt" files on the floppy disk collection. You can also decompress most of these files by moving them to a blank floppy along with CptExpand. This is a little more trouble than our usual Disketeria fare but think of the value—two for one.

Mac Disk Catalog

Mac Disketeria Catalogs are available at the office, at the monthly meetings and by mail order. Price is \$3.00; add \$1.50 to cover postage and handling if you order by mail. The catalog covers all Macintosh disks issued through July 1991.

This catalog includes only disk descriptions; alphabetical lists of programs and files were dropped from the catalog due to lack of space. We have added Mac Disk #00.01 to the library; it includes a delimited text file which lists all files in the Mac Disketeria. You may import the text file into the database of your choice for viewing and further manipulation. Additionally, a printed list arranged alphabetically by file name is available at the office for viewing or copying at the standard copy rate.

About Shareware Requests

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

DISK #00.01 — C 1 ***THE MAC 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 #25.01 — PI 1 ***THE BEST OF THE PI***

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.

20 BeepSounds f: Beep #1 through Beep #20: This collection of short sound files may be used to replace the "beep" that your Mac makes. The sounds in this folder are all interesting or unusual. They range from castanets, chords, chimes, hammer, notes, shouts, shots, and others too peculiar to describe.

3D Tic Tac Toe: This Desk Accessory is a game just as the name says.

A Sumo Wrestler, Kunisada 1835 — A MacPaint format Japanese Ukiyoe painting of a wrestler done around 1835.

Address Book DA 3.0.1 f: Address Book DA 3.0.1 and Address Book 2.5: By Jim Leitch. This is a phone list and dialer in DA and application formats which permit viewing of 66 names (length limited to 40 characters) in three columns per page. Select a name and double click to open each record and then choose one of three telephone numbers to dial automatically. Several pages of help; MultiFinder compatible. Files can be exported. **ADBK Manual MacWrite and Read me** are in MacWrite and text formats respectively. **Sample_Addr_list** is a sample address list. **Shareware** — \$20.

Albatross TT f: Albatross: By LORVAD™ (formerly Printers Devil). A TrueType body text font with a moderately short x-height. The relative point size is a bit small, i.e., 14 point is closer to what most people would consider 12 point. It contains all the



regular characters and many special characters. **Read Me First-LORVAD.txt** is in text format. *Shareware - \$10.*

AmortDA.acc.: By Roger V. Mitchell. This DA calculates various elements of a typical loan and prints an amortization schedule.

Anonymity: By Anonymous. Removes a program's owner's name from the opening menu of some applications. Run only on copies of applications. Does not work on all applications. Please use this utility for legitimate purposes only.

AppDisk 1.2 f; AppDisk 1.2: 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 1.2 Read ME!** is in text format. *Shareware - \$15.*

Architect TT f; Architect: By Hank Gillette. The Architect TrueType font simulates hand printing of the type typically done by architects. It was inspired by Adobe's font Tekton™. It has a full set of letters, numbers, and punctuation, and quite a few extra characters. **Architect Read Me** is in MacWrite format.

Arctic f; Arctic: By Sam Wang. A PostScript Type 1 brushscript font from the Dover book on Solotype fonts. It is complete with upper and lowercase letters, as well as numbers, punctuation etc. **ReadMe** is in text format. *Free but \$5 donation cheerfully accepted.*

Artisto+ 2.01 f; Artisto+ 2.01: By Tom Taylor. A Desk Accessory that allows you to open up a MacPaint or FullPaint document from inside any program that supports Desk Accessories and select any portion of the image and copy it into the Clipboard. This is all described in the **Artisto+ 2.01 Instructions**. *Shareware - \$5 or \$10.*

ASCII Chart 4.0 f; ASCII Chart 4.0: By Jon Wind. The DA chart shows all 256 ASCII characters and their decimal and hex equivalents. A menu selection permits changes to displayed font and size (9, 10 and 12 point). **ASCII Chart 3.2 Docs** is in text format. *Shareware - \$10.*

AUTHOR IW: By Joseph W. Miller, one of our own Washington Apple Pi members. This plain typewriter-style font for the ImageWriter was created because of the lack of a font for the Macintosh that looked like a familiar typeface. In Joe's words, "It has the virtue of being peculiar in no particular way." With a very limited number of optional characters, Author takes less space in your System file than other fonts. For example, Author 12-point requires 2382 bytes, compared to 2892 bytes for Geneva and 3864 for Boston.

Author LW f; Author: By FontBank, Inc. A classic cursive script in a heavy weight for headline use. This is a commercial PostScript Type 1 font (not shareware or public domain) that is offered without cost as a sample. See the **Special Offer 10/19** in

text format for details on ordering the collection at a reduced price.

Beverly Hills IW f; Beverly Hills: By Alan D. Hayman. One of the "superfonts". An outstanding business font for the ImageWriter printer. It is available in sizes of 9, 10, 12, 14, 18, 20, 24, 28, 36, and 48 points. Not only does it look good in the standard 12-point size, but it also prints very well-formed characters in the larger "headline" type sizes such as 18 points. Like Palencia, Beverly Hills prints real fractions and other special characters. Also available is the separate Beverly Hills Large typeface, in 36 and 72 points, which can be used within MacPaint or MacDraw. **Read This First!** is the MacWrite file that contains the shareware notice and instructions for printing the rest of the documentation. The **BH Disc Configure MacWrite** document provides helpful instructions for installing the Beverly Hills fonts in your System file. Using **Beverly Hills MacWrite** document provides detailed information on the Beverly Hills fonts. *Shareware - \$10.*

BezierDA f; BezierDA: By C. Heilman. A modest painting program with a special talent. Like a French curve drafting tool, it helps you construct smooth curves as described in **AboutBezier**.

Big Ben II: By Riccardo Etorre. An analog clock with the face of the historic tower clock of Westminster, London. (Trivia note: Big Ben is the bell, not the clock.) Like the original, this has no second hand.

Blackout f (v1.2.1); Blackout: By Andrew Welsh. A screen blanker Control Panel Device (cdev), configured from the Control Panel, which displays a moving field of stars. For 512KE and later. **Blackout Docs** is a double clickable application. *Shareware - \$5.*

DISK #25.02 — PI 2 THE BEST OF THE PI

Bill the Cat Acck! The Meadow Party candidate for president in MacPaint format?

BlackForest TT f; BlackForest: By LORVAD™ (formerly Printers Devil). A TrueType font with an old world German feel with intricate upper case letters. Designed without any curves it is best at larger sizes. **Read Me First!!** is in text format. *Shareware - \$10.*

BlackJack 1.76 f; BlackJack 1.76: By Brad Slutsky. A Blackjack game DA where one player plays the house. **BlackJack Manual** is the comprehensive MacWrite document describing the program. *Shareware - \$20.*

Boaster INIT f (v1.0); Boaster INIT: For all of you who want to impress co-workers or friends with lots of icons showing at start-up. **Boaster INIT** does nothing useful except for displaying all icons it finds inside **Boaster INIT**. It may be customized using **ResEdit**. **About Boaster 1.0** is in TeachText text format.

BODIDLYBold TT f; BODIDLYBold: By LORVAD™ (formerly Printers Devil). A TrueType font that looks great in small or large sizes. This one can readily pass for

Poster Bodoni at a fraction of the cost. **Read Me First!** is in text format. *Shareware - \$10.*

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.

Boston II IW f; Boston II: By Charles E. Maurer. Simply one of the best word processing fonts available for the ImageWriter printer. Font sets are available for New York, MacWrite and Word. **READ ME FIRST!** tells how to install the font and print the Manual. To understand all that Boston II can do, print out the manual in high quality after having installed one of these fonts. **Manual/512K** is the very comprehensive MacWrite manual for 512K and later Macs. The RAM disk mentioned in the documentation has been removed as it does not work with most Macs. If you want to use a RAM disk, see **RAM Disk +** in the System Utilities series.

BroadCast f (1.2); BroadCast: By Joachim Lindenberg. A Chooser Document used to send short messages between Macs on a network. *Shareware - \$25 a machine or \$100 a network.*

Cal 3.02 f; Cal 3.02: By David Oster. A Desk Accessory calendar and agenda pad for your appointments; it is suitable for solo use or for shared use over a network. **Calendar Tools** can convert calendar files from the author's earlier "Calendar" program. It can also pack an entire calendar database into a single text file for maintenance. **Cal Intro** is in text format. *Shareware - \$15, reduced per copy price for multiple nodes.*

CartWright TT f; CartWright: By LORVAD™ (formerly Printers Devil). A TrueType font inspired by the Adobe wood type Ponderosa font. Just the font for designing those old west wanted posters. **Read Me First!!** is in text format. *Shareware - \$10.*

Cat•Mac™ f; Cat•Mac: By Andrew Worth, Paul Bailey, & John Moreno. A "TeaseWare" version of a good cataloging utility. **Cat•Mac** will catalog the files on all your disks, creating listings showing type of file, file name, volume name, modification date and time, and file size. The program allows sorting by the various categories, as well as rearrangement of the columns of information. You can save the listings as a text file (with data separated by spaces, tabs, or commas) so that the catalog information can be exported to your favorite data base or word processing program. The "Level 1" version of the program provided here is limited to 1,000 files. Level 2 allows 10,000+ files and includes other features not found in Level 1. The \$10 "TeaseWare" registration fee gives you a credit toward purchase of the Level 2 program. **Cat•Log™** is a demo catalog listing and **Scrapbook File** is accessible within the **Cat•Mac** application that contains information on some "Hidden Cat•Mac Power Tools" and on how to register (including a mailing label, so you'll



have no excuses for not paying your fees). **"TeaseWare" - \$10.**

Cheeta is a striking facial close-up of this fast cat. It's done in MacPaint format.

Chime 4.0.1 f; Chime: By Robert Flickinger. This Control Panel Device (cdev) plays up to 4 snd. resources on the hour, half-hour, and quarter hours. A coo-coo clock chime is included. **Read Me** is in MacWrite format. **Shareware - \$10.**

ChooseCDEV™ f; ChooseCDEV™: By CE Software. The Control Panel orders the cdev files in alphabetical order except for the General screen, which is first. This little application lets the icons be placed in any order desired by the user, so that it isn't necessary to scroll to find those frequently used. **About ChooseCDEV™** is in text format.

Clairvaux IW f (v. III); Clairvaux: By J.W. Leedom. One of the four "superfonts". Available in sizes of 9, 10, 12, 14, 18, 20, 24, 28, 36, 40, 48 and 72 points, Clairvaux is a proportionately spaced, variable-width font with straight serifs and dense and angled letters. It blends elements from Palatino and Post Medieval Light and is designed to be both stylish and legible. Clairvaux includes many special characters, including mathematical symbols and fractions. Clairvaux Caps, which is available in 14, 18, 24, 28, 36, and 48 points, includes only capital letters and is designed for creating large initial letters to delineate sections of a document. **Docs.McWrt** is an excellent MacWrite document that describes the Clairvaux font in words and pictures. For proper spacing, install Clairvaux in your System before printing the manual. **Text Introduction** is the instructions. **Shareware - \$10.**

Compact Pro 1.30 f; Compact Pro 1.30: (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.**

Cube: A cube á la Rubick's in Desk Accessory format. Much more challenging than the puzzle.

Curlers f (v1.0); Curlers: By Tom Phoenix. An INIT that causes the typing of the appropriate open or closed (" and ") quotation marks (and single quotes) instead of straight quotes. **Curlers manual** is the text documentation.

DISK #25.03 — PI 3 THE BEST OF THE PI

CONVERT f; CONVERT: By JAM TECHNOLOGIES. A SMALL DA CALCULATOR THAT ALSO PROVIDES A LARGE VARIETY OF ENGLISH AND METRIC CONVERSIONS. INSTALL CONVERT TAKES THE

PLACE OF FONT/DA MOVER TO INSTALL CONVERT AND ABOUT CONVERT IS THE VERY BRIEF TEXT FILE. **SHAREWARE - \$15.**

CRAY5A.BIN f; CRAY5A.BIN: By DesktopCAD Inc. This full featured scientific and programmer's DA calculator has many functions. The scientific features include exponential, power and root, trigonometric and coordination transformation functions. Programmer's features include base selection and conversion (in binary, octal, decimal and hexadecimal), logical operations (such as and, or, xor, etc.), register rotate and shift and an ASCII table with Apple's extensions. **CRAY5P.BIN** is the stand-alone application version and the comprehensive **User's Manual** describes how to use it. **Shareware - \$8 for use, \$19.95 for license and updates.**

DD Expand™ 3.7 f; DDEExpand™ 3.7: By Lloyd Chambers & Terry Morse, Salient Software, Inc. DiskDoublor is a commercial file compression program available for the Macintosh. DDEExpand, which is provided free of charge to individuals, is an expand-only version of DiskDoublor. The **About DDEExpand.old** in TeachText format is from an older version; for some reason, a newer version was not included with the download.

Desktop Mgr: By Apple Computer, Inc. An INIT which, when placed in the System folder, improves the way the Mac keeps track of files. Essential for improved Finder performance for disks with large numbers of files. Part of AppleShare server software and usable with any recent System software but works best with Finder 6.1.4 or later. This function is embedded in System 7.X.

Disinfectant 2.5.1: By John Norstad. Detects and repairs files infected by all of the currently known viruses including Scores, nVIR (A & B), INIT 29, ANTI (A & B), WDEF (A & B), CDEF, ZUC (A, B & C), MDEF A (Garfield), MDEF B (Top Cat), MDEF C and MDEF D, MacMag (Drew, Brandow, Aldus or Peace) and Frankie. Like Virus Detective, it operates under your control and can scan a succession of floppy disks and create a log file of the results. Check out the About Disinfectant under the Apple menu; it's a gas! Requires System Software 6.0 or later and Mac 512KE or later.

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 checksums 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.

DiskTimerIIa f; DiskTimerIIa: By Steve Brecher. The classic program to benchmark hard disk performance. It monitors the disk read and write calls to determine times required for these actions. **Notes on DiskTimer II** is the MacWrite document

listing performance times for a number of hard drive.

DiskTop 1.2: By Gil Beecher. An evaluation copy of CE Software's DA utility which will find HFS files, copy, delete, and move files, folders, and more, all from within any document or application. The commercial version is much more capable and is an invaluable aid in preparing the WAP disks and catalogs.

Display2 TT f: By David Rakowski. A collection of display fonts. **Read me Display TT fonts 2** is in TeachText format and includes pictorial samples of the fonts. **Shareware - \$3.99 for each font (except Zaleski \$.99) to Columbia University.**

Polo Semiscript: A brushstroke font with plenty of swashes. It makes a good specialty font for advertisements when an informal feel is desired.

Pixie: A Type font that roughly looks like Bodoni must look like after ten or more beers — an uneven, hand-drawn serif font with a wide variation of thick and thin. It makes a good specialty font for advertisements when an informal feel is desired or when you want to recreate generic 1950's advertisements from Boys Life or Mechanix Illustrated. **Read me Pixie** is in text format.

Rudelsberg: The font is in the Art Nouveau vein (turn of the century Germany in this case) and may be thought of as a second cousin to Adobe's Arnold Boecklin font, in that the lower case letters are a little similar, although the upper case characters lack the swashes of Adobe's font. Rudelsberg contains the full set of upper- and lower-case characters, numbers, and some punctuation, but no diacritics.

Zaleski Caps: A font named for Jean Zaleski, the New York painter who is, among other things, short. It is modeled on an Art Deco typeface called Ashley Crawford. It is bold and brash and serifed. Numbers and punctuation are also in the font.

DOCMaker v3.72 f; DOCMaker v3.72: By Mark S. Wall, Green Mountain Software. This program was formerly named "The DOCTer." Allows you to create stand alone documents that do not need a word processor to open them. **DOCMaker Shareware Doc** is double clickable. **Shareware - \$25 with disk.**

Document Builder f; Document Builder: By Andrew Welch. Allows you to create stand-alone documents which include text and graphics. Since Document Builder documents are applications, the reader does not need a word processor to show them on the screen or to print them. **Document Builder Docs** describes the application. **Shareware - \$20.**

Drop Menus 1.2 f; Drop Menus 1.2: By Richard Outerbridge. This INIT drops menus down and keeps them there when you click the mouse in the menu area. Select any menu item by clicking on it. **Drop Menus Read Me** is in text format.



Dubiel TT f: Dubiel and Dubiel Italic. By David Rakowski. These TrueType fonts are modeled on the Torino and Torino Italic fonts which are similar to a condensed Bodoni except with lighter strokes. They work well as either text or display fonts. Since the FOND resources have not been merged you must select the italic font from the font menu rather than selecting the Dubiel font and giving it an italic style. **Read me Dubiel fonts/TT** is in TeachText format and includes samples of the font. **Shareware - \$14.99 to Columbia University.**

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.

DISK #25.04 — PI 4 THE BEST OF THE PI

Easy Envelopes+ 2.0.2 f: Easy Envelopes+ 2.0.2: By Andrew Welsh. This DA or application lets you print envelopes with a return address, up to 99 stored addresses, and an optional endorsement line. **Easy Envelopes Plus 2.0.2** is the documentation in application format. **2.0.2 Update Notes** is in text format. **Shareware - \$15.**

Electric Dvorak f: Electric Dvorak: By Tom Phoenix. Lets you use the Dvorak keyboard. **Dvorak Installer** removes or installs the Electric Dvorak and the "switching by Keyboard" option. **Dvorak Start-up** and **QWERTY Startup** are INIT files for the Systems Folder. **Read Me about Dvorak** contains the instructions. **Electric Dvorak QuickRef** is a keyboard layout document. An optional **Membership Application** is included for the International Dvorak Organization. This application modifies the System file with a resource; backup your System file first and then reinstall if necessary to return to your original configuration. **Shareware - but you pay for it if you don't use it or pass it along.**

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

Eyeballs & BigFoot f: Eyeballs and BigFoot: By Ben Haller. The INITs Eyeballs and BigFoot gives your menubar eyes and creates a pair of feet that walk around your desktop. **Critters Docs** is in text format.

F1-F4 f: F1-F4: By Emy Tontlinger. This INIT translates the F1 through F4 keys on an extended keyboard to command-Z (undo), command-X (cut), command-C (copy) and command-V (paste) keystrokes normally associated with these functions. **F1-F4.des** is in text format.

FastEnvelope 2.0.1sw f: FastEnvelope 2.0.1sw: By Henry Carstens, Vertical Solutions. This demo Desk Accessory prints

envelopes of various sizes and postcards with address, return address, bar code, message (for example—First Class), Icons and Pictures. After 10 days, the word Demo is printed on the envelope. **FastEnvelope 2.0 Manual.text, QuickStart!** and **What's New** are in text format. Folks, this is a super value, so ante up. **Commercial - \$10, see license for ordering information.**

FastLabel 3.0 f: FastLabel 3.0: By Henry Carstens, Vertical Solutions. Permits you to print a variety of labels quickly and easily. Includes standard templates for mailing, disks, VCR, and other label formats for LaserWriter, ImageWriter and DeskWriter printers. You may also create your own templates and save them for later use. This program is worth at least five times the shareware price. **FastFix Documentation** is in text format. **Commercial - \$10, see license for ordering information.**

Finder Sounds f (v1.3): Finder Sounds: By Greg Smith. With System Software version 6.0.4 or later, the Finder can play sounds corresponding to various events. The **Finder Sounds Config cdev** permits you to select sounds for these events include opening and closing windows, creating and deleting files, and even modifying windows. **Finder Sounds.teach** is the TeachText format documentation.

FKEY Collector 4.1: By Jim Moore. Lets any selected file of FKeys be sampled or installed as FKeys. Contains an assortment of FKey examples.

Flash-It 2.2b1 f: Flash-It: By Nobu Toge. A cdev that defines three (3) hot-keys to: capture all or a selected part of the screen image, save it to the clipboard or to a disk file, and print it. **FI22b1.DOC (MW)** is in MacWrite format. **Shareware - \$15.**

FlashWrite][1.02 f: FlashWrite][1.02: By Andrew Welch. A super notepad DA which may have multiple pages, each with its own name and each containing up to 32,000 characters in any font face, size and style. It can import and export text and you may select your favorite word processor in a preferences setting. The DA also has a find function and counts characters, words, sentences and paragraphs. **FlashWrite][Docs** is in double clickable application format. **Shareware - \$15.**

GateKeeper f (v 1.2.1.1): GateKeeper and GateKeeper Aid: By Chris Johnson. These INITs and associated Control Panel Device (cdev) are placed in your system folder (Systems earlier than 7.0) and are then accessible via the Control Panel after booting. For System 7.0 and later installation, see the documentation. GateKeeper monitors the types of action that viruses take and limits the system response to prevent infection. GateKeeper creates a log file for later analysis and diagnosis of virus attacks. GateKeeper Aid looks for WDEF, CDEF and MDEF viruses and their variants and eradicates them. **GateKeeper Introduction** and **GateKeeper Aid Introduction**, in MacWrite format, describe the use of the programs. For Mac 512KE and System 4.1 or later. **Send a postcard.**

DISK #25.05 — PI 5 THE BEST OF THE PI

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.

FreeTerm 3.0 f: FreeTerm 3.0: By William Bond. This simple terminal emulator supports ASCII file transfers. The XModem protocol is supported as is the Macintosh MacBinary II format. It will work on asynchronous communications devices that support data transfer rates from 300 to 57600 baud. If you have a Hayes-compatible modem, there is support for auto-dialing and hang up commands. The **FreeTerm 2.0 Doc** describes all of its features and lists a number of the XModem error messages.

Graphic Light TT f: Graphic Light: By Richard Mitchell. A TrueType font patterned after a metal type from the Baltimore Type Foundry. It has an unusual "ft" ligature and a small x-height. If you use it for blocks of text, always try it first set solid, that is, with a line spacing equal to its size, 12 on 12, for instance. The face, because of its small x-height, is very small on the body, and the lines will fly apart with too much leading. **Please Read...** and **Generic README - TrueType font** are in text format.

HAL 1 f: These sounds are part of the collection of sounds from the Stanley Kubrick movie version of Arthur C. Clark's space novel, 2001.

Answer (HAL): "Dave, I really think that I'm entitled to an answer to that question."

Completely operational (HAL) "I'm completely operational and all my circuits are functioning perfectly." An assuring statement prior to a heavy computer session.

Dave, stop (HAL) "Dave, stop ..."

HAL 2 f: More sounds from the demented computer.

Decisions (HAL): "I know that I've made some very poor decisions recently."

Difficult (HAL): "Without your space helmet, Dave, you're going to find that rather difficult."

Enjoy working (HAL): "I enjoy working with people."

HAL 3 f:

FAULT.IN.AE35 "I've just picked up a fault in the AE35 unit. It's going to go 100 percent failure within 72 hours."

Human error (HAL): "Human error."

Much better (HAL): "I feel much better now."

Sorry Dave (HAL) "I'm sorry Dave, I'm afraid I can't do that!"

Stress pill (HAL): "Take a stress pill and think things over."

HeapTool 1.4 f: HeapTool: By Kerry Clendinning. If you use System 6.0.7 and earlier with MultiFinder and more than a



few INITs, you may experience frequent bombs as the "System Heap" runs out of memory. The system heap is an area of Mac memory set aside for use by the Mac operating system and other system software. INITs use space in the system heap during startup, and many of them stay loaded as long as your Mac stays running. Fonts and Desk Accessories also require space in the system heap, but their use of the heap tends to be *dynamic*, meaning that the amount of space needed changes according to what the user is doing. Just drop the Heap Tool cdev into the system folder, and it will expand your system heap the next time you reboot. **Manual 1.4-mw** is in MacWrite format. *Shareware - \$13.50.*

Helium 1.0: By Robert L. Mathews. This Control Panel document permits you to select Balloon Help in System 7.0 without going to the Help menu and back to toggle it on and off. Just the thing for the occasional need to see a help item.

Help Meister f: Help Meister: By Robert John Churchill. Whenever you want to see balloon help for something, point at it with the mouse and press control-Help. This will toggle balloon help on and off. This INIT requires System 7.0 and extended ADB keyboard with a "Help" key. **About Help Meister** is in text format. *Shareware - \$5; \$20 for disk with source code.*

IconWrap f (v1.2): IconWrap: By Ken McLeod. An INIT that will "wrap" INIT and cdev icons around the Mac screen on startup to begin a new row when the edge of the screen has been reached. Doesn't work with nonstandard icons or color icons (cicn resources); must load before icons reach right side of screen. **IconWrap.doc** is the text format documentation.

DISK #25.06 — PI 6 THE BEST OF THE PI

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

Icon Colorizer 1.6 f: Icon Colorizer: By Robert P. Munafo. This cdev displays a replacement set of multi-color icons for a variety of programs on the Desktop. Icons can be modified in ResEdit following the instructions in the documentation. **Icon Colorizer 1.6 Doc** is the MacWrite format documentation; it includes an excellent description of the types of color icons. For color or gray scale Macs.

Informal Oblique TT f: Informal Oblique: By Phil Noguchi. This is a fully functional slanted TrueType font useful for informal correspondence and note taking. It replaces the PostScript shareware font Slant Informal in public distribution; this is a complimentary ProtoType™ font. **Informal Oblique 21 April 1991** and **Wd Informal Oblique 21 April 1991** are in text and Word formats respectively.

Init cdev 3.0 f: init cdev 3.0: By John Rotenstein. "init cdev" will provide a list of all the INIT (Start-up), cdev (Control Panel) and rdev (Chooser) files in your System

Folder and let you turn them on and off. This free cdev performs a similar function as the commercial Aask! and INITPicker. **About init cdev 3.0** is the documentation in text format. *Shareware - Picture post-card of your hometown.*

INIT Tracker f (v1.0): INIT Tracker: By Andrew Welch. Monitors all INITs that load after itself to determine the technical changes performed by each INIT. It then writes this information to disk for later analysis. **INIT Tracker Docs** is in double clickable application format. *Shareware - \$10.*

Just Click 1.0 f: JustClick: By Luis Bardi. Under System 7.0, this INIT permits you to click at the top right hand corner of your screen to switch from application to application (just like MultiFinder in earlier Systems). **JustClick Info** is in text format.

Kastellar f: Kastellar: James M. Harris. A PostScript Type 1 (ATM-compatible) display typeface in uppercase characters only (no lowercase or numerals) created with Letraset's FontStudio. It is a very elegant open-face-styled design that until this offering, was only available in hot metal. **READ ME FIRST!** is in text format. *Shareware - \$20.*

Kiwi Envelopes!™ 2.05: By Kiwi Software, Inc. A DA to print envelopes on LaserWriters or compatibles. *Shareware - \$8 for registration and documentation.*

Laser "Quotes" f: Laser "Quotes"™: By Deneba Systems, Inc.. An INIT that generates left and right quotes (" "), apostrophes, and the Chicago font symbols for the command key, check, diamond, and apple. **Laser "Quotes" Docs** is the MacWrite format documentation.

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.

LockOUT™ f (v2.0): LockOUT™: By Beyond™ Inc. A Control Panel configurable medium-security password protection system for the Mac. When enabled, requires the entry of a password to log on. **LockOUT™ 2.0 DA** and **LockOUT™ 2.0 FKey** can be used to protect the system without shutting it off. **LockOUT 2.0 Release Notes 2** is the TeachText format documentation.

Mac's Bar v2 f: Mac's Bar: By Mike Warren. It allows you to keep track of your favorite bar recipes (or any other recipes for that matter). Mac's Bar has with it over 100 drink recipes already entered with room for about 300 more. You may also keep a very simple inventory of the drink ingredients that you have on your bar and Mac's Bar will search out all the drinks that you can make. Mac's Bar is also capable of searching out all the drinks that contain a particular ingredient. **Mac's Bar Docs** is the documentation in great detail. **Bar1** and **Bar2** are start-up bars; however you can create your own.

MachineBlock f: MachineBlock: By Gary Hagestead. A bold headline PostScript Type 1 font consisting of upper case letters and most of the commonly used symbols. It is patterned after the "Machine" type style. **MachineBlock.doc** is in MacWrite format. *Shareware - \$15.*

Macify 2.8 f: Macify 2.8: By Eric Celeste. Converts a plain text document into a useful one by removing hard carriage returns, lower 32 ASCII characters (all the "control" characters) and generally cleaning up things. It also lets you modify the appearance of a document by using ligatures (the little "fl" and "fi" items seen so often in booktype) and inserting proper "open" and "close" quote marks. This is a most useful program and performs a real service if you do much file transferring. **About Macify Stack** is the users manual in HyperCard format. *Shareware - \$10.*

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.

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.

Manhattan TT f: By David Rakowski. A TrueType conversion of earlier Type 1 Postscript fonts. **Readme Manhattan TrueType** is in TeachText format and includes samples of the fonts. *Shareware - donation to Columbia University as indicated.*

Upper East Side: An art deco style that works well in both text and display applications. It contains a full set of characters, including diacritics, and has 477 kerning pairs. It resembles the well known Parisian display font. **\$9.99.**

Upper West Side1: This font is the font which is used for the logo of the NEW YORKER magazine and which is also used for headings throughout each issue. It contains a full set of upper- and lower-case characters, punctuation, and numbers. And several characters are filled with the image of the New Yorker's famous FOP. **\$9.99.**

Lower East Side: A font modeled on an Art Deco typeface called Astur. It looks like bold, 3-D brush strokes forming the characters with deep shadows — it also tends to look like bent pieces of plywood with shadows. It is kerned, and ought to be used for display text only at sizes 72 points and larger. **\$2.99.**

Lower West Side: A font created with Fontographer 3.1. It contains a full upper- and lower-case alphabet, numbers and punctuation — no diacritics. It is based on the typeface "Shatter" and looks much like the famous signs saying things like "STRESSED OUT?" or



"ARE YOUR EYES BAD???" Obviously the typeface is of limited use, except for calculated irritation. \$2.99.

McSink DA V7.0A f; McSink DA V7.0A: By Dave McWherter. A general-purpose text editing DA multi-window memory-based editor. Use up to 16 windows, with the amount of text in each window limited only by the amount of available memory. McSink also provides a number of special purpose editing and file access commands. **VCMDs folder** includes external commands ASCII Codes, Catalog, Compare Files, Copy Icon Grabber, Curly Quotes, Delete Files, File Munger, Hex Icon Grabber, Join Files, Open Files, Sloppy Compare, Sloppy Search and Straight Quotes. **McSink V7.0 Changes** is in text format. *Shareware - \$45.*

MiniScreen 1.4 f; MiniScreen: By Morgan Davis. MiniScreen cdev changes your color monitor's desktop size to that of a dinky, nine-inch monitor. Now you may easily use that expensive tube to design applications for smaller nine-inch screen Macs. **About MiniScreen...** is in text format.

Open-wide-2.0 f; Open-wide 2.0: By James W. Walker. This Control Panel Device widens the Open and Save dialogs so that you can see longer file names. **Open-wide help text** is in TeachText format.

DISK #25.07 — PI 7 THE BEST OF THE PI

miniWRITER 1.71 f; miniWRITER 1.71: By David Dunham. A text editor with features such as font face and style selection and a find command. **miniWRITER.doc** is in MacWrite format and the supporting files **mWRT update** and **Read Me First (mWRT 1.71)** are in text format. *Shareware - \$12.*

Moire 3.22 f; Moire 3.22: By John Lim. A color Moire cdev screensaver with a built-in menu clock. The program **Moire cdev => INIT** makes it a smaller startup document, not configurable from the Control Panel. **After Dark Module** lets you install the Moire pattern in the After Dark screen saver. **Moire Docs (MacWrite)** is the documentation in MacWrite II format. *Shareware - \$10.*

Mug Shot Lite™ 1.20: 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.

Palencia 2.3: By Andrew Welch. One of the "Superfonts". A very high quality typeface that produces beautiful print on the ImageWriter. To get started with Palencia, double-click on the Palencia v2.3 suitcase icon. You can read or print the excellent manual in Palencia typeface without having to install the font in your System file. Note that the actual Palencia fonts, which are available in sizes of 9, 10, 12, 14, 18, 20, 24, 28, 36, and 48 points, are not accessible to the Font/DA Mover until

they have been "extracted" by means of the Extract command under the File menu. *Shareware - \$12.*

Pcal2.11 f; Pcal2.11: By Joseph F. Buchanan. A handy appointments calendar with a variety of presentation formats including day, week, month and year. **PCal docs (text-only)** is the documentation and **Sample Events** is the sample file containing user defined events; both are in text format. The MiniWriter DA referred to in the documentation is available in the DA series.

PhoneBook DA 2.5 f; PhoneBook DA 2.5: By Tim Herzog. It handles long lists of names and addresses usually managed by a Rolodex, HyperCard, or some other tool. It sports a slick interface, extensive phone dialing features, envelope printing, and a robust phone call timer. A utility program for printing reports and converting files to PhoneBook format is included in **PhoneBook Plus f. PhoneBook 2.5 Notes** and **PhoneBook Plus Notes** are in text format. *Shareware - \$20 for DA, \$10 for PhoneBook Plus; \$25 for both.*

PM 4 ShortCuts 1.0 f; PM4 ShortCuts: By Mark Teranishi and Paul Sorrick. This DA lists all of PageMaker's keyboard shortcuts as well as some undocumented features. **READ ME** is in Word format. *Shareware - \$10.*

PopIt! 1.72 f; PopIt! 1.72: By Pete Helme. A popup menu that copies the menu bar for use anywhere on the screen. **PopIt! v1.72 dox.macwrite** is the documentation. *Shareware - \$10.93.*

PopUp 1.0 f; PopUp: By Robert Stromberg. A Desk Accessory that allows access to the menu bar from anywhere on the screen as described in **About PopUp**. It will work with (probably) any menu in most any application. *Shareware - \$10 (\$25 for code.)*

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

PowerStation™/E (v2.3) f; PowerStation™ E: By Steve Brecher, Software Supply. A Macintosh "software control center" that lets you organize your frequently-used applications, documents, and desk accessories in a way that is suited to your working habits, independently of the way they are organized under the file system. And, PowerStation lets you move among applications quickly - much more quickly than is possible with the Finder. **Open PowerStation™** is the small file to be kept on the desktop to facilitate opening PowerStation if you don't use PowerStation as your startup application. This evaluation copy of PowerStation is limited in its capability; the full version is available commercially. **PowerStation™ Orientation** is the documentation.

PrintAid 1.4 f; PrintAid 1.4: By James W. Walker. Permits printing in the background

under MultiFinder (or Finder with System 7.0) without causing other background applications to stop. Requires System 6.0.4 or later. **PrintAid help** is in TeachText format.

Public Folder f (v1.01); Public Folder: By Michael Peirce, Claris Corporation. This Chooser document enables a network file transfer and file sharing system that allows anyone to make files and folders of files available to other users attached to an AppleTalk network. Any files and folders stored in the special folder called the Public folder can be seen and fetched by anyone on the AppleTalk network that is also using Public Folder. Access is via the Chooser. **PF1.01 ReleaseNotes** and **Release Notes TEXT** are in MacWrite II and TeachText format.

Quote Init 2.2 f; Quote Init 2.2: By Lincoln D. Stein. Replaces neutral double quotes ("") with quote pairs (""") and neutral single quotes (') with apostrophes ('). This cdev is fairly smart and can handle nested quotations and multi-paragraph quotes. **Quote INIT Docs.MacWrite** and **Quote INIT Docs.MW** are in MacWrite and Word respectively. *Shareware - \$15.*

RAMCheck 2.0 f; RAMCheck. 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.

RamDisk+ 2.12 f; RamDisk +: By Roger D. Bates. A RamDisk program intended to run automatically on startup by remembering previously set parameters. **Read Me - RamDisk+** is in TeachText format. *Shareware - \$20.*

REdit 1.2: By Gerard Schutten. An easy-to-use resource editor. Change icons, dialog boxes, alerts, and the like with a click of the mouse. Moderate care is required when using REdit. Experiment on backup disks only.

Sav-O-Matic 1.51 f; Sav-O-Matic: By Bruce Partridge. A automatic, file saving program configurable from the Control Panel. Permits you to specify the applications for which the feature is enabled and the time between saves. **Sav-O-Matic Docs** is in text format. *Shareware - \$20.*

Scribbler 3.0 f; Scribbler 3.0: By Brian Newton. An object-oriented drawing package in a Desk Accessory as described in **Scribbler 3.0 Manual.txt**. *Shareware - \$25.*

Scroll2 v2.1 f; Scroll2 v2.1: By Mayson G. Lancaster. Replaces Apple's standard scrollbar. This cdev saves you time by letting you scroll either way from either end of the scrollbar. Particularly useful for



larger screens. **Scroll2.doc** is in TeachText format. *Shareware - \$15.*

SCSIProbe 3.1: By Robert Polic. Like SCSI Tools, this cdev displays the status of SCSI drives; mounts SCSI disks and disks that have been dragged to the trash. Also reads drive PROMs and reports back vendor, product and version numbers.

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

Set Clock 2.2: By Jim Leitch. Synchronize your Mac to within one second with a 10 second call to Toronto Canada or Chesapeake Virginia.

Set Paths 1.0b2 f; Set Paths 1.0b2: By Bruce Tomlin. A Control Panel file which maintains a list of up to five folders. The list is used as a search path any time a file open operation occurs. A very handy way to reduce System folder clutter. **Set Paths.doc** is in text format.

SFScrollInit: By Andy Hertzfeld. Remembers the location of any previously selected item when using the "Standard File" dialog boxes so that you don't have to scroll down the list to get to the next item.

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.

SmartCal 2.3 INIT f; SmartCal 2.3 INIT: By Lee Ann Rucker. Smart Calendar is an INIT/DA combination. The Calendar DA allows you to save messages, and the INIT reminds you of them when you first start up your Macintosh. **Smart Cal Converter** produces a text file that may be used with Calendar Maker. For System 6.0.x or higher to see reminders. **Read Me... SmartCal** is in TeachText format.

SmartKeys 2.0 f; SmartKeys 2: By Maurice Volaski. Type on the Macintosh as if it were still a typewriter. Creates dashes, curly quotes, ligatures and prevents double spaces, doubled caps and > and < signs in place of periods and commas. Requires System 6.0.2 or later. **SmartKeys 2 Docs** is in MacWrite format.

DISK #25.08 — PI 8 THE BEST OF THE PI

ResEdit 2.1.1 f; ResEdit 2.1.1: Apple Computer. The latest version of the resource editor produced by Apple Computer now includes resource templates for System 7.0 and a much improved user interface. With ResEdit you can make changes to icons, dialog boxes, fonts, menus and other resources. It is a very powerful tool, so powerful that unless you know what you are doing, you can cause edited programs to not operate properly. Only modify a copy of any application or file. For instructions on the use of ResEdit see the HMG™ ResEdit Primer on another disk in this series and **ResEdit™ Reference**, by Apple Computer (\$12.95) distributed by Addison-

Wesley Publishing Company, Inc. (APDA #M0015LL/C). **Release Note** is in text format. Also included are an **Examples** folder for uses with MPW 3.2 and an **Extensions** folder with two additional editors that may be added to ResEdit. Requires System 6.0.2 or later.

sndConverter 1.2 f; sndConverter 1.2: By Joe Zobkiw. Converts or extracts 'snd' resources to a format that may be used with System 7.0 and higher. Includes two sound files; **Razz SysBark** (to be converted) and **Triangle (7.0 compatible)**. **sndConverter 1.2 Read Me!** is in text format.

SoftwareFPU v2.01a f; SoftwareFPU (cdev): By John Neil. A cdev that allows most programs expecting an FPU to work properly on the Macintosh LC and IIs which are not configured with an FPU. A Floating Point Unit (FPU) is a hardware chip that performs certain types of mathematical operations quickly. An FPU is also known as a floating point co-processor or a math co-processor. **About SoftwareFPU - Word** and **About SoftwareFPU - MacWrite** are the documentation. *Shareware - \$10.*

SoundMaster 1.6.5 f; SoundMaster 1.6.5: By Bruce Tomlin. A cdev that permits you to specify startup, beep, disk insert, disk eject, bad disk, restart, shutdown and key click sounds, rates and volumes from folders inside your System folders. Use System 6.0.4 or higher for all sounds. **SoundMaster.doc** and **SoundMaster changes** are in text format. *Shareware - \$15.*

SoundMover Package 1.71 f: By Riccardo Ettore. A package of four sound programs for different versions of the Mac and System Software. **SoundMover 1.71** 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** is a much improved IBeep2 that requires System 6.0.4 or higher. **StartupSndInit** plays compatible sounds placed in the System Folder. **SMP Disk Manual** and **Sound Mover 1.71 Docs** are in text format. *Shareware - \$25.*

SoundPlay: By Bruce Tomlin. This Desk Accessory opens and plays sound files.

SuperClock! 3.9 f; SuperClock!: Steve Christensen. The classic full-featured menu clock; with timer and other features, all configurable from the Control Panel. One of the best free software packages available for the Macintosh. **SuperClock! README** is in MacWrite format. Free, but if you really want to send something, send it to Stanford Children's Hospital.

SureSaver f (v1.0); SureSaver™: By Kent R. Glenn. A cdev that automatically saves the file that you are working on in most applications at a user specified time. Requires System 4.2 or greater. **SureSaver™ Notes** is in text format. *Shareware - \$10 or whatever you think it is worth.*

DISK #25.09 — PI 9 THE BEST OF THE PI

Sounds4SndMaster1 f; Bad disk, Beep sound, Disk eject, Disk insert, Key click, Shutdown sound and Startup sound: These are tailored sounds for SoundMaster by Edgar Allen Pole as described in **Read this or you die.**

Sounds4SndMaster2 f; Bad disk, Eject disk, Failure, Falling tree, Insert disk, Oops, Red Alert/11, Shutdown, ShutDownSound and Taps are more SoundMaster system event candidates.

Star Trek f: Except for Beam Up, these are some sounds from NetTrek, a network game loosely based on Star Wars.

Beam Up is a transporter sound.

BeepSound (Hail): "Whoo-eee, whoo-eee! Bridge to Captain Kirk!" Atta-boy Mister Chekhov.

Boom: A very anemic boom.

KBeep, KCom, KPhasors and KTorps: Sounds made by communicators, phasors and photon torpedoes belonging to those nasty Klingons.

RBeep, RCom, RPhasors and RTorps: The same thing for the equipment of the Romulans.

TBeep, TCom, TPhasors and TTorps: The equipment sounds of the Terran good guys.

Transporter The only thing missing is the "Beam me up, Scotty" that usually precedes this sound.

Star Trek + f: By Eric Trueheart.

Alert Klaxon, Alert Klaxon X3, Trek Door, Trek Whistle are some mechanical sounds from Star Trek. **Read Me Please** is the Gultware request.

Sun_Desk 1.1 f; Sun_Desk 1.1: By Frédéric Miserey, Jean-Michel Decombe and Tom Poston. An INIT that alters the way the Finder draws icons on the desktop and in windows to display full-color icons. Sun_Desk uses "icl8" color icon resources which use less RAM and are drawn quicker on screen than "cicn" resources. icl8 resources will be supported by Apple in Finder 7.0. **SunDesk 1.1 Docs** is in Word format.

Super MANDELZOOM 1.07 f; Super MANDELZOOM 1.07: By Robert P. Munafro. An easily manipulated color Mandelbrot set rendering program that draws very quickly particularly in the lower resolution views. (It will also operate in black and white.) The program permits easy scrolling, zooming in and out, selection of any of six shading tables and a lot of other features that make the program easy and fun to use. **The Super MZ doc (Read me first), Super MZ doc part 1 and ...part 2** is in text format. The extensive documentation will probably tell you more about Mandelbrot and Julia sets than most of you will ever want to know.

SwitchBoot 1.1 f; !!SwitchBoot!: By John Mancino. An INIT intended for Mac users who change their boot drive often and wish to shortcut the time involved in waiting through the boot process of the current default drive, setting the new drive in the



control panel Startup CDEV, and then rebooting. Requires SE or newer machine. **SB Docs.MW5.0** and **SB Docs.TeachText** are MacWrite and text formats respectively.

Tape Labeler 3.0 f: Tape Labeler 3.0: By Johnathon Z. Simon. A real winner for tape cassette fans. Prints professional looking cassette labels on the ImageWriter or LaserWriter. There is space to type two artists, two album titles and 30 songs, plus noise reduction mode and recording dates (for each side of the tape). Specify the tape length, bias/equalization, tape brand and tape type, a catalog number and a distinctive Identification pattern. Even prints in color. **Tape Labeler 3.0 Doc** describes the features and how to customize it using ResEdit. *Source code (with comments) in ZBasic, \$15 and a blank disk.*

DISK #25.10 — PI 10 THE BEST OF THE PI

SysErrTableDA 3.1: By Bill Steinberg. Displays a comprehensive list of Macintosh errors. The window comes set for the proper width, and it autocenters itself on the main screen. On a color Mac II, it'll be in color. With a little work with ResEdit it can be used to display other information too. Click on the author credit of the DA for the documentation.

System Picker 1.0b7: 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.

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.

TappyType 1.3 f: TappyType 1.3: By Colin Klipsch. This cdev makes typewriter noises in response to your keypresses; different sounds for printable characters, tab/space/delete and carriage returns. **TappyType.doc** is in text format; note the modification needed to work with Suitcase. For System 6.0 and later.

TeachTextMaker 1.1 f: TeachTextMaker 1.1: By Karl Pottie. Create TeachText documents with embedded graphics in the text using this utility and your favorite Word Processor and screen capture, paint or drawing program. **TeachTextMaker.doc** is in TeachText format. *Shareware — \$15.*

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 Grouch 2.0B8 f: The Grouch 2.0B8: By Eric Shapiro; graphics by Ken Hornak. An INIT that modifies the Special menu and replaces the Trash can with one with Oscar the Grouch. Works with Mac Plus

and System 6.0 and later. The Grouch Instructions are in TeachText format.

the TypeBook 2.2 f: the TypeBook 2.2: 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. **theTypeBook-READ ME** is in text format. Now fully compatible with System 7.0 and TrueType.

Tiger is a MacPaint format document that may be converted to one of the best startup screens available; the paper white screen of the Mac really does it justice.

UltraBlack LW f: UltraBlack: By Gary Hagestead. A bold headline PostScript Type 1 font consisting of upper and lower case letters and most of the commonly used symbols. It is patterned after the "HelveticaBlack" type style. **UltraBlack.doc** is in MacWrite format. *Shareware — \$15.*

UnScrolly f (v1.0): UnScrolly: By Frédéric Miserey. When the Control Panel is active, this cdev permits you to select between either a "list view" or "Icon view." **UnScrolly.Doc.Wrt** is in MacWrite format.

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.

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.

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

ViewPaint 1.7: By Steve Dagley. This program is a utility to manipulate Paint and StartUpScreen documents. It allows you to open, view, convert and print documents of either type. Also, you may view PICT files. *Shareware — \$5.*

VirusDetective 4.0.4 f: VirusDetective@: By Jeffrey S. Shulman. This Desk Accessory scans a disk, folder or file to detect a virus. It includes the capability to search for operator entered strings and to write a log file to disk. This version has extended capabilities that permit you to easily check out an entire floppy disk library. **VD 4.0.4 Doc (MW)-IW** is the terse but comprehensive MacWrite format documentation on the theory and use of Virus Detective. The text files **Virus-Detective™ Searches** or **Alternate Search Strings** are discussed in the **Read Me** text file. *Shareware — \$35 for license, \$40 for license and disk with other demo programs.*

WindowShade f (v1.1): WindowShade: By Robert Johnston. Double click anywhere on the title bar of the window and the lower part of the window will 'roll up' underneath the title bar. Double click on the title bar again and the window will lower to its original size. **WindowShade Doc** is in MacWrite II, text and Word 3.0 formats.

ZTerm 0.85 f: ZTerm 0.85. By David P. Alverson. This relatively full featured communications program supports ZModem transfers as well as XModem protocols. **ZPhoneList, ZTerm & Bin Files, ZTerm 0.85 Changes, ZTerm 0.85 Release Notes, ZTerm Doc** and **ZTerm Registration** are the supporting documentation and files. *Shareware \$30, \$40 for disk.*

In Search of...

A Graphics Editor for the WAP Journal. If you are interested in computer art and learning new and innovative techniques that will enhance your skills please call Nancy Seferian at 202-333-0126 for details on becoming the WAP's next Graphics Editor.



MACINTOSH DISKS & WAP DISKETERIA ORDER FORM

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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 Mac II Series ___ 13 disk set: \$39 ___ 20.01A - MII 1 ___ 20.02A - MII 2 ___ 20.03A - MII 3 ___ 20.04A - MII 4 ___ 20.05A - MII 5 ___ 20.06A - MII 6 ___ 20.07A - MII 7 ___ 20.08B - MII 8 ___ 20.09B - MII 9 ___ 20.10A - MII 10 ___ 20.11A - MII 11 ___ 20.12A - MII 12 ___ 20.13A - MII 13 HyperCard Externals ___ 5 disk set: \$15 ___ 21.01 - HE 1 ___ 21.02 - HE 2 ___ 21.03 - HE 3 ___ 21.04 - HE 4 ___ 21.05 - HE 5 Best of Pi Series ___ 10 disk set: \$35 System Software 6.05 ___ 5 disk set: \$15 ___ SS1.ST ___ SS2.PT ___ SS3.U1 ___ SS4.U2 ___ SS5.NI | System Software 6.0.7 ___ 4 disk set: \$12 ___ SS1.ST ___ SS2.PT ___ SS3.U1 ___ SS4.U2 True Type Software ___ 2 disk set: \$6 ___ TT.FS ___ TT.PT System Software 7.0 ___ 9 disk set: \$20 ___ \$45 Non-Member ___ \$55 Disks + Mbership HyperCard Update 1.2.5 ___ 3 disk set: \$9 HyperCard Update 2.0 ___ 5 disk set: \$15 -- HC.01 - 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|---|--|--|--|

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 : Disketeria 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 ___ Singles ___ 4 or less @ ___ 5 or more @ ___ Sets (marked above) + postage \$1.00/disk, maximum \$5.00. ___ Disk Catalogs + postage @ \$1.50 TOTAL AMOUNT DUE | Member Price @ \$4.00= \$3.50= \$(above) \$3.00= \$ | Extended _____ _____ _____ _____ _____ _____ _____ | Name _____ Box Number, Apartment, Suite, etc. _____ Street Address _____ City | State _____ Zip Code _____ | Day Telephone _____ Evening Telephone _____ |

News of the Washington Apple Pi Book Library

by Brian Mason

Book Library Re-catalogued

I went to the Washington Apple Pi office a little over a year ago to see if there was anything that I could do to help. Nancy Pochecko pointed to the book library. It was still suffering the after-effects of the move. I realized that if any sense was to be made of the book collection, it had to be reorganized.

It is now a year later and half of the books have been recatalogued. By this time next year, the task should be completed. I want to take this opportunity to explain the new cataloging system. It should make running of the book library much simpler in the future. It is my expectation that the new cataloging system will make it much easier to find the book you are interested in as well as making it easy for anyone who wants to catalog the books in the future.

The Dewey decimal system had been used in the past. It was totally inadequate to the specialized needs of our library. There are only a few numbers in the Dewey decimal system that have anything to do with computers.

I went to the Montgomery County libraries and several bookstores to see how they organized their computer-related books. The bookstores did the best job of organizing the books, so I took some notes on how these were organized. The result is that I have attempted to pattern our system after theirs.

Basically, there are currently 22

major categories. In alphabetical order according to category code they are:

| Major Category | Description |
|----------------|---|
| A | Applications |
| C | Computer Specific |
| D | Dictionaries, General Reference |
| E | Education |
| F | Interface Card |
| G | Games, Entertainment |
| H | History |
| I | Input Devices |
| J | Employment |
| K | Networks |
| L | Programming Languages |
| M | Marketing |
| O | Operating Systems |
| P | Output Devices |
| Q | Software: Design, Engineering, Repair |
| R | Hardware: Design, Engineering, Repair |
| S | Storage Devices |
| T | Telecommunications |
| V | Vertical Applications |
| W | Law |
| X | Expert Systems, Artificial Intelligence |
| Y | Hypermedia |

Under each of the major categories there are subcategories. The subcategories established so far under Applications, for example, are:

| Sub-Category | Description |
|--------------|-------------------------------------|
| AC | Accounting |
| AR | Artificial Intelligence |
| CA | Computer Assisted Drafting |
| CE | Computer Assisted Engineering |
| CH | Charting, Plotting, Graphing |
| CM | Computer Assisted Manufacturing |
| CO | Communications |
| CP | Computer Assisted Programming |
| DA | Data Processing |
| DE | Desktop Publishing |
| GR | Graphics |
| N | Integrated Applications |
| IP | Idea Processing, Outline Processing |
| LA | Legal |
| ME | Medical |
| MU | Music |
| PJ | Project Management |
| PR | Presentation |
| RE | Scientific Research |
| SH | Shells, User Interface |
| SP | Spreadsheets |
| TE | Telecommunications |

| Sub-Category | Description |
|--------------|-----------------|
| UT | Utility |
| WP | Word Processing |

Each of the subcategories are further broken into more specific categories. For example, the applications under word processing for which we have books include Bank Street Writer, MacWrite, MouseWrite, MicroSoft Word, Super Scribe, Word Handler, WordPerfect and WordStar.

The books are also categorized by author and title. Generally the first

four characters of the author's last name and the four significant first letters of words in the title are used.

Therefore, a book on Bank Street Writer, written by Don Beil and entitled, The Bank Street Writer Book would be classified as follows:

AWP.BSW
BEIL
BSWB

This cataloging method ensures that books are grouped by subject-matter, making them easier to find on the shelf.

I have been entering the catalog of

the WAP book collection in a DBMaster database on my Apple IIGS for record-keeping purposes. Because the library is so small, I have seen no need at this point to publish a catalog. The books are easy enough to spot on the shelf. Should the need for a catalog arise, it will be easy to produce.

Anyone with some understanding of the computer world can assist in this cataloging effort. I have left instructions with the office. With help, the library could be re-cataloged in a much shorter time. Any suggestions, comments, or assistance will be appreciated.



Apple Macintosh Rebates Group Purchase Coffee MUG



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Members of Washington Metropolitan Area Computer User Groups (i.e. WAP, BRMUG, GRAMA, NASA MUG, and the Pentagon MUG just to mention a few) are combining their buying power to buy Apple computers and Software. The objective is to have the next 100 firm commitments to buy Macintosh computers by the end of Dec 1991. The first 400 have already been ordered and delivered from an authorized Apple dealer and also a local dealer.

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Titles on Hand

by Brian Mason

The Washington Apple Pi has one of the finest computer-related libraries in the area. It undoubtedly has the finest Apple computer-related library. The move to new office facilities disrupted the library activities for awhile, but we are gradually getting the books back on the shelves and cataloged. This is a very slow process and will take several months to get all the books shelved. Several attempts have been made to come up with a cataloging scheme. Originally, the books were cataloged using the Dewey Decimal system; however, this system is extremely limiting because there just aren't that many numbers set aside for computer topics.

The scheme I have developed will be easy to understand and use after I am gone. We have books on how to use applications, books on programming in all the various languages, hardware manuals, directories of all types, and on and on. The magazine collection provides boundless sources of information. The library is located in the Washington Apple Pi office at 7910 Woodmont Ave., Bethesda, MD. and is open during office hours—10 am to 2:30 pm, Monday through Saturday and 7-9 pm Tuesdays. We hope to be able to offer the library books through the mail in the near future. When this service is available, information will be printed in the Journal.

All books are due back at the library three weeks from the date they leave the office. They may be renewed once. All members who have used the library in the past and now have overdue books need to return

them right away. If you are unable to get to the office, please return them by mail, courier, or whatever means is most convenient. Other members are waiting to use these books.

Volunteers are needed to help with the library. Right now, we need someone to come in and put the card pockets in the books so the library cards will not fall out of the books while the books are on the shelves. Finally, this is a notice to all members who are finished with their books or magazines. The library is now prepared to once again accept your donations. Any book, magazine, newsletter, audio or video tape that is any way related to the subject of computers is welcome, but especially, of course, any related to products of Apple Computer, Inc. If we have duplicates, we surely can find a school library to take them. The following list is arranged by Topic, Author, Title.

Apple II Computers
 Poole, Lon
**Apple II, User's Guide for:
 Hypertalk:**†
 Little, Gary B.
Exploring the Apple IIGS†
 Apple Computer France
Le Guide:†
 Apple Computer
Setting Up Your Apple IIGS:†
 Apple IIc Computers
 Lieberman
Introducing Apple IIc:†
 Apple Computer Co.
The Apple IIc Reference Manual:†
 Applications - Accounting
 Hannah, John
Dollars and Sense:†
Using Dollars and Sense:†
 Perry, Paul J.
Quicken Quick Reference:†
 McComb, Gordon
**The First Book of Quicken in
 Business:†Includes Version 4.0**
 Meade, James J.
Using Peachtree:†
 Applications - Accounting - Tax Preparation
 EZWare Corp.

**EXTax-PREP:†Form 1040 Documents
 for Excel on the Macintosh EZWare
 Corp.**
**EXTax-PREP 1040 Professional
 Ed.:†Form 1040 Documents for Excel
 or Multiplan on the Macintosh**
 Applications - CAD
 Knight, Robert L.
Autocad Quick Reference:†
 Applications - CAD/CAM/CAE Systems
 Greco, Joseph
The Macintosh CAD/CAM Book:†
 Applications - Computer Assisted
 Programming
 Swan, Tom
Mastering Turbo Debugger:†
 Applications - Data Processing
 Maller, Steven
Mastering Omnib 3:†
 Andrews, Nancy
**Microsoft File on the Apple Macin-
 tosh:†**
 Seal, Jean
**PFS Report User's Manual for Apple
 III:†**
 Bedke, Janelle
PFS User's Manual for Apple III:†
 Applications - Graphics
 Bove, Tony
**Adobe Illustrator 88:†The Official
 Handbook for Designers**
 Time-Life Books
**Computer Images:† Understanding
 Computers**
 Gray, Daniel
Inside CoreDRAW!:†
**The Practical Guide to Computer-
 Aided Graphic Design**
 Apple Computer Co.
MacPaint:†
 Schnapp, Russell L.
SuperPaint 1.1:†
 Bryan, Marvin
Using MacDraw:†
 Applications - Idea/Outline Processing
 Kamin, Jonathan
**Mastering ThinkTank on the 512K
 Macintosh:†**
 Applications - Integrated Applications
 Scelato, Donald
**Advanced Guide to Microsoft
 Works:†**
 Tymes, Elna
Mastering AppleWorks:†
 Munz, Mark
**The UltraMacros Primer:†How to
 Use TimeOut UltraMacros**
 Aron, Arthur
Using Appleworks:†
 Mansheld, Ron
**Using Microsoft Works:†Macintosh
 Version**
 Applications - Shells, User Interfaces
 Kernighan, Brian
**The UNIX Programming Environ-
 ment:†**
 Person, Ron
**Windows 3 Quickstart:†A Step-By-
 Step Approach**
 Applications - Spreadsheets
 Microsoft Corp.
Arrays, Functions, and Macros:†
 Salkind, Neil J.
Excel Quickstart:† Person, Ron
Excel Tips, Tricks, and Traps:†
 Cobb, Douglas
Excel in Business:†
 Goodman, Danny

Hands-On Excel:†
 Robbins, Judd
Lotus 1-2-3 Step-by-Step:†
 Lasselle, Joan
Macintosh Multiplan:†
 O'Brien, Bill
Making Your Macintosh Excel:†
 Townsend
Mastering Excel on the Macintosh:†
 Bolocan, David
Mastering Multiplan:†
 Hergert, Douglas
Microsoft Excel:†Command Performance
 Microsoft Corp.
Microsoft Excel Sampler:†
 Ettlin, Walter A.
Multiplan Made Easy:†
 Cobb, Douglas Ford
Multiplan Models for Business:†
 Altman, Rebecca Bridges
Using 1-2-3 Release 3.1:†
Using Excel:†
 Applications - Utility
 Wilson, David A.
Programming With MacApp:†
 Applications - Word Processing
 Lutus, Paul
Apple Writer III Operating Manual:†
 Microsoft Corp.
Learning Microsoft Word:†for the Apple Macintosh
 Nelson, Kay Yarborough
Mastering Word Perfect on the Macintosh:†
 Microsoft Corp.
Microsoft Word:†for the Apple Macintosh
 Microsoft Corp.
Reference to Microsoft Word:†
 Shetter, Michael D.
Super Scribe II Reference Manual:†
 Krumm, Rob
The Best Book of:†Microsoft Word for the Macintosh
 Bilbo, Mark K.
Using MacWrite:†
 Mynhier, Judy
WORD Companion:†
 Fox, Marianne B.
Wordperfect PC Tutor:†
 Morse, Miranda
Wordstar in 3 Days:†What To Do When Things Go Wrong
 Artificial Intelligence
 Time-Life Books
Artificial Intelligence:†Understanding Computers
 Cohen, Paul
The Handbook of Artificial Intelligence:†
 Barr, Avron
The Handbook of Artificial Intelligence:†
 Catalog - Resources
 DLM Teaching Resources
Apple Computer Resources in Special Education & Rehabil.:†
 Catalog - Software
 Hart-Davis, Sandra
 Software Shopper:† The Public Domain Exchange
The Best of Apple Public Domain Software, Edition II:†
 Computers
 Time-Life Books
Input/Output:†Understanding Computers
 Time-Life Books
Robotics:†Understanding Computers
 Computers - Personal
 Webster, Bruce F.
The NeXT Book:†
 Aspinwall, Jim, Burke, Rory &
The PC User's Survival Guide:†
 McWilliams, Peter
The Personal Computer Book:†
 Computers in Space
 Time-Life Books
Space:†Understanding Computers
 Design, Computer Hardware
 Klingman, Edwin
Microprocessor Systems Design:†
 Dictionary
 Pfaffenberger, Bryan
Que's Computer User's Dictionary:†
 Disk Drives Apple Computer

UniDisk 3.5 Owner's Manual:†English, French, German, Spanish, Italian
 Disk Operating Systems
 Campbell, John
Inside Apple's ProDOS:†
 Apple Computer
Macintosh System Software User's Guide Version 6.0:†
 Apple Computer Co.
ProDOS 8 Technical Reference Manual:†
 Doms, Dennis
ProDOS Inside and Out:†
 Education
 Geoffrion
Computers and Reading Instruction:†
 Education - Using Microcomputers
 Lathrop, Ann
Courseware in the Classroom:†
 Selecting, Organizing, and Using Educational Software
 General Reference - Selecting, Buying, Purchasing
 McWilliams, Peter A.
The Personal Computer Book:†
 History - Apple Computer Inc., Macintosh Div.
 Kawasaki, Guy
The Macintosh Way:†
 Hypermedia
 Harvey
Understanding Hypercard:†
 Hypermedia - Hypercard
 Winkler, Dan
Hypertalk 2.0: The Book:†
 Hypermedia - HyperCard
 Goodman, Danny
The Complete HyperCard Handbook:†
 HyperTalk - Programming Language
 Winter, Dan
Cooking With HyperTalk 2.0:†
 The Waite Group
Tricks of the Hypertalk Masters:†
 Interface Design
 Laurel, Brenda, ed.
The Art of Human-Computer Interface Design:†
 Local Area Networking
 Rogers, Mike
Hands-on Appletalk:† Corvus Systems, Inc.
Network Manager's Guide for the Macintosh:†
 MacApp (Computer Programming Utility)
 Wilson, David A.
C++ Programming with MacApp:†
 Macintosh Computers
 Levitus, B.
Dr. Macintosh:†
 Heid, Jim
Inside the Apple Macintosh:†
 Macintosh Computers
 Connolly, Edward S.
Introducing the Apple Macintosh:†
 Apple Computer Co.
 Macintosh:†
 Chernicoff, Stephen
Macintosh Revealed:†Programming with the Toolbox
Macintosh Revealed:†Unlocking the Toolbox
Macintosh Revealed:†Volume Four: Expanding the Toolbox
 Weber Systems Inc.
Macintosh User's Handbook:†
 Lu, Cary
The Apple Macintosh Book:†
 Salkind, Neil J.
The Big Mac Book:† The Definitive Mac Tutor, Vol. 4:†
 Eckhardt, Robert C.
The Fully Powered Mac:†
 Naiman, Arthur
The Macintosh Bible:†
 Medicine - Data Processing
 Bronzino, Joseph D., Ph.D.
Computer Applications for Patient Care:†
 Spohr, Mark Harrison, M.D.
The Physicians Guide to Desktop Computers:†
 Microcomputers
 Murray, Katherine
Introduction to Personal Computers:†
 Shore, Joel
Using Computers in Business:†
 Microcomputers - Maintenance & Repair
 Williams, Gene B.

How to Repair & Maintain Your Apple Computer:†All II Series Models, Including the IIc
 Printers
 Foerster, Scott
The Printer Bible:†
 Programming
 Knaster, Scott
How to Write Macintosh Software:†
 Mark, Dave
Macintosh C Programming Primer, Volume II:†Mastering the Toolbox Using THINK C
 Smith, David E.
The Best of MacTutor:†The Macintosh Programming Journal
The Complete MacTutor:†The Macintosh Programming Journal
The Essential MacTutor:†The Macintosh Programming Journal
 Programming Languages - Assembler
 Zaks, Rodney
Programming the 6502:†
 Eyes, David
Programming the 65816 Including the 6502, 65C02, and 65802:†
 Weston, Dan
The Complete Book of Macintosh Assembly Language Programming:†
 Skier, Ken
Top-Down Assembly Language Programming for the 6502 Pers. C.:†
 Programming Languages - BASIC
 Apple Computer, Inc.
Applesoft II: BASIC Programming Reference Manual:†
 Albrecht, Robert L.
BASIC:†
 Peckham, Herbert
Hands-on BASIC: for the Apple II:†
 Waite, Mitchell
Microsoft Macinations:†
 Hergert, Douglas
The Apple II BASIC Handbook:†
 Narling, Richard
Using Macintosh BASIC:†
 Programming Languages - C
 Moore, Robert Jeffrey
QuickC Programmer's Guide:†
 Programming Languages - C++
 Weston, Dan
Elements of C++ Macintosh Programming:†
 Programming Languages - Cobol
 Sluceterec?
Programming for the Cobol Programmers:†
 Programming Languages - FORTH
 Calburn
MacFORTH:† Programming Languages - LOGO
 Thornberg, David D.
Computer Art and Animation:†A User's Guide to Atari Logo
 Programming Languages - Pascal
 Sand, Paul A.
Advanced Pascal Programming Techniques:†
 Luehrmann, Arthur
Apple PASCAL:†A Hands-on Approach
 Simonoff, Jonathan D.
Introduction to Macintosh Pascal:†
 Platt, Robert
Perfect Pascal Programs:†
 Grogono, Peter
Programming in Pascal:†
 Osborne/McGraw-Hill
Some Common Pascal Programs:†Based on the Book, Some Common BASIC Programs
 Tiberghien, Jacques
The Pascal Handbook:†A Complete Dictionary of Pascal Terms
 Programming Languages - Postscript
 Adobe Systems, Inc.
Postscript Language Reference Manual:†
 Research, Scientific
 Time-Life Books
Revolution in Science:†
 Understanding Computers Software
 Design - Interface Design
 Barkakati, Nabajyoti
X Window System Programming:†



Apple Disk Library

compiled by John Ruffato

The Apple Disk Library has been updated and reformatted to enable you to more easily and quickly locate those disks in which you are interested. All 3.5" disks are listed first, followed by the complete listing of all 5.25" disks. Look for the  and  icons which distinguish them.

3.5" DISKS

(SW) INDICATES SHAREWARE

IIGS FONTS (27 DISK SET-\$81)

Apple II GS

SYSTEM DISKS

- ___ GSAS-01 System Disk V. 5.0.4
- ___ GSAS-02 System Tools V. 5.0.4



IIGS COMMUNICATIONS

- ___ GSCM-01B FreeTerm (2003)
- ___ GSCM-02A SnowTerm

IIGS DEMO (16 DISK SET-\$48)

- ___ GSDM-01 Cartooner's Demo
- ___ GSDM-02 Deluxe Paint II Demo
- ___ GSDM-03 Music Studio Demo
- ___ GSDM-04 Beagle Writes 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, DesignMaster, GS16 Forth, Micol, MicroDot

IIGS DESK ACCESSORIES (11 DISK SET-\$33)

- ___ GSDA-01 Desk Accessories 1 (2020)
- ___ GSDA-02 Desk Accessories 2
- ___ GSDA-03 Desk Accessories 3
- ___ GSDA-04 Desk Accessories 4
- ___ GSDA-05 Desk Accessories 5
- ___ GSDA-06 Desk Accessories 6
- ___ GSDA-07 Desk Accessories 7
- ___ GSDA-08 Desk Accessories 8
- ___ GSDA-09 Desk Accessories 9
- ___ GSDA-10 Desk Accessories 10
- ___ GSDA-11 Desk Accessories 11

IIGS DEVELOPER (7 DISK SET-\$21)

- ___ GSDV-01 Demo Source Code 1 (2005)
- ___ GSDV-02 Demo Source Code 2 (2006)
- ___ GSDV-03 Shell Applications (EXE) 1
- ___ GSDV-04 Shell Applications (EXE) 2
- ___ GSDV-05 Miscellaneous Developer Files 1
- ___ GSDV-06 Miscellaneous Developer Files 2
- ___ GSDV-07 Miscellaneous Developer Files 3

- ___ GSFT-01 A-Plain
- ___ GSFT-02 A-Fancy, Foreign, Graphic
- ___ GSFT-03 B-Plain, Foreign, Graphic
- ___ GSFT-04 B-Plain, Fancy
- ___ GSFT-05 C-Plain
- ___ GSFT-06 C-Plain
- ___ GSFT-07 C-Graphic, Foreign
- ___ GSFT-08 C-Fancy
- ___ GSFT-09 D-Plain, Fancy, Foreign, Graphic
- ___ GSFT-10 E-Plain, Fancy, Foreign, Graphic
- ___ GSFT-11 F-Plain, Fancy, Graphic
- ___ GSFT-12 G-Foreign, Fancy
- ___ GSFT-13 G-Plain, Graphic
- ___ GSFT-14 H-Fancy, Foreign
- ___ GSFT-15 I
- ___ GSFT-16 J
- ___ GSFT-17 K
- ___ GSFT-18 M-Fancy
- ___ GSFT-19 M-Foreign
- ___ GSFT-20 M-Plain
- ___ GSFT-21 M-Graphic
- ___ GSFT-22 N-Plain, Fancy
- ___ GSFT-23 N-Foreign, Graphic
- ___ GSFT-24 O
- ___ GSFT-25 P-Foreign, Graphic
- ___ GSFT-26 P-Plain, Fancy
- ___ GSFT-27 Q
- ___ GSFT-28 R
- ___ GSFT-29 S-Fancy
- ___ GSFT-30 T-Fancy
- ___ GSFT-31 S_Plain, Graphic
- ___ GSFT-32 S-Foreign
- ___ GSFT-33 T-Plain
- ___ GSFT-34 T-Foreign, Graphic
- ___ GSFT-35 U
- ___ GSFT-36 V
- ___ GSFT-37 W
- ___ GSFT-38 Y
- ___ GSFT-39 Z

IIGS GAMES (22 DISK SET-\$66)

- ___ GSGM-01A Mean 18 Golf Courses (2007)
- ___ GSGM-02A Mean 18 Golf Courses 2 (2018)
- ___ GSGM-03 Bouncing Bluster Boot Disk
- ___ GSGM-04 Bouncing Bluster Data and Docs
- ___ GSGM-05 Bouncing Bluster Consn. Set
- ___ GSGM-06 Games 1
- ___ GSGM-07 Games 2
- ___ GSGM-08 Games 3
- ___ GSGM-09 Games 4
- ___ GSGM-10 Games 5
- ___ GSGM-11 Games 6
- ___ GSGM-12 Games 7



- ___ GSGM-13 Games 8
- ___ GSGM-14 Games 9
- ___ GSGM-15 Games 10
- ___ GSGM-16 Games 11
- ___ GSGM-17 Mean 18 Golf Courses 3
- ___ GSGM-18 Games 12
- ___ GSGM-19 Games 13
- ___ GSGM-20 Games 14
- ___ GSGM-21 Columns GS V. 2.0
- ___ GSGM-22 Lode Runner GS

IIGS GRAPHICS (21 DISK SET-\$63)

- ___ 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
- ___ GSGX-07 Pics and Utilities 1
- ___ GSGX-08 Pics and Utilities 2
- ___ GSGX-09A Pics and Utilities 3
- ___ GSGX-10 Pics and Utilities 4
- ___ GSGX-11 Modulæ
- ___ GSGX-12 Paula Abdul Demo
- ___ GSGX-13A Pics and Utilities 5
- ___ 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

IIGS HYPERSTUDIO (21 DISK SET-\$63)

- ___ 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
- ___ GSHS-11 Miscellaneous HS Stacks 1
- ___ GSHS-12 Miscellaneous HS Stacks 2
- ___ 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

IIGS ICONS (8 DISK SET-\$24)

- ___ GSIC-01A Finder Icons 1 (2022)
- ___ GSIC-02A Finder Icons 2
- ___ GSIC-03A Finder Icons 3
- ___ GSIC-04A Finder Icons 4
- ___ GSIC-05A Finder Icons 5
- ___ GSIC-06A Finder Icons 6
- ___ GSIC-07A Finder Icons 7
- ___ GSIC-08 Finder Icons 8
- ___ GSIC-09 Finder Icons 9
- ___ GSIC-10 Finder Icons 10
- ___ GSIC-11 Finder Icons 11

IIGS MUSIC (12 DISK SET \$36)

- ___ GSMU-01A SoundSmith and Songs
- ___ 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 Deversi-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"

IIGS MISCELLANEOUS

- ___ GSMS-01 New Member's Disk (2000)
- ___ GSMS-02 GS Disk Library Catalog Disk 1
- ___ GSMS-03 GS Disk Library Catalog Disk 2

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 TUTOR TECH

- ___ GSTT-01A WAP Stacks (2019)

IIGS UTILITIES (9 DISK SET-\$27)

- ___ GSUT-01A Utilities 1 (2001)
- ___ GSUT-02 JumpStart Prog Sel V. 3 (2021)
- ___ GSUT-03A Utilities 2 (2028)
- ___ GSUT-04A Utilities 3 (2029)
- ___ GSUT-05A Utilities 4
- ___ GSUT-06A ZZ Copy-V. 2.21 Disk Copier
- ___ GSUT-07A Utilities 5
- ___ GSUT-08C Utility Works GS V. 0.9.2
- ___ GSUT-09 Utilities 6
- ___ GSUT-10 Utilities 7
- ___ GSUT-11A Utility Works Launcher V. 2.2.3

3.5" DISKS (SW) INDICATES SHAREWARE

APPLE II

APPLE SYSTEM DISKS

- ___ 2APS-01 System Disk - Utilities V. 3.1



COMMUNICATIONS

- ___ 2COM-01 TCS Instructions 1.05
- ___ 2COM-02 Appletnet V. 1.3

EDUCATION

- ___ 2EDU-01 Newton's Apple/Cocaine & Teeth

TECH NOTES

- ___ 2TEN-01 IIGS-GSOS-About-Index
- ___ 2TEN-02 IIC-IIe-IMWR — etc.
- ___ 2TEN-03 FTNS-STDS-Tidbits



UTILITIES

- ___ 2UTL-01 New Member Disk 2.01
- ___ 2UTL-02 DB Master V.5 (Shareware)

5.25" DISKS (SW) INDICATES SHAREWARE

APPLE II

APPLE SYSTEM DISKS

- ___ APSD-01 System Disk-Utilities V. 3.1

APPLEWORKS

- ___ APWK-01 Desk, Printer and Money Helpers (813/814)
- ___ APWK-02 Food, Lists, etc. (815/816)
- ___ APWK-03 Reserved for Tax Templates

COMMUNICATIONS

- ___ COMM-01 TCS Inst. 1.05 A & B- Disk 1 of 2 (825)
- ___ COMM-02 TCS Inst. 1.05 A & B- Disk 2 of 2 (826)
- ___ COMM-03** WAPABBS.1 Documentation(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 and Telecom (808/817)
- ___ COMM-08 MicroModem II (SW)-Hayes Term(116/169)

CP/M

- ___ 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 Utilities (406/408)
- ___ CP/M-05 ZCPR2 Doc. and Essential Utilities (407/410)
- ___ CP/M-06 Text Editor and 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

- ___ EAMN-01 Utilities II and III (220/221)
- ___ EAMN-02* Dungeon Designer and City /Clouds(180/229)
- ___ EAMN-03 Beginners Cave (Master) & Alt (181/214)
- ___ EAMN-04* Lair of Minotaur and Cave of the Mind (182/183)
- ___ EAMN-05* Zyphur Riverventure and Castle/Doom(184/185)
- ___ EAMN-06* Death Star and Devil's Tomb (186/187)
- ___ EAMN-07* Caves of Treasure Is. and Furioso (188/189)
- ___ EAMN-08* Magic Kingdom and Tomb of Molinair (190/191)
- ___ EAMN-09* Lost Island and Abductor's Quarters (192/193)
- ___ EAMN-10* Quest and Undergr City (194/195)
- ___ EAMN-11* Merlin's and Hogarth Castle (196/197)
- ___ EAMN-12* Deathtrap and Black Death (198/199)
- ___ EAMN-13* Temple of Ngurct Black Mountain (200/201)
- ___ EAMN-14* Nuclear Nightmare /Feast of Carroll (202/203)
- ___ EAMN-15* Master's Dungeon /Crystal Mountain (204/205)
- ___ EAMN-16* Lost Adventure and Manxome Foe(206/207)
- ___ EAMN-17* The Gauntlet and Caverns of Langst (208/209)
- ___ EAMN-18* Future Quest and House of Secrets (210/211)
- ___ EAMN-19* Sewers/ Chi /Slave Pits of Kzorland(212/213)
- ___ EAMN-20* Lifequest and Swordquest (215/216)
- ___ EAMN-21* Priests of Kim! and Heroes Castle (217/218)
- ___ EAMN-22* Temple of the Undead and Quest (223/224)

- ___ EAMN-23*
- ___ EAMN-24*

- Caves/Mondamen & Orb of Polaris(225/226)
- Death's Gate /Escape From Orc's Lair(227/228)

EDUCATION

- ___ EDUC-01 Education and Personal Education (76/110)
- ___ EDUC-02 Personal Education 2 and Education 3 (131/139)
- ___ EDUC-03 Math / Science and Education 4 (127/140)
- ___ EDUC-04 Advanced Math and Vectors / Motio (510/513)
- ___ EDUC-05 Albert Camus Int and Elementary 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 in French /L'Hote Quiz (47/50)
- ___ EDUC-09 French Poetry Tut and Appollinaire (51/51)
- ___ EDUC-10 Rafel Boot Disk and Rafel (55/56)
- ___ EDUC-11 Tic-Tac-Toe in Spanish /Rafel Quiz (54/57)
- ___ EDUC-12 Matute and Lo Fatal (58/59)
- ___ EDUC-13 Reading Fun (Shareware) (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 Assembler/Disassembler /Screen Editor(700/701)
- ___ FRTH-02 Go Forth Tutorial and Fig/Forth 78 (702/703)
- ___ FRTH-03 Forth and Floating Point Arithmetic (704)

GAMES

- ___ 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 /Mystery House (SIERRA)(73/517)
- ___ GAME-07 Educational Games G and H (508/509)
- ___ GAME-08 Sports and Utilities / Games (143/160)
- ___ GAME-09 Adventures /Game Room (811/812)
- ___ GAME-10 Haunted House (176/810)
- ___ GAME-11 Mostly Games /Wizard Worker I (122/161)

LOGO

- ___ LOGO-01 Logo Tool Kit and \DocS (145/146)
- ___ LOGO-02 Sample Disk and Dallas Apple Logo(147/158)

MISCELLANEOUS

- ___ MISC-01 SS (Coin Collect) and Misc. (95/115)
- ___ MISC-02 Miscellaneous (119/120)
- ___ MISC-03 Miscellaneous and Recipe Files (125/159)
- ___ MISC-04 Glaq and No Name Yet (129/175)
- ___ MISC-05 Special Databases /Jim's Data Base
- ___ MISC-06 Misc and Applesoft /AppleWriter IIe) (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 (Disk 2 of 2) (515)
- ___ MISC-11 Gardner's Assistant (518)
- ___ MISC-12 Music and Sights / Sounds (71/126)
- ___ MISC-13 Merry Christmas and Happy Holidays (103/165)
- ___ MISC-14 Graphics and Cat Graphix (108/171)
- ___ MISC-15 Print Shop Graphics (172)
- ___ MISC-16 Color Graphics for Fun/Science / Engi.(75/106)
- ___ MISC-17 Plots / Graphs and Charts / Graphs (163/166)
- ___ MISC-18 Business/Math Stat and SS (70/90)
- ___ MISC-19 SS (Investment) and SS (Business) (91/92)



- ___ MISC-20 Business A and B (104/113)
- ___ MISC-21 Investments A and B (153/154)
- ___ MISC-22 Spreadsheet A and Miscellaneous (137/155)
- ___ MISC-23** Riley's Personal Instrumentation (173)

PASCAL

- ___ PASC-01 AttachBios for Pascal 1.1 and Utilities (300/301)
- ___ PASC-02 Crypto/Graphics and Bios/Printers (302/303)
- ___ PASC-03 Misc. and Read/Write DOS / Printers (304/305)
- ___ PASC-04 Cataloger and Hires Printing/Lisp (306/307)
- ___ PASC-05 Puffin / Holiday Music -CPM-Pascal(308/309)
- ___ PASC-06 3D Education /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

- ___ 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. Utilities and One-Key DOS (41/42)
- ___ UTIL-09 Beg.Choice /Intermediate Utils. (501/502)
- ___ UTIL-10 Diversi Copy and Diversi DOS (45/130)
- ___ UTIL-11 Additions to ProDOS and Zap Utility (804/806)
- ___ UTIL-12 Utilities A (ProDOS) and File Cabinet (802/803)
- ___ UTIL-13 Imageworks (174/807)
- ___ UTIL-14 DOS 3.3 System Master and Tutorial (511/512)
- ___ UTIL-15 Visi-Trend / Visi-Plot and Calculink (93/94)
- ___ UTIL-16 AppleSoft Tutor and Picture Packer(109/117)
- ___ UTIL-17 AppleWriter Utilities (168)
- ___ UTIL-18 AppleSoft Programs and Love's Follies(144/170)
- ___ UTIL-19 "Old" New Member's Disk (134)
- ___ UTIL-20 JoyReader (Shareware) (819)
- ___ UTIL-21 Large Type JoyReader (SW) (823)
- ___ UTIL-22 DB Master V. 5 - Program Disk
- ___ UTIL-23 DB Master V. 5 - Sample Files /Docs

5.25" DISKS

(SW) INDICATES SHAREWARE



ACCOUNTING

- ___ 3ACT-01A Easy Accounting
- ___ 3ACT-02 Easy System and Accounts Rec.
- ___ 3ACT-03 Easy System and A/Cn. Ledger



III SEZP & AW TEMPLATES

- ___ 3AWZ-01 AW - EZP Bus Templates (1060)
- ___ 3AWZ-02 Checkbook Plus by Lomartire
- ___ 3AWZ-03 Accounting/Finance Templates
- ___ 3AWZ-04 Mortgage Templates
- ___ 3AWZ-05 Checkbook Templates

III BUSINESS BASIC

- ___ 3BSB-01 Pohlman Disk 01 (1017)
- ___ 3BSB-02 Pohlman Disk 02 (1018)
- ___ 3BSB-03 Pohlman Disk 03 (1019)
- ___ 3BSB-04 Pohlman Disk 04 (1020)
- ___ 3BSB-05 Pohlman Disk 05 (1021)
- ___ 3BSB-06 PPT Demo / BASIC Helps (1098)
- ___ 3BSB-07 BASIC 1.23 & Utilities / Auto Basic by Boston
- ___ 3BSB-08 Best of OnThree

III GAMES

- ___ 3GAM-01 Games 01 (1001)
- ___ 3GAM-02 Games for Kids (1007)
- ___ 3GAM-03 Cap'n Magneto-Revised 1/89 (1041)
- ___ 3GAM-04 Games 02
- ___ 3GAM-05 Star Trek

III GRAPHICS

- ___ 3GRX-01 Sketchpad and Slideshow (1012)
- ___ 3GRX-02 Fig Factory Manual (1069)
- ___ 3GRX-03 Fig Factory - Black and White (1070)
- ___ 3GRX-04 Fig Factory - Color (1071)
- ___ 3GRX-05 Raster Graphics Tool Kit (1072)
- ___ 3GRX-06 3-D Modeling Tool Kit (1073)
- ___ 3GRX-07 Chartmaker III (1074)
- ___ 3GRX-08 Graphics Utilities (1075)
- ___ 3GRX-09 Graphics Disk 01 (1062)
- ___ 3GRX-10 Graphics Disk 02 (1076)
- ___ 3GRX-11 Graphics Disk 03 (1077)
- ___ 3GRX-12 Graphics Disk 04 (1078)
- ___ 3GRX-13 Graphics Disk 05 (1079)
- ___ 3GRX-14 Graphics Disk 06 (1080)
- ___ 3GRX-15 Calendar by Bloom (1081)
- ___ 3GRX-16 Typewriter Art Disk 01 (1082)
- ___ 3GRX-17 Typewriter Art Disk 02 (1083)
- ___ 3GRX-18 Poster by Bloom (1084)
- ___ 3GRX-19 Raster Demo / Tmapio
- ___ 3GRX-20 Icon Demo / Tfont
- ___ 3GRX-21 Trixelmap Demo / Mask Demo
- ___ 3GRX-22 Tmem Demo / Trechts Demo
- ___ 3GRX-23 GIF Graphics 01
- ___ 3GRX-24 GIF Graphics 02
- ___ 3GRX-25 GIF Graphics 03
- ___ 3GRX-26 GIF Graphics 04
- ___ 3GRX-27 Grafworks 1 and 2 (SW)
- ___ 3GRX-28 Grafworks 3 and 4 (SW)
- ___ 3GRX-29 Sign by Bloom
- ___ 3GRX-30 Scanned Graphics #1
- ___ 3GRX-31 FOTOView by Lomartine
- ___ 3GRX-32 A2/A3 Graphics

III INFORMATION

- ___ 3INF-01A WAP /// SIG PD Catalog-7/1/90 (1000)
- ___ 3INF-02B New Member's Disk-7/8/90 (1005)
- ___ 3INF-03 Best of MAUG Side One (1008)
- ___ 3INF-04 Best of The Source (1A) (1009)
- ___ 3INF-05 Best of TAU (1A) (1010)
- ___ 3INF-06 Best of ATUNC (1A) (1055)
- ___ 3INF-07 Best of III's Company - 01(1A) (1015)
- ___ 3INF-08 Best of III's Company - 02(1A) (1057)
- ___ 3INF-09 The Best of Bloom (1A) (1035)
- ___ 3INF-10 Impert's Corner by Bloom (1) (1096)
- ___ 3INF-11 Phase III Conference Plus! (1) (1047)
- ___ 3INF-12 Best of Ottalini - Disk 01 (1) (1040)
- ___ 3INF-13 Best of Ottalini - Disk 02 (1) (1058)
- ___ 3INF-14 Best of Ottalini - Disk 03 (1) (1059)
- ___ 3INF-15 Best of Ottalini - Disk 04 (1) (1087)
- ___ 3INF-16 Best of Pair BBS (1)
- ___ 3INF-17 Reviews by Bloom (1)
- ___ 3INF-18 III Cheers (Boot and Program)



- ___ 3INF-19 III Cheers (Issues 1 and 2)
- ___ 3INF-20 Best of Ottalini-Disk 05
- ___ 3INF-21 Three's Company BBS
- ___ 3INF-22 Best of Bloom-Disk 02
- ___ 3INF-23 WAP 3 SIG PD Catalog
- ___ 3INF-24 Best of ATUNC-Disk 02

III MISCELLANEOUS

- ___ 3MSC-01 File Cabinet / Sort Directory (1046)
- ___ 3MSC-02 Contributions - Disk 01 (1A) (1053)
- ___ 3MSC-03 Contributions - Disk 02 (1A) (1061)
- ___ 3MSC-04 Contributions - Disk 03 (1A) (1086)
- ___ 3MSC-05 Le Grayhaven Cookbook Plus! (1A) (1097)
- ___ 3MSC-06 Double Boot (1099)
- ___ 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 (1)
- ___ 3MSC-12 Apple II Boot Disk
- ___ 3MSC-13 French tutor
- ___ 3MSC-14 Italian Tutor
- ___ 3MSC-15 Contributions - Disk 04 (1)
- ___ 3MSC-16 Bowling Grid/Grade
- ___ 3MSC-17 Floppy Book by Shapiro (1)
- ___ 3MSC-18 Music-Music-Music

III PASCAL

- ___ 3PCL-01 Pascal 1.2
- ___ 3PCL-02 Pascal 2.0 Compiler/TookKit
- ___ 3PCL-03 Pascal ToolKit #2/#3
- ___ 3PCL-04 Pascal Pronto Debug/SANE
- ___ 3PCL-05 Pascal SANE #2/#3
- ___ 3PCL-06 Pascal SOS I/O/ExerSOS (1)
- ___ 3PCL-07 Pascal Utilities: PutDemo/PutLib
- ___ 3PCL-08 Pascal Wade's Patch/PCode Dis
- ___ 3PCL-09 Chaos Programs in Pascal

III REPAIRS

- ___ 3REP-01 Apple 3 Diagnostics - Disk 01 (1013)
- ___ 3REP-02 Apple 3 Diag - Block Edit (1094)
- ___ 3REP-03 Repairing your Apple III (1A) (1088)
- ___ 3REP-04 Brain Surgeon (1089)
- ___ 3REP-05 Disk Map (1090)
- ___ 3REP-06 Disk Check and Pro Health (1091)
- ___ 3REP-07 Vindicator and Catalyst Fixer (1092)
- ___ 3REP-08 (Block Editor and Block Byter 1093)
- ___ 3REP-09 Jeppson Disassembler (1095))

III TELECOMMUNICATIONS

- ___ 3TEL-01 Telecom - Disk 01 (1A) (1063)

- ___ 3TEL-02 Telecom - Disk 02/Access III (1064)
- ___ 3TEL-03 Telecom - Disk 03 (1) (1065)
- ___ 3TEL-04 Kermit III (1066)
- ___ 3TEL-05 XModem III (1067)
- ___ 3TEL-06 TerminALL Manual (1032)
- ___ 3TEL-07 TerminALL(1033)
- ___ 3TEL-08 WAP TCS Disk (1)

III UTILITIES

- ___ 3UTL-01 System Utilities and Data (1004)
- ___ 3UTL-02 Apple II Emulation - Disk 01 (1A) (1043)
- ___ 3UTL-03 Apple II Emulation - Disk 02 (1A) (1044)
- ___ 3UTL-04 SOS Drivers - revised 9/90 (1A) (1052)
- ___ 3UTL-05 Basic Boot Disk(1014)
- ___ 3UTL-06 Basic Utilities - (1A) (1002)
- ___ 3UTL-07 Programmers Power Tools (1A) (1056)
- ___ 3UTL-08 Applecon (1016)
- ___ 3UTL-09 Diskmaker and Appleseeds (1A) (1045)
- ___ 3UTL-10 Basic XT and Basic Utilities (1A) (1022)
- ___ 3UTL-11 The Retriever (1023)
- ___ 3UTL-12 Power Print III (1A) (1024)
- ___ 3UTL-13 Disk Window III (1A) (1025)
- ___ 3UTL-14 Source Window/Data Window (1) (1026)
- ___ 3UTL-15 Powercat and Basic XRF (1) (1027)
- ___ 3UTL-16 Basic Extension (1A) (1031)
- ___ 3UTL-17 Power Keys DM Plus (1A) (1034)
- ___ 3UTL-18 RAM+3/Two-n-Fro III /128K (1036)
- ___ 3UTL-19 Basic GTO (1051)
- ___ 3UTL-20 Custom Font Manual (1037)
- ___ 3UTL-21 Custom Font (1038)
- ___ 3UTL-22 Fonts - Disk 01 (1039)
- ___ 3UTL-23 Disk III Backup by Bloom (1011)
- ___ 3UTL-24 Gucspar by Bloom (1042)
- ___ 3UTL-25 ACCIDIF by Bloom-4/88 (1028)
- ___ 3UTL-26 Mail List Manager Manual by Bloom (1068)
- ___ 3UTL-27 MLM Utilities by Bloom-Disk 01 (1048)
- ___ 3UTL-28 MLM Utilities by Bloom-Disk 02 (1049)
- ___ 3UTL-29 MLM Utilities by Bloom-Disk 03 (1050)
- ___ 3UTL-30 AppleWriter to 3 EZP by Bloom (1085)
- ___ 3UTL-31 Pascal Menu Maker (1054)
- ___ 3UTL-32 Catalyst Release
- ___ 3UTL-33 Reformatter III
- ___ 3UTL-34 Custom Font Demo & Font Bib PD

III WORD PROCESSING

- ___ 3WDP-01A AppleWriter (1006)
- ___ 3WDP-02 Footnote III (1003)
- ___ 3WDP-03 InkWell Manual (1029)
- ___ 3WDP-04 InkWell Program (1030)
- ___ 3WDP-05 AppleWriter Demo
- ___ 3WDP-06 Script 3 & Pascal Text Editor

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APPLE III DISKETERIA

by David Ottalini, Apple III SIG Co-Chairman

The PD coffers are full this November, III SIGers so lets get right to the disks! 3INF.29 is our long-promised "How Do I?" Disk. It contains a number of articles on how to do all kinds of things with your III. The material comes from all over, but is on just one disk to provide as much help as possible. And if there's enough material, I'll consider doing another disk (drop me a note and let me know what you need.) Please note this number leaves a three disk gap in our INF series. Those slots will be filled by the remaining "Best of ATUNC" disks. I continue working on them, but they take lots of time to format properly for our Menu.Maker program.

Disk 3INF.29

Side One

- USE.A.MOUSE :Information on using a Iie Mouse on a III.
- APPLE.TO.IBM :Converting files from SOS to MS-DOS.
- BATTERY.BACKUP :How to build a battery backup for your III.
- CURSOR.MOD :How to modify your Cursor III Joystick to play II games.
- DELETE.KEY :One way to add a delete key to your Apple III.
- DRIVER.CONFIG :Configuring your SOS.Driver file.
- TURN.IT.ON :What happens after you boot your III.
- CLEAN.DRIVES :Cleaning your Disk Drives.
- ALIGN.A143 :How to align a MicroSci A-143 Disk Drive.
- RAM.TEST :Testing your III's RAM.
- UPGRADING.SOS :Upgrading to 1.3 version of SOS.

DESTRUCT.KEY :Another way to add a delete (destruct) key for your III.

Side Two

- A3.INFO :Basic Information about the III.
- CLOCK.KIT :Add a clock to your III.
- EMULATION.TIPS :Modify your Emulation Disk to reset to Monitor.
- FILE.RECOVERY :Recovering damaged files.
- HARD.DISKS :How to take apart a Profile Hard Disk.
- LASER.PRINTERS :How to use a Laser Printer with your III.
- MAC.N.BAK :Transferring files from the Mac to the III and back.
- POWER.SUPPLY :Trouble-shooting Power Supply problems.
- SERIAL.CABLE :How to make a serial cable for your III.
- SOS.DRIVER.FILE :Al Bloom's tutorial on working with the SOS.Driver file.
- SOS.DRIVERS :More on modifying your SOS.Driver file.
- TELECOM.INFO :Everything you need to know to get into telecommunications.
- UPGRADE.256K :How to upgrade from 128 to 256k.
- UTILITIES :Little known utilities in System Utilities.
- VIDEO.HELPS :Getting Composite Color from the III.

We also are offering six new Pascal disks this month. Please note that all require extensive knowledge of Pascal to use. 3PCL-10 and 11 are two double-sided disks that provide the source code for Daryl Anderson's Power Keys DM+ (Disk 3UTL-17). If you use this great background

utility and ever wished you could modify it, here's your chance! 3PCL-12 is called MacStuff. It is a Pascal Intrinsic unit designed to give your III more of a Graphical User Interface. Former III SIG CO-Chairman Tom Bartkiewitz worked with this one-time commercial offering a bit and came away somewhat unimpressed. But take a look and see what you think. There is currently NO documentation on disk, but I am looking for a volunteer willing to transcribe the manual to disk. Finally, disks 3PCL-13, 14 and 15 are some of the nuggets we got from a recent donation by Joe Dobrowolski (of Apple Users Group International) in Guam. I call them "David Craig Disks 1,2 and 3" since the material on these disks were all placed into the PD by (yes, that's right....) IIIer David Craig. He wrote to Joe back in 1988 to say that:

I hope the files that I have sent can be of some use to other members... Most of the files are Pascal programs with a smattering of assembly here and there. The best program, in my opinion, is PPrint (PrettyPrint), a pretty printer aimed at producing professional listings of Pascal programs. For Pascal enthusiasts this program can be very useful. For your benefit a description of the major files follows:

DISK 3PCL-13

Side One

- MUSIC: Music playing code from the Apple [I Programmer's Aid # 1 collection
- MUSIC.TEST: Tests the MUSIC routine by playing several scales
- SOS.STATE : Returns SOS's inter-



nal status

SOS.HEART : Tests SOS.

STATE STR2REAL : Simple program for converting string numbers to REAL values, is very good at testing the string for validity.

Side Two

ASMFORMAT : Formats assembler listing files so that all back-patches are correctly patched. Nice utility for the III assembly people.

FILEDIV : Divides large Pascal text files into smaller files.

NINE2ONE : Interesting number game whose purpose is to arrange a sequence of the first 9 digits (1 to 9) into a pattern which when processed generates a desired value.

TIMER : Digital clock for the III. Great for the III owner whose watch has broken.

WEEKDAY : Day of the week calculator given any date.

DISK 3PCL-14

Side One

PPRINT: Pascal source code pretty printer utility that supports highlighting of Pascal's reserved words. Allows the user the ability to define words which are also highlighted.

Side Two

UTS: Pascal token search unit which is used by PPRINT. Useful for parsing any Pascal program.

DISK 3PCL-15

Side One

EMUL.ROM : Disassembled source code listing for the Apple II Emulation ROM for the III.

SAVAGE : Floating point benchmark program which tests the accuracy of the transcendental functions.

UDEBUG : Runtime debugger which uses an external terminal. Used by most of my programs since I rarely write a program which runs correctly the first time.

USINCOS : Nice Pascal unit for generating the sine and cosine values very quickly.

| | | | | | |
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Apple II/III

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Beginners: M
II/II+: A / D / M
III: N / J / AL / AM / AN / AP

Ie Iic: D / H / ?

GS: A / C

Repairs: A / D / F / M

Purchases: A

Educators: M Graphics: C / U

Interfaces/Interoperability: D / U
(Apple to MS/DOS and vv.)

Hardware

Apple II/II+: D / M

Apple Iic Iic+: M

Apple Iie: D / U

Apple IIGS: A / C / E / Y / AB / AC

Apple II: N / J

Apple SSC: S

Modems: B / D / L / U

Printers:

Apple: G / U / X / AJ

Other: G / U / X / AJ

Hard Drives:

Corvus: F / U

Sider: A / D / Q / U

CMC: R

CMS: ?

Hyper-Card: ??

Scanners: C / U Apple II/III
Software

AppleWorks: C / D / E / T / U / AQ

AWGS: Y

TimeOut: C / L / P / R / U / AH /
AQ / AR / AS / AT / AV

Word Processing: ?

Data Base: C / P / U / AK

SpreadSheets: C / D / X

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