

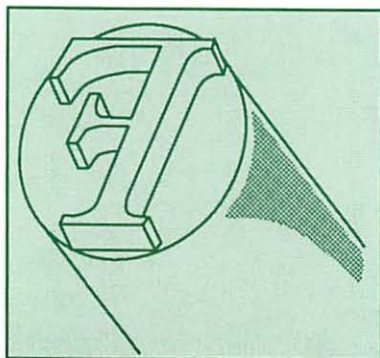
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The Journal of Washington Apple Pi, Ltd.

Volume 12, Number 3

March 1990

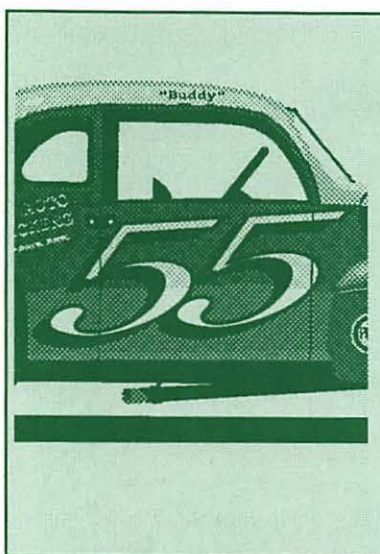


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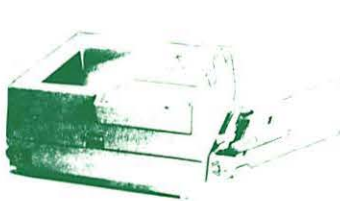
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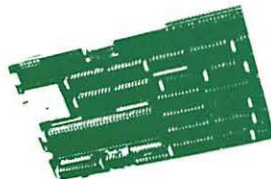
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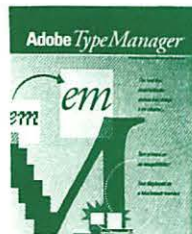
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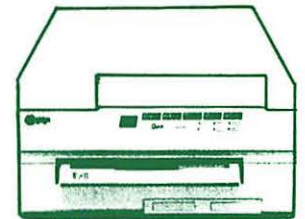
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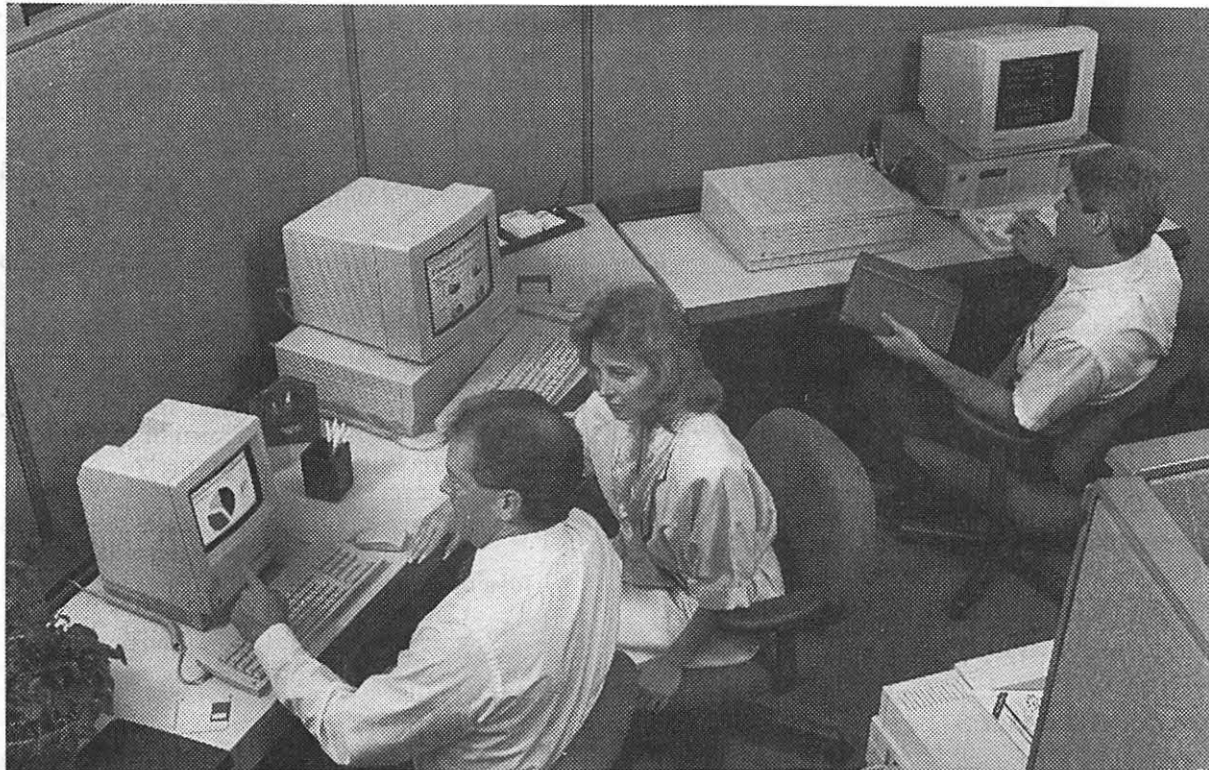
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Changing Times

Rolling heads

The commotion at the helm of Apple seems to have abated not at all. Lots of people have left to pursue other opportunities, the most recent of whom may or may not be Jean Louis Gassée, although there is so much dust in the air, it is hard to know just *what* is happening.

The rumor is that much of this restlessness has to do with the question of what to do about the "low-end" Mac, about which so much has been written recently and so little known. Will we see, some day, a new, inexpensive and technologically sophisticated version of the Macintosh or will we just see cheaper Mac Pluses? Or none of the above (which seems to us to be an embodiment of the corporate Death Wish)? But what will all this do to the Apple II line, whose owners and fans seem ready to take to the barricades at any suggestion that support for their computers is dwindling?

Some day, Apple will discontinue or simply walk away from the Apple II line. It will have to—in 1991, 2001 or some other year. That's the way the system works. In the same way, the Macintosh will eventually fall victim to the inexorable progress of new and more powerful ways of doing computation. We all hope and assume that Apple will continue to play a role in this evolutionary process, and that its upheavals of management are symptomatic of the perhaps necessarily untidy ways that we struggle upward in the quest for a yet more responsive set of tools for work, fun or just for the hell of it. We just wish that we felt a little more comfortable about the situation in Cupertino today.

We are well aware that this is a sensitive subject, just as we are aware that we have no particular line on what is Really Happening.

This no doubt comes as a shock to some, but there it is... If someone wishes to communicate his or her own views on this subject, we will be happy to make space available on this page for that purpose at a later date. That, we seem dimly to recall, is the way that learning progresses. At least that is what Hegel said, dint he?

On Perceptions and Reality...

Elsewhere in this issue (this is a roundabout way of saying that you should turn to page 10) there is printed a draft set of rules governing conduct of WAP members who do business with the Pi. We hope that you will read them, that you will think carefully about them, and that you will let us know your thoughts on the subject.

WAP is no longer a small operation and we all know that it has been plagued by a certain amount of—shall we say bad feelings—during the past year. One of the legacies of that era is a certain residue of concern that, in an organization of this size, some sort of set of rules ought to be in place, governing how we behave in our personal and financial relationships to the Pi. The Draft Standards of Conduct represent an effort to define those relationships, and their drafters are to be commended. No doubt the draft can be improved; very little in our experience cannot be improved. But the effort is to get everything out on the table, in full view and available for any member to review.

We understand that this proposal has been greeted by a sense of outrage in some quarters—that they are making allegations about the ethical standards of members who have been dealing financially with the Pi in the past. That theory seems considerably off

the mark, in our view. It is precisely to avoid any such allegations of conflict of interest that these rules have been drawn up.

Please—take a look at them and let us know what you think. Drop a line to us at the office and tell us if you think we have gone too far, not far enough or whatever.

In some cases sunshine can be a healing force.

Oops...

Funny thing happened last month on the way to the airport...

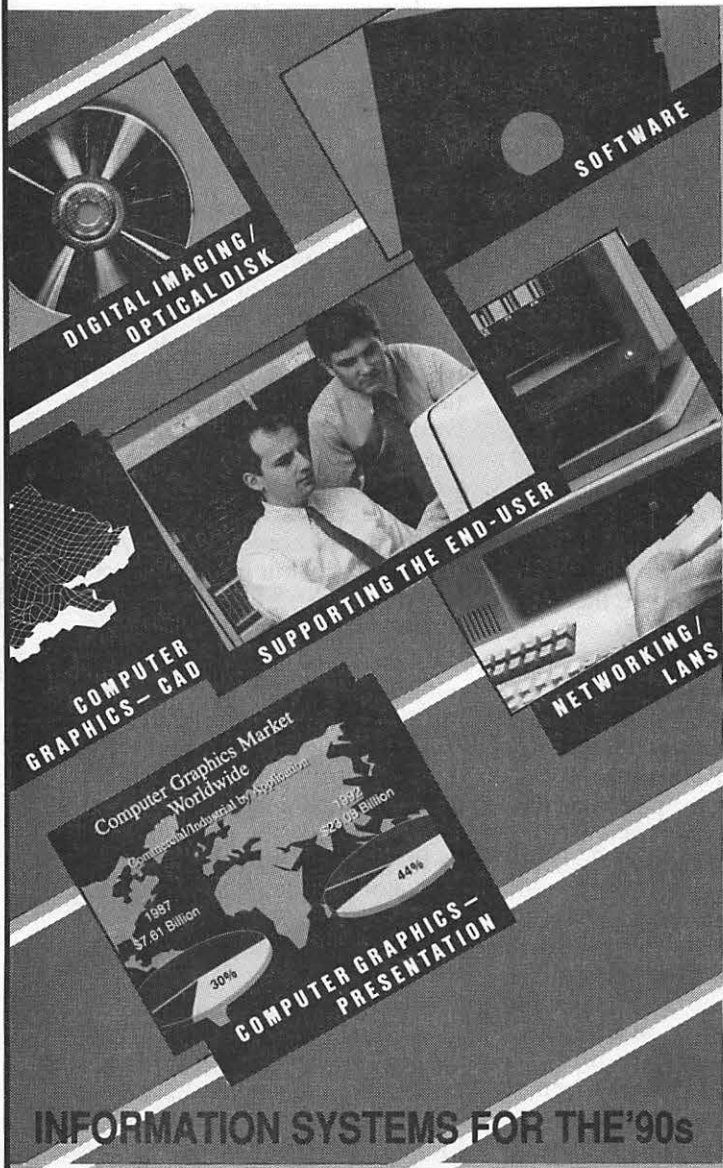
Somehow or other, Ralph Begleiter's installment of MacNovice got chewed up last month, and those of you who were looking for enlightenment about file conversion are probably wondering where it all went. So, it turns out are we. Nothing daunted, we are trying again and maybe the second time will be the charm. We would apologize (have, in fact already apologized) to Ralph. We would promise that it will never happen again, but in an imperfect world, we have learned better than to make such commitments.

At the time, we were rushing out the door on the way to Moscow for a conference on the environment (a conference that introduced the Macintosh desktop to a number of startled and delighted Russians, as it happened) and were unable to fix the problem long distance. As a matter of fact, doing anything long distance in Russia turns out to be a nontrivial task, but that's another story.

The last time we saw Ralph, come to think of it, he was on TV in Moscow, holding a microphone and talking knowledgeably about the continuing shakeup in the Kremlin. Perhaps it is time to produce a Russian version of the Journal... (except for the fact that we tend to be stymied by the Cyrillic alphabet).

—fmp

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The President's Corner

by David Morganstein

Let's look into the crystal ball. I see two futures for Apple Computer coming through the mist shrouded tomorrow. In the first one, Apple continues to show innovation and becomes more responsive to the market. In this future, Apple gains market share and remains a leader in personal computers. The innovation appears in several forms, most notably a low end Macintosh that supports color and runs Apple II software. This machine is priced to be purchased by individuals for use in the home and by schools to continue building on Apple's success in the educational market. This future also contains a 'true' portable Mac. A lighter weight, cheaper computer with a back-lit screen. It does not have a heavy battery which, although lasting for a long time, is so heavy that no one can carry it around and use it in a portable mode. What is more, the back-lit screen can be used in low-light conditions, such as on an airplane, where portability really pays off.

There is something else coming through. Ah yes, I see Apple standing proudly behind a quality reputation and extending its current 90 warranty to a full one year. No, wait, I am wrong. Apple moves ahead of its competition by offering its loyal users a two year warranty, stating unequivocally that it offers a quality product.

Unfortunately, the picture is not perfectly clear. There is another future in the crystal ball. And we know what it is. It leads down a path of ever reduced market share for Apple. It reveals a dead-end for Apple's most loyal and oldest

supporters, its Apple owners. It contains an Apple Computer boastfully displaying an excellent System 7 enhancement but to ever fewer users. In this future, Apple's competitors finally get their windows open and in rush the many computer users who have been unwilling to pay Apple's excessively high prices for more computer than they need or can afford.

Which future is in store for us? Only time and Apple management decision will tell. If you want to affect that future, write a Dear John letter to John Sculley. Tell him what kind of Apple computer you want to see and what kind of warranty you feel you deserve.

Garage Sale. Although postponed from Dec., the January Garage Sale was a definite success. Our bi-annual tribute to the Apple II's humble origins found almost five hundred members in attendance. I'd like to thank the many people who helped to make it a success. If you've never been to one, plan to attend the next one to be held in the Spring.

Computers for Schools. We are approaching the \$10,000 mark in Giant Food Store receipts. Many thanks to those who have helped out and another plea for help from those who have, until now, been unable to assist. If you buy at Giant and don't need the receipts for your own kids schools, please save them and send them in or drop them by the office.

Future of the PI. On the third Saturday in April, we will hold a Future of the Pi meeting. We are seeking your thoughts for topics of

discussion. Among these are how we best serve our diverse spectrum of hardware owners. Do we need to talk about the amount of club business you want to see in the journal? Or whether we should have separate journals for separate hardware groups. What's important to you? In years past, this meeting was held annually as a way of seeking out members' input on non-computer topics of importance to the WAP.

May Picnic. In May we are planning on a picnic. We hope you will consider attending. We think this would be a way to get to meet more members and perhaps find ways of putting volunteer time to work helping the club. Exact time and location will be announced next month.

Elections. Believe it or not, it is time to think of elections again. They will be held in the Spring, just a few months away. For now, we are glad to have Jon Hardis, Bruce Field and Mike Hartmann on an Election's Commission to do the planning. We also need a nominating committee. If you would like to run for a position, please contact the office.

Volunteers Needed: As we have said many times. The WAP grew to its present size and reputation on the strength of its volunteers. We need a few hours of your time. If you would like to help, here are a couple of ways you can.

Membership Directory. If you have publications skills and can help us put together a membership directory, step right up. We have not issued a new directory for several years and are in need of doing so.

Help at the office. If you have a few spare hours each week, please drop by the office and give us a hand. We can ALWAYS use a few spare ones. There are mailing and stuffings and a variety of very non-technical things that need doing. The office staff love to meet new faces and certainly new hands. Please come by and offer some help. The best approach is to call in first and find out if there are a preferable time for utilizing your energy. In advance, thanks! 🍏

Draft Standards of Conduct for WAP Members

<Preamble> It is recognized that many members of WAP are employed in, or are otherwise financially associated with, computer related companies and enterprises. The club and its members profit greatly from the association with such computer-literate Apple enthusiasts since they are able to share in the wealth of knowledge that these members possess. The fact that the club association may also help the computer-employed member is a desirable quid pro quo. However, it is possible for conflicts to occur between the interests of the member and that of the club, and these rules are promulgated to attempt to reduce and mitigate these potential conflicts.

It is recognized that WAP exists to serve its members, and all of the officers, directors, employees, authors, editors, chairpersons and others who are given a position of authority, responsibility or platform owe a duty to the members to be open, fair and honest in their dealings with the club. These rules are promulgated to attempt to generate these attributes in all such dealings.

<1. Official Office:> All officers, directors, employees, appointed office holders, SIG Chairpersons and candidates for such office shall disclose to the club any employment, remuneration, stockholdings, royalties or other financial arrangements which could place such member in a position where the interests of the club could conflict with the financial interests of the member, OR where those financial interests could bias or favor or disfavor the opinion, decision or vote of the member in any club matter. It is NOT IMPROPER for a club member to hold such office while having such a potentially adverse interest, but it must be disclosed to the club. No member

may vote on a matter of official business when that member has a financial interest in the outcome of the vote.

<2. Authorship and Reviews:> All members authoring a club article, review, publication or presentation, or having editorial review over same, shall disclose in a headnote or footnote to such article, review, publication or presentation all employment, remuneration, stockholdings, royalties or other financial arrangements which have any association with the context or subject of the article. It is NOT IMPROPER for a club member to author, review, edit or present while having such a potentially adverse interest, but it must be disclosed in the review. No one should communicate with a supplier or software manufacturer regarding the supplying of hardware or software for purchase, review or test for WAP unless that member is authorized to do so.

<3. Compensation of members:> The club will maintain a list of all members who receive more than \$100 remuneration or compensation for any one activity, service, product or event OR receive more than \$500 aggregate in any one year for all such activities combined. The list will be maintained in the club office for inspection and review by any member.

<4. Official business:> A member should avoid using his or her official club capacity in a manner to advertise or promote a product, activity or service in which the member has an interest, however it is NOT IMPROPER for a club member to describe or demonstrate such a product, activity or service when the financial interest is disclosed and the product, activity or service in which the member has an interest is the proper subject for such a

presentation.

<5. Fellowship:> A club prospers in an air of collegiality and congeniality. All members should at all times strive to assist, understand and to accommodate the other club members. When policy disagreements arise it is the issue which should be aired and debated in an attempt to achieve understanding and resolution. Personal attacks on a member and name-calling serve only to generate bad feelings and ill will, not only with the person attacked but with everyone subjected to such poison. members should avoid personal attacks on fellow members.

<6. Club property:> Any club member receiving property in his or her official capacity as a club member, employee, officer, reviewer, etc. should log in such property with the club office, and should appraise the office of the disposition and use of the property. Any club member checking out property should log it out and back in and account for the disposition of the property while in his or her possession.

<7. Official communication:> Club business must be conducted in a proper manner by those in proper authority. Only an officer of the club, or his specific designee, should communicate with anyone regarding official club business.

<8. Other communication:> Any member may hand out or display non-commercial literature pertaining to club business at a club activity, PROVIDED HOWEVER, that such does not violate the rules of the host organization, and provided that such literature does not purport to be official club literature or to have official content, unless it is approved by the presiding officer of the meeting.

January Directors' Meeting

EXAMPLES OF PROPER AND IMPROPER CONDUCT

1. It is not improper for an owner of a business selling Macintosh accessories to be a director of WAP if the relationship is disclosed to the club at the beginning of his candidacy for office.
2. It would be improper for the above mentioned director to vote on who should be the supplier of two hard disks the club is purchasing if one of the potential suppliers is his store.
3. It is not improper for the above mentioned director to offer the hard disks to the club at a special price, so long as he does not vote on the issue
4. It is not improper for a club member who is an employee of Microsoft, Inc to review Word 4.0 for the WAP Journal, so long as his employment is disclosed in this article.
5. It is improper for a SIG chairman to mail flyers advertising his new software product to the mailing list of the SIG, however it would not be improper for him to demonstrate his new product as a presentation at one of the SIG meetings.
6. It is not improper for a member to hand out a handbill at the general meeting stating his views against a new meeting date adopted by the Board of Directors. It would be improper for the handbill untruthfully to state that the Board reversed its decision and the meeting would be on the old date - this would appear to be an official action of the club.
7. It is improper for a member to call a software manufacturer and represent that he or she will review a product and write an article for the WAP Journal on that company's product if the company will send a copy of the product for review, UNLESS such is authorized by the WAP review coordinator.

The Washington Apple Pi Board of Directors met on Wed. January 10 in the Pi office.

Jody Joy of the Desktop Publishing SIG discussed plans for resumption of the SIG's seminar series. Discussion followed on issues of fees to be charged, payment terms for instructors, and disposition of revenues. The Board approved an interim plan, under which seminars can begin, with additional matters to be discussed by an Ad-hoc Committee of Board members and SIG Officers. Seminars will be offered for \$25/class for Pi members and \$35/class for non-Pi members. Instructors will receive 60% of the revenues collected for a seminar, exclusive of any charges for materials. All check will be made out to WAP, and deposited in WAP's bank account. Nancy Pochecko will receive a summary of the attendees and revenues for each class, and will be responsible for remuneration of instructors.

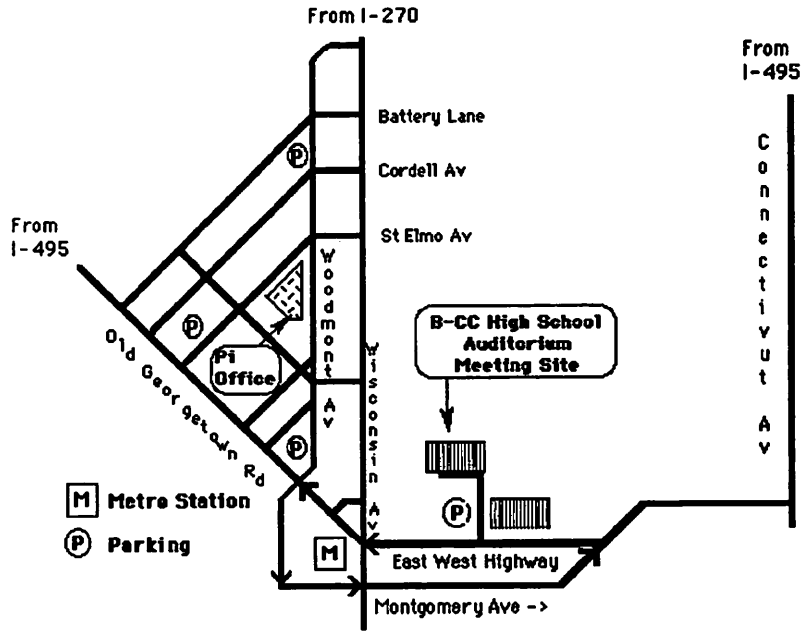
Plans were announced for a "future of the Pi" meeting, to be held in the spring. Plans were announced to establish an Election Procedures Committee to review and draft the rules for the May-June election period.

Recent non-renewals will be contacted by letter and/or telephone to ascertain their reasons for leaving the Pi, and to encourage them to rejoin.

The Board approved the purchase of a removable cartridge hard disk drive for storage of membership database files.

A draft set of Standards of Conduct guidelines for Club officials and members was reviewed. They will be published in the Journal for member comment this spring.

The publication and mailing of the Journal was discussed. Journals are currently being sorted and bundled by McArde Printers, and are being sent by 2nd class mail. Plans are to have Journals received by members one week in advance of each month's meeting (This should be accomplished by the March issue). Plans are being made to hold the Feb. membership meeting at Bethesda-Chevy Chase HS. Efforts are underway to re-secure USUHS as our regular meeting site



Annapolis Slice

At our general meeting January 13, Telecommunications was the program ably demonstrated by Ray Settle, Pres. and Seth Mize, Vice-Pres. About 25 people enjoyed the presentation of what happens when you log onto a Bulletin Board Service. Seth had "captured" his recent log-ons from CRABBS (Chesapeake Region Apple Bulletin Board Service) and WAP's TCS. Through a set-up involving a view screen, the audience was able to see the actual line by line procedure of logging on, going to the file section, etc.

At the MAC Sig meeting on January 18, carrying telecommunications even further, a representative from PRODIGY, Inc. demonstrated the Prodigy bulletin board service. The 12 who attended the meeting were all interested and many took applications which allowed them 4 free months of service before the monthly billing of \$9.95 would start. In addition to the attractive services offered (travel info; stock listings; automatic teller service, and many others) one of the most appealing features of this service is that there are many telephone lines to allow instant log-on and you can stay on as long as you wish.

The Apple Sig meets an hour before the regular meeting on the second Saturday of the month. The subject in January was telecommunications to tie in with the theme of the month. Craig Contardi, Ray Settle, and Seth Mize worked together on presenting the special features of bulletin Board services.

The February 10 meeting will present a program on "Taxes". Louise Tanney will present 1040 Works to the Apple Users and Steve Toth is expected to present MacInTax to the Mac owners.

CRABBS users are increasing by the day, mainly due to increased membership. We are up to 106 members. Ray Arndt, the Sysop, is pleased with the enthusiasm. Phone number is (301) 553-6929.

But Membership Chair, Bill Derouin, reminds the 43 that have not renewed their membership and they will be given until the end of February to renew. Then the services discontinue. So hurry up and renew!

Scheduled for March is a demonstration of Tutor Tech. This meeting may be a date and place change so do check with one of the officers before attending.

The new officers for 1990 are: Ray Settle, Pres; Seth Mize, Vice-Pres; Kay Cave, Sec; Bill Derouin, Treasurer/Membership. The past President Chuck Schindler has taken over the responsibility of putting out the monthly newsletter, "The CrabApple."

General meetings are held on the second Saturday of each month at the Anne Arundel County Community College, Arnold, in the Lecture hall of the Careers Building. Executive board meetings are open to all members and are held the Friday following the general meeting at the secretary's house at 7:30 p.m. (Kay Cave, 1715 Woodlore Road, Annapolis).

That's all the news from Crabtown. 🍷

Columbia Slice

by Tim Childers

Our January meeting covered the topic of Income Tax preparation software. It was our first meeting using the new format of separate Mac and Apple II presentations occurring simultaneously. I think it went well but February will be a little more difficult to adapt to the new format since we will be covering Music and MIDI. Hopefully we will get the large room, not the small one! As usual we will meet at 7PM in one of the conference rooms at the Howard County Board of Education Building on Rt. 108 West on the first Thursday of the month.

On the Macintosh side our club accountant Neil Gordon (who is a CPA) gave an excellent demonstration of MacInTax. To demonstrate the program he stepped us through

the preparation of General Manuel Noriega's tax return. It was so easy we finished the meeting early even though he explained every step of the way and provided a running commentary on where these large figures might be coming from! MacInTax is more than just a spreadsheet programmed to perform all the calculations required for the 1989 tax forms. It actually is an exact copy of the actual form that you fill out on screen; it performs all the calculations for you and prevents or corrects many of the common errors you might make trying to follow the 'simplified' tax rules. The program also includes context-sensitive help. Double click on any of the lines on a form or schedule and it pops up a window with the exact paragraph that applies to that line from the official tax return preparation guide published by the Government. Sure, the rules are given to you on paper when you get your blank form from the IRS but MacInTax is smart enough to take you to the applicable rule when you have a question. (Now if only the IRS would write the rules in English...) MacInTax will actually print the completed form on blank paper, even on an ImageWriter. This form is completely readable and is accepted by the IRS; just sign it and mail it. (Ed.: And make a separate backup on a floppy!) Several accounting programs can export data in a form usable by MacInTax, and MacMoney files can be imported directly.

On the Apple II side Tom Cowley gave a demonstration of a home accounting package called Quicken. This package is also available for the Mac, the Apple IIGS and for MS-DOS machines. The user interface is different for each machine but they all offer a simple, easy to use bookkeeping and check writing package that is modeled on a simple checking account. The program allows you to set up many different accounts and is suitable for home or very small businesses which do not have large inventory problems. I even know a veterinarian who has a staff of at least 4 who says it does all he needs. Tom demonstrated how to

set up categories of expenses and income which match key lines on your income tax form. At the end of the year, if you kept your books current, your taxes should be much simpler to fill out. There was some discussion by other members on tax preparation software they had used and someone promised to bring in some AppleWorks spreadsheet templates for the next meeting which automate the 1989 tax forms.

In addition Tom Cook gave out updates of Beagle Brothers software to registered owners who brought in their original disks. Tom is now an official 'Beagle Buddy' and will have authorized copies of the latest versions of Beagle Brothers software available at each meeting. So if you are a registered owner and haven't gotten the latest upgrades bring your original disks and some blanks to the next Apple II meeting.

For the Mac programmers in the group we are currently trying to coordinate a meeting sometime with Kurt Schmucker of Apple Advanced Technology Division. He is the author of a book on Object-Oriented Programming for the Macintosh and we have several members who are interested in hearing him speak about the work he is doing for Apple (or just programming the Mac in general).

AVSIG

by Steve Sachs

On Wednesday, January 24, the Art & Video SIG met at Chris St. John's studio in Virginia to take a look at some of the Mac II's state-of-the-art animation technology. Through a combination of basic color painting bit-mapped movement, basic and accelerated animation, synthesizers, color scanning, still video technology and laser disc technology we watched patiently as Chris caused things to move that don't usually move. The various processes for graphic art work becoming ani-

mated video, for example, are both complex and fascinating, but Chris showed the 20 or so visitors just how much fun this hard work can be. Airplanes curled through the blue sky and dogs walked past fire hydrants. Life Cycle Technology Corporation is located in Fairfax, Virginia, and basically transfers a computer generated product to film, disk, or video tape adding sounds and music to create a product which has the look and feel of film but allows the viewer and user the opportunity of interacting with it. The user is given the ability to control presentations by stopping and starting wherever and whenever he or she wishes for discussion and instruction. ☼

EdSIG

by Phil Shapiro

In response to popular demand, the educational special interest group (EdSIG) held an organizing meeting on January 18, at the Pi office. A small crowd of enthusiastic Pi members showed up, representing a nice cross section of teachers, parents, and software developers. Pat Kirby, who couldn't join us in person, participated via speaker-phone.

The meeting started off with a spirited discussion of math programs. Comparisons were made between various popular titles. Discussions took place on how to incorporate software into the standard classroom math curriculum. At one Montgomery County middle school, a separate math computer lab has been set up, with twelve Apple IIGS's. Students can then work independently on their math skills, outside of their other computer-related activities.

Bill Wydro then spearheaded a discussion of a number of simulation programs he has found to be valuable. Bill had some interesting things to say about a program called "The Voyage of the Mimi." This Apple II program is actually a part of a larger package, complete

with videotapes and workbooks. While this software sounded quite exciting, apparently the complete package is priced at several hundred dollars—dismayingly beyond the reach of most home users!

Other programs recommended by Bill include Geoworld and Zoo Builder. Geoworld is a geological simulation where you have to hunt for minerals, and make the same types of decisions as geologists make every day. As with any simulation, you have to carefully analyze your situation so as to maximize all the trade-offs.

Zoo Builder is a program published by National Geographic that actually gets children to design the layout of a zoo, complete with restaurants, restrooms, and animal hospital. At the end of the game you are rated on the effectiveness of your design. Zoo Builder also comes with a pamphlet describing the diets and habits of the various animals. In order to get the highest points, you have to consult the pamphlet while making your decisions.

Carol Hyatt then presented the meeting with information about a computer coordinator conference being held by the Maryland Instructional Computer Coordinator's Association (MICCA). The conference will take place on March 1 and 2. For further information, contact Judy Mauriello, Anne Arundel County Public Schools, Annapolis, Maryland. (Phone number not listed on registration material.)

Following the discussion, the group gathered around the office's public access Apple IIGS and demonstrated some educational public domain programs. Since the evening was getting late, we all agreed to continue with some hands-on demos next meeting. The next meeting will be Thursday, February 22, at 7:30 p.m. at the Pi office. EdSIG will be meeting regularly henceforth on the 4th Thursday of every month, at the same time and place.

The last item of business on the agenda was the election of a chairperson for the group, the result being myself. For further

Apple maven with a need to work in the IBM world, PC Transporter could be the way to go.

There followed a lot of discussion about the movement of files back and forth between the MS-DOS and GS worlds, with the occasional side trip through Mac-land. WordPerfect is especially helpful in this regard, since versions exist for MS-DOS and the IIGS, and their files can be readily exchanged (preserving all formatting) via modem, direct computer-to-computer link, or within a PC Transporter-equipped IIGS. The PC Transporter also comes with a utility called Transfer.EXE which facilitates the transfer of files between the MS-DOS and ProDOS environments.

Fred's presentation was followed by a Q&A which focused on AppleWorks 3.0, patches thereto, TimeOut enhancements thereto, and the various upgrades coming from your friendly neighborhood Beagle Buddy. Disks full of music for SoundSmith were exchanged, and the usual frenzy of disk copying of PD and shareware products continued on into the night.

Hope to see you next month!

WorksSIG

by Chris Bastian

The Microsoft Works Special Interest Group kicked off 1990 with another look at desktop publishing and related topics. First off was a report on the Works update to version 2.00b, a release with no new features, but designed to fix "an inconsistency between Works and Apple's new Macintosh IIci." Works 2.00a owners can upgrade their packages with a free patch utility (now available in the TCS Mac utilities area). A presentation was then offered on how to "flow" text around a non-rectangular graphic object (by craftily building several odd-sized linked text columns around the picture in question), and the capabilities and drawbacks of Adobe's ATM (great for posters, but lousy for small sized text) were discussed. There was also a comparison of the Works "Spread Text" command vs the new Type Align utility, which

allows text lines to be bent, twisted and otherwise stylized to add more punch to documents, using ATM. A full-blown presentation of Type Align's capabilities will be offered at the February 17 meeting, which will also be WORKSIG's First Anniversary celebration (gee, it seems longer...). All are welcome.

SIG Note: The Cobb Group has begun publishing a monthly journal called "Inside Microsoft Works," featuring user tips, reviews of Works add-ons and peripherals and other handy bits of information. I have dipped into the SIG's lavish budget to pay for a charter subscription, which will be kept at the office for all interested readers. ☛

Satellite Scientific

Practical Peripherals 2400 Modem	\$190
New — Avatex 1200e Modem	\$90
Orange Micro C/Mac/GS	\$75
Proterm V2 (Communications Package)	\$90
Anchor 2400e	\$165

2400 Baud Zoom Modems \$129

Applied Engineering
 2400 Internal w/software \$185
 GS Accelerator \$290
 GS RAM+ \$250

We have memory for the Mac and GS and II

Chinook Hard Disk for IIC/IIC+ \$740
 Chinook 20—\$640 / 40meg—\$860
 Chinook 40 comes with 2-year warranty
 Chinook Drives come with Apple SCSI

Crate for Mac
 60meg—\$650/ 80meg—\$750
 Crate for IIGS
 60meg—\$750/ 20meg—\$650

Crate comes with Apple SCSI

Authorized Applied Engineering Dealer

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followed unless you are composing your article on a Mac, and other may just seem too complicated. Not to worry. Do the best you can and we will take care of the rest of it. The more closely you can follow these suggestions, the easier it will be for us to do that.

Except for common abbreviations and acronyms, a long name should be spelled out the first time it is mentioned in the article with the abbreviation or acronym after it in parens. Numbers, including money, should be written with commas where appropriate: 1,000 or \$13,450. If a number series occurs within a paragraph, number the series using "(1)," etc.

Do not indent by adding spaces or tabs. If this is a problem, don't bother to indent—let us do it. One space only after punctuation marks. Two spaces after periods confuses typesetting practice.

Do not use an extra return between paragraphs. Periods and commas always go inside quotation marks. Other punctuation marks go outside, unless they are part of the quotation.

When you quote a person or text, please be sure to get the quote exactly correct. We don't have the time or, usually, resources to check it ourselves.

This editor prefers no serial commas, i.e., "red, green and blue flags."

Use ellipsis (Option/Semicolon) without extra spaces(...). At the end of a sentence, use a period as well (...).

Use en dash for phone numbers (Option/Hyphen). Use em dashes (Shift/Option/Hyphen) within text. No space before or after. Add subheads where you think they might be useful.

Italicize all publication names (except WAP Journal).

Place "open apple" (Shift/Option/K) at end of articles. If you are not using a laser font, not to worry. We can do it, and we try to catch them all. Repeat: Do not use more than one space between sentences, or after punctuation marks. No space before punctuation marks.

Avoid use of ALL CAPS and

quotation marks, unless part of trade or product name.

Beware of editorializing. If in doubt, make note to Managing Editor.

"It's" is an abbreviation for "it is" or "it has." It's frequently misused, and its incorrect use bugs the editor.

One other grammar reference: "hopefully" is frequently misused. You wait hopefully for the Wells Fargo wagon; it is hoped that the word will be properly employed in the WAP Journal.

Footnotes: they are difficult to handle. They can be added as endnotes to the article, but they should be avoided, if that is possible. Barring that, they should be minimized.

Legal concerns: Please do not submit material that is not your own or that bears someone else's copyright notice. You may copy-right your own material, but we will print it only if permission is granted to reprint in other publications, with appropriate citation.

We will not publish material that we consider to be offensive. This is not censorship—just a matter of good taste.

Software Reviews: Essentially, what the reader would like to know is whether or not you think this is an appropriate program for the user, and under what circumstances it is useful (or not, as the case may be). It would be useful to have your judgment on the level of user it is targeted for (novice, average, expert) and how well it does its job. If you have had occasion to call on the publisher for support, it would be useful to know how good that support is (another way, we suppose, of finding out how buggy the program may be). Try to give the readers the information that you would look for, if you were in the market for this kind of program.

Name of Program (and version). How much have you used it? A few hours? A few weeks? Short description (word processing, page layout, 3D graphics, etc.) What does it do? How well does it do it (if possible, contrasted with similar programs)? What do you like most

about it? What do you like least about it? Do you recommend it, and for whom? Ease of use? Quality of documentation? Help files available? Name & address of publisher Telephone number (800 number if possible) Copy protected? Compatibilities, if known (kind of computer, Multifinder-compatible, memory demands, what else is required, etc.) List price and street price, if known.

Glossary:

\$249, not \$249.00
2D
40MB HD (hard disk)
640K
Apple II SIG
AppleCare
AppleWorks
Apple IIs, Apple Iie, Apple II+
Apple III
ASCII
AV SIG
Backup (noun); Back up (verb)
Capital PC (referring to the user group)
CCAD
Database
Demo (okay as an abbreviation for demonstration)
DIF
EPS (Encapsulated PostScript)
GameSIG
HyperTalk
IBM-PC
LaserWriter
Mac, not MAC
Mac Q&A (no spaces)
March 15, not March 15th
Megabyte
MHz (megahertz)
NeXT computer
Online
PICT
PostScript
RAM (all caps)
ROM (all caps)
SCSI
StackWare
TIFF
v1. 1 means version 1.1
WAP Journal SIG (special interest group)
Word processing; word processor
WYSIWYG (What You See Is What You Get) (to be distinguished from WYSIWYWLITG What You See Is What You Would Like To Get, and WYSIWYOG What You See Is What You Occasionally Get).

Article Length

Type of article	Length	Characters	Words
SIG Meeting Report	1/2 page	2,250-2,500	390-450
Short Note	1 column	1,725-1,800	300-400
Short Article	2 columns	3,500-3,700	630-700
Article		5,000-5,400	880-1,000
Medium Article		10-11,000	1,750-2,000
Long Article		15-17,000	2,640-3,000

If you include graphic material (which we encourage), you should subtract the approximate size of the graphic from the figures above, as follows:

Type of graphic	Area	Characters	Words
Small Graphic	1/12 page	500	85
Medium Graphic	1/6 page	1,000	175
Large Graphic	1/3 page	2,000	350
Screen Shot	(half size)	1,500	260
Screen Shot	(full size)	1,750	350

These lengths are approximate and are intended to serve as guidelines only. Space is allowed for the article heading and an average number of subheads.

Remember that odd-length articles are difficult for us to place.

Character count means actual count, not the file size reported by the operating system.



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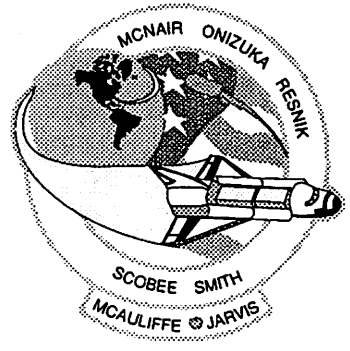
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WAP Journal, August 1989

If your job entails using graphics related to the Government, you'll love Federal Clip Art...

Chips

(Armed Forces Magazine), October 1989



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Getting From There to Here

by Ralph J. Begleiter

Recently a colleague relatively new to the Mac described his attempts to work with a document created on someone else's Macintosh, and created in a word processor different from the one he normally uses. His description included starting up both Macs and transmitting the document by modem to his own Mac. Then, he was able to import the document into his word processor and edit it.

Although that technique is definitely a resourceful method of accomplishing the common task called "file conversion," it also creates a lot of unnecessary headaches. For instance, there's really no need to set up (or even possess) a modem to achieve file conversion among various Macs. And transmitting a file by modem almost always causes a document to lose its formatting (that is, it loses many of the margin settings, boldface and other type styles, font choices, etc.).

There are much easier ways to work with documents created on other Macintoshes, in programs other than the ones you regularly use. Getting from there to here is often as simple as making choices in the File menus of both programs. Your life will be a lot simpler if you become familiar with the Save As... menu in virtually every Macintosh computer program.

In its simplest terms, converting a document involves instructing the creating application (the program the document was created in) to save the file in a different format from the one it normally uses. That different format is usually one which may be automatically read by other applications. (As the Macintosh system evolves, however, there are some complexities in this process. I'll get to those in a minute.)

For instance, suppose you were creating a word-processing document in the program called

"FullWrite Professional." But you know that your colleague uses "MacWrite" as his word processor. When you're ready to Save your document, choose Save As... from the File menu. Notice that the dialogue box includes a button called "File Format." Press it. You're offered several more choices, which include "Text Only" and "MacWrite."

File	Edit	Move
New		⌘N
Open...		⌘O
Close		
Save		⌘S
Save As...		
Revert		
Preferences...		
Get Info...		
Doc Layout...		
Doc Setup...		
Page Setup...		
Print...		
Quit		⌘Q

If you select "MacWrite," your document will be automatically readable by your colleague's MacWrite program. It will retain most of the formatting you may have given it in "FullWrite." (Every word processor contains some formatting conventions which are different from those in other programs, so there will almost always be some loss of formatting.)

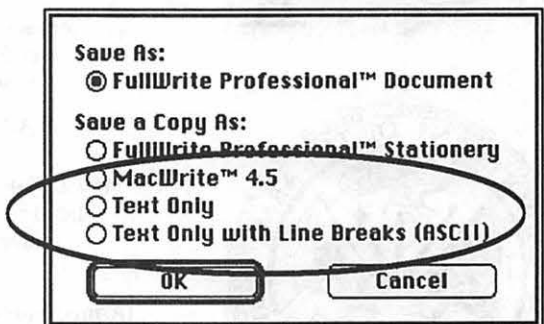
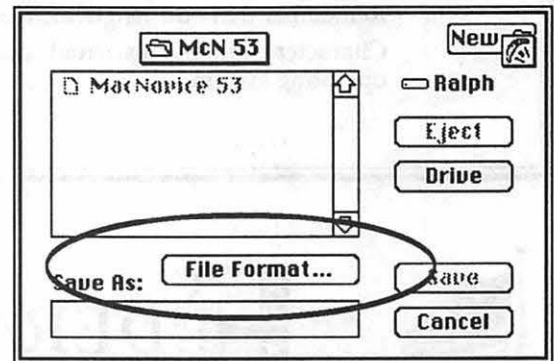
If you select "Text," from the File Format dialogue box, your document will be readable by any word processor, as well as by many database programs, spreadsheets, page layout and even some graphics programs. Selecting "Text" is the most versatile format

for converting files. However, because it's versatile, it also retains very little formatting. (Still, it's less cumbersome than transmitting over a modem!)

Once you've saved your file, move it to a floppy disk, carry the disk to the other computer, start up the new word processing program and choose Open from the File menu. You'll see your saved document among the selections available to you... and you'll be able to instantly open and manipulate the document without further conversion.

Incidentally, because MacWrite was the first Macintosh word processor, and because it came free with all Macintoshes for several years, it has become something of a Macintosh "standard" format for

FullWrite Save As...

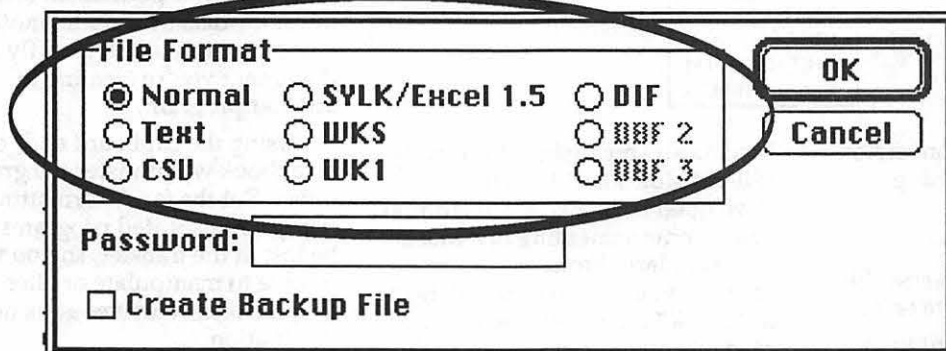
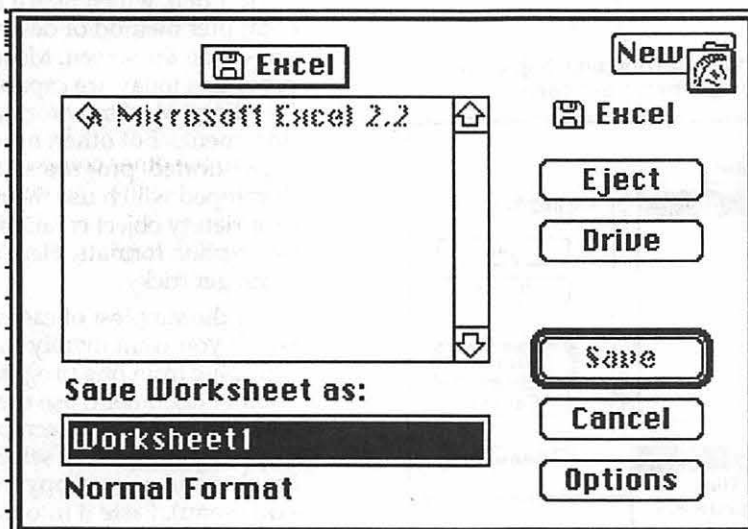


word processing documents. If you're able to save your documents in "MacWrite" format, it's almost certain your colleagues will be able to open them with their word processors.

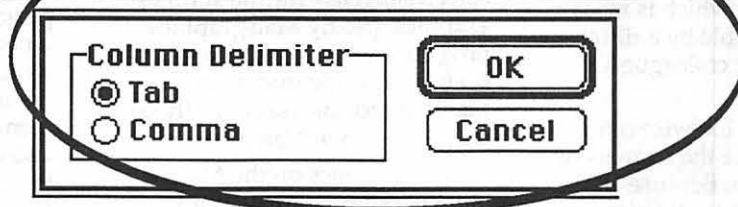
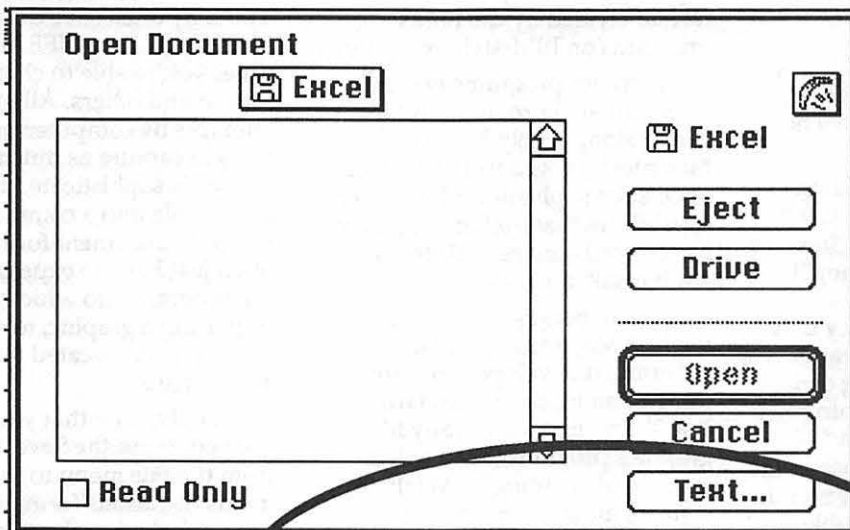
The "Text" format, however, is universal. Not just among Macintoshes, but also among other computers. So saving a document as "text" will almost always allow conversion.



Excel Save As...

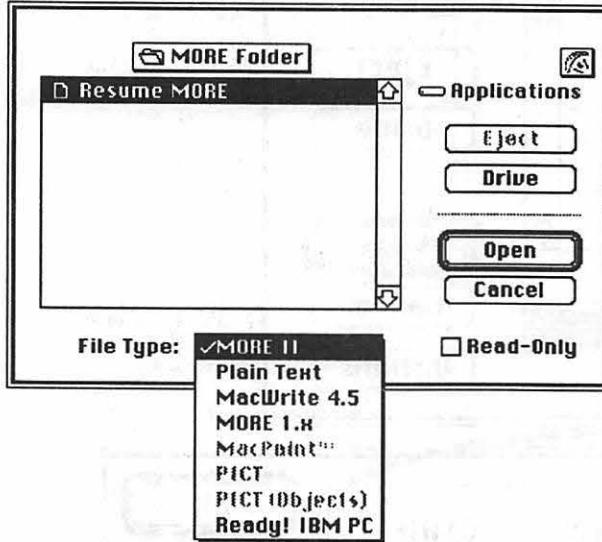


Excel Open...





MORE! uses a handy "pop-up" menu from which you may select document formats to "Save As..." or "Open..."



Recapping the file conversion process for word-processing documents:

- Save As...
- Choose a universal file format, such as MacWrite or Text
- Save document to disk
- Carry disk to another computer
- Open document using a different word processor

But what about other types of documents, such as spreadsheet, database files and graphics? There are solutions here, too.

Databases often allow saving of their documents in either a word-processing format (such as "text") or in a spreadsheet format. They'll save documents with tabs or carriage-returns, so that they may be imported by other programs which use those formatting conventions to separate data into rows and columns or into "fields." Again, the key is to make use of the Save As... choice in the File menu. You'll see the choices available, and you can pick one which is most likely to be readable by a different program on your colleague's computer.

Spreadsheets likewise offer several choices for the formats of saved documents. Because Micro-soft produced the first major

Macintosh spreadsheet (originally called "MultiPlan" but later developed into "Excel"), its format has become something of a Macintosh standard. From within "Excel," you can save spreadsheets as "SYLK" documents, which are readable by most other spreadsheet programs. Many Macintosh spreadsheet programs are also capable of reading the ".WKS" format created by the Lotus programs on IBM-style computers.

Graphics programs present some unusual problems in file conversion, largely because Macintosh programs have developed such sophisticated graphics capabilities that exchanging them has created a maze of different "universal" formats.

Again, because "MacPaint" was the first Macintosh graphics program, it developed into something of an industry standard. You'll find that almost any Mac graphics program today will be capable of "reading" a MacPaint-style document. That makes conversion easy for the simplest graphics. (Many Mac graphics programs are also capable of saving their documents in MacPaint format, specifically so they'll be convertible.)

But graphics on the Mac quickly outgrew MacPaint's

limited capabilities. "MacDraw" came along, which uses a different computer method of describing objects on the screen. Most drawing programs today are capable of "reading" MacDraw format documents. But other, much more sophisticated, programs have been developed which use their own proprietary object creation and description formats. Here's where it can get tricky.

In the simplest of cases, in which you want merely to transfer a graphic from one program to another document, use the Macintosh clipboard or the scrapbook. Copy the graphic (by selecting the graphic and using Copy from the Edit menu). Paste it into the scrapbook (for permanent storage or for on-disk transfer to another computer) or paste it directly into a document you're creating in another program.

Using the clipboard and/or the scrapbook will transfer the graphic intact. But the fancy formatting of many sophisticated programs will be lost in the transfer, so you won't be able to manipulate or alter the graphic once it arrives at its new destination.

Many of the most recent graphics programs offer you choices in the Save As... menu. You may often save documents as PICT, PICT 2, or TIFF files. Sometimes you're able to choose EPS format and others. All of these are attempts by computer programmers to capture as much of the graphic's sophisticated formatting as possible into a commonly-readable document format. You'll often just have to experiment with the program into which you're importing a graphic, to see which of these sophisticated formats it is able to read.

Finally, now that you've learned to use the Save As... choice from the File menu to save documents in various formats, don't overlook the fact that many programs also offer choices in their Open... menu selection. Choices which correspond to various document formats. Sometimes, the menu item is called "Import." Using these selections, you're able to choose from a variety of document types to read.



File conversion can seem daunting when a document created in a different program doesn't show up as readable by the program you're now using. But you'll often be able to find a solution to file conversion which will save you the time and trouble of either transmission by modem or recreation of the document from scratch. Explore your software and instruction manuals to see what options are available to make getting from there to here easier.

FileMaker II uses "Input" & "Output" to describe "Save As..." and "Import" options.

File	Edit	Selec
New...		
Open...		
Close		⌘W
Password...		
✓Exclusive		
Paper Sizes...		
Page Setup...		
Print...		⌘P
Preview...		⌘U
Input From...		
Output To...		
Save a Copy...		
Recover...		
Quit		⌘Q

File	Edit	Selec
New...		
Open...		
Close		⌘W
Password...		
✓Exclusive		
Paper Sizes...		
Page Setup...		
Print...		⌘P
Preview...		⌘U
Input From...		
Output To...		
Save a Copy...		
Recover...		
Quit		⌘Q

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WordMaker

by Paul Schlosser

Word Processing For The Rest Of Us

WordMaker is a new word processing program from New Horizons Software. It has all the standard features of advanced word processors, and more too. It is intended to compete with other low-end word processing programs such as Write (Microsoft), MacWrite (Claris), and WriteNow (T/Maker). As a new Macintosh owner I was asked to review the program for the Pi, with the idea that I would not be comparing it to other more sophisticated programs.

I found WordMaker to be easy to use and a solid, reliable program. It is MultiFinder aware and can perform certain tasks in the background, such as checking spelling, sorting, or global search and replace. It will notify you (via the Notification Manager) when a task is completed or it needs further instructions. You can even have WordMaker begin loading files and then switch to another application while the files are loaded. This is especially useful with very large files.

You can have several windows open at the same time, and cut and paste information between files. WordMaker can also use graphics created by Macintosh paint and draw programs. These graphics are treated as objects independent of the text and can be positioned anywhere on the page. By adjusting margins you can flow text around these graphics. The graphics are imported into WordMaker via the Macintosh Clipboard, and can be re-sized by clicking and dragging with the mouse.

WordMaker can change the case of selected text, to all upper case, all lower case, or mixed case (capitalizing the first letter of each word). The find and change

command has several options, you can search for any occurrence of a specific string, or narrow the search to only whole words, or by matching the case of the search string. There is a Go To command that will take you to a specific page.

The font, font size, and style formatting is selected via pull down menus. The color of the text is also selected in this manner and is displayed and printed in color on monitors and printers that support color. The paragraph formatting can be specified for each paragraph if desired. You can set justification, spacing, line height, and the type of tabs. The justification options are left, right, centered, and justified. Line spacing can be set for single, 1.5, or double spacing. Line height is normally set to auto, and will change so as to not overlap previous or following lines. If desired line height can be manually set. The ruler can be set to display in inches, centimeters, pitch, or points. The margin markers and tab stops are displayed in the ruler, and can easily be changed by clicking and dragging with the mouse. Tab stops may be specified as right, center, left, or decimal aligning.

Headers and footers are supported, and edited in the same manner as normal text. Page numbering can be set, and the options include regular numbers (1, 2, 3), roman numerals (I, II, III), or alphabetical (A, B, C). There are also commands that will insert the date and time into your document. The time can be in 12 or 24 hour format, and the date can be one of five different formats, (1/5/90, Jan 5, 1990, etc.).

A Document Information window can be displayed, showing you the number of characters, words, lines, sentences, and pages in your document.

WordMaker has a built-in spelling checker that contains 100,000 words. It is also easy to add your own words to a user dictionary. You can check the spelling of an entire document, of a selected block of text, or look up one specific word. In the continuous mode WordMaker will beep and flash the menu bar when you enter an incorrectly spelled word. Continuous mode can be turned off if desired, and you can check your spelling when the entire document is finished.

You print your documents via the normal Page Setup menu, although there is a Print One selection that bypasses the page setup box and uses the most recent settings. The page number box in the lower left corner of the WordMaker screen indicates what pager number is currently being printed, a nice touch I think.

WordMaker has a nice, easy to use Merge feature. You can create a text file, from scratch or from a data base file, containing names and/or addresses, and WordMaker will print multiple copies of a form letter inserting the data from the text file where appropriate.

Once you've set WordMaker up the way you like it you can save these preferences. Each following time you start up the program these parameters will be just as you set them. You can specify just about all of the settings to be saved, including the font, font size, paragraph format, margins, ruler options, window size, and spell checking options.

The program employs many keyboard shortcut options, giving you the choice of using the mouse or a keyboard equivalent to perform a task. For instance, command-S will save a document, command-P to print, command-F to find text, etc. A feature that I really liked is the instant menu. You can be anywhere on the screen and command-click will show an instant menu at that point on the screen. You can then select any WordMaker function from that menu, rather than move the mouse to the top of the screen to select a command. The extended keyboard is also supported, via the help,



home, end, page up, and page down keys.

The WordMaker manual is very nice, and easy to read. At 100 pages in length it won't take you a month to read. While I knew that pressing return will select the Ok or Yes button when it has a heavy border around it, I was surprised to learn that pressing escape (or command-period) will select the Cancel button. The manual contains a glossary and index, making it easy to find just the reference you are looking for.

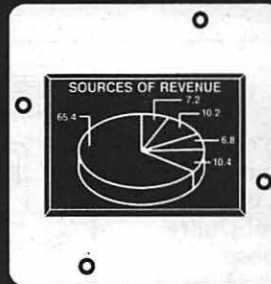
While WordMaker will not format text into columns easily, neither will the programs against which it is competing. I liked the

four options available when saving a document. You can save a document in WordMaker format, MacWrite format (although some formatting may be lost), text format, or stationery format. Stationery means the file is saved in normal WordMaker format, but the next time you edit this file you will be editing a copy of the document, choosing save will not erase the original copy. WordMaker always asks if you want to save your work when you attempt to quit from the program. The program is quite good at importing different formats, I've yet to find a file that I could not load into WordMaker.

I've come to like WordMaker quite a bit, and find it easy to use, while at the same time it is a powerful program. I would recommend the program to anyone that needs a word processing program, but doesn't need (or want to pay for) Word 4.0. WordMaker is not copy protected, and will run from your hard drive. The program lists for \$125, but is available mail-order for \$69, a very good value.

The author is a new Macintosh owner, after having spent five years in the Apple II arena. He is also a co-sysop on the WAP Telecommunications System.

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The Color SE/30

by John Willis

How Well Does It Work?

When I upgraded to a 68030 Macintosh last May the dollars were just not available to go for a full bore color machine. At a minimum it looked as though at least an additional \$1200 would be required just for the color monitor and video board if I bought a IIcx. Besides I was used to throwing the Mac in the trunk on business trips or a weekend at the beach and there were magazine predictions of reasonably-priced color boards becoming available for the SE/30 (for some reason Apple has not provided their own color board for the SE/30). Therefore I opted for an SE/30 which I gradually upgraded to a reasonably potent 5 megs with an 80 meg hard drive. Still, with the IIcx available at work, the attraction of color did not

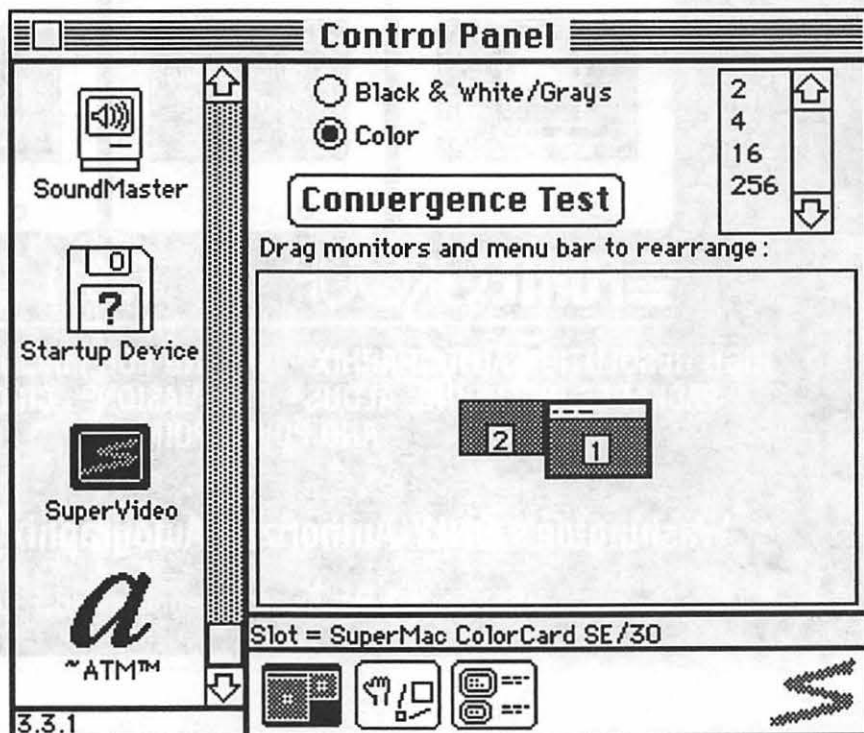
go away.

At the release of the SE/30 both SuperMac and RasterOps announced color boards which were based on their large monitor color boards for the Mac II series and which, as a consequence, were somewhat overkill for supporting a standard 13" Apple color monitor. Typical prices were greater than \$1500 for the video boards alone. As the summer progressed there seemed to be several additional alternatives. Dimension X (a company I had never heard of) announced an 8 bit board for the SE/30 that would list at \$995. Rasterops overwhelmed the media with descriptions of a breakthrough 24 bit board for the II series and the SE/30. Unfortu-

nately, they could not fit all of the standardized components into the tight constraints of an SE/30 case and the SE/30 board was priced at \$1295. Their arch-rival SuperMac announced an 8 bit board for both the II and the SE/30, with the latter priced at \$995. Finally there was promise of an 8 bit board from Micron Technologies at \$595 for the SE/30. The latter seemed worth waiting for, so I did.

I called Micron Technologies several times to find out how close they were to shipping. By mid-October, despite color ads in the magazines, the board still didn't look like it was going to be filling dealer shelves before Christmas. I also began to have some concerns about being a beta tester for a company which didn't have a track record in video boards. This latter thought left me with choosing between SuperMac and RasterOps. It would have been nice to have some example of such a system locally, or testimony from someone else with such a system, but I was not able to find anything more to go on. I finally decided that 24 bits was nice, but not necessary. I still had concerns about how well the color was implemented in any of

Enables you to choose the parameters for the monitor connected to the ColorCard SE/30. The Control Utility enables you to choose between black and white or color output, choose the number of colors to be displayed, and perform a convergence test for color monitors. The Control Utility also enables you to choose whether the internal monitor or the external monitor has the Apple menu bar, and allows you to adjust the spatial alignment of the two monitor screens.





these add-on boards, but I decided to take the risk.

The local Computerland in Frederick was willing to order and install the SuperMac ColorCard SE/30. They gave me a very competitive price for the ColorCard combined with the normal Sony-built Apple monitor and at the same time expressed an interest in seeing how well such a configuration would function. The ColorCard comes with detailed installation manual and reference book for

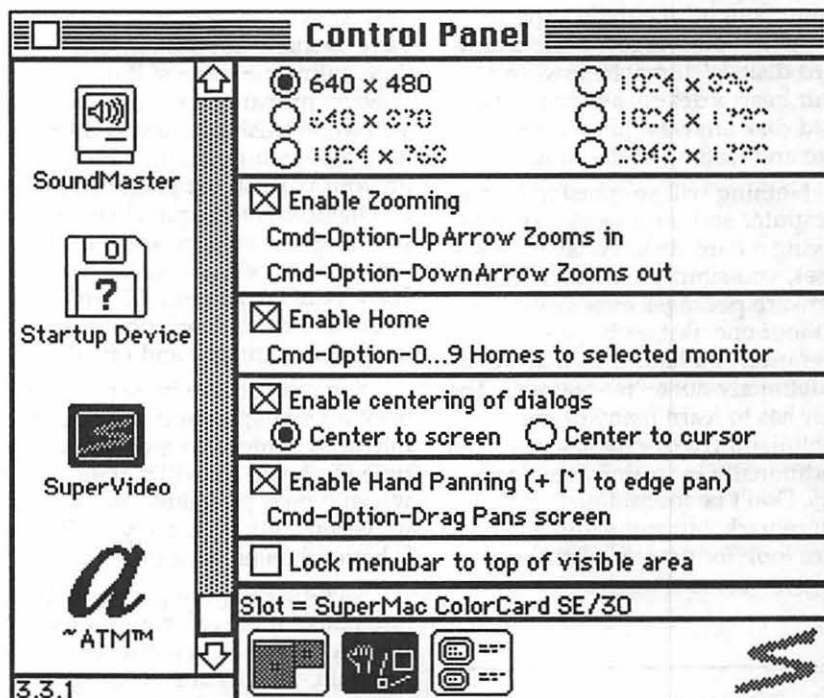
the control utility which sets up the monitor display. The technician had no problems with the physical installation of the card, and a standard video connector (slightly recessed in the back of the SE/30) was the result of the short operation. The only difficulty on start-up was solved by removing my Stepping Out II Cdev. The latter conflict is not surprising since it turns out all of the capabilities of Stepping Out are duplicated in

hardware and software on the ColorCard.

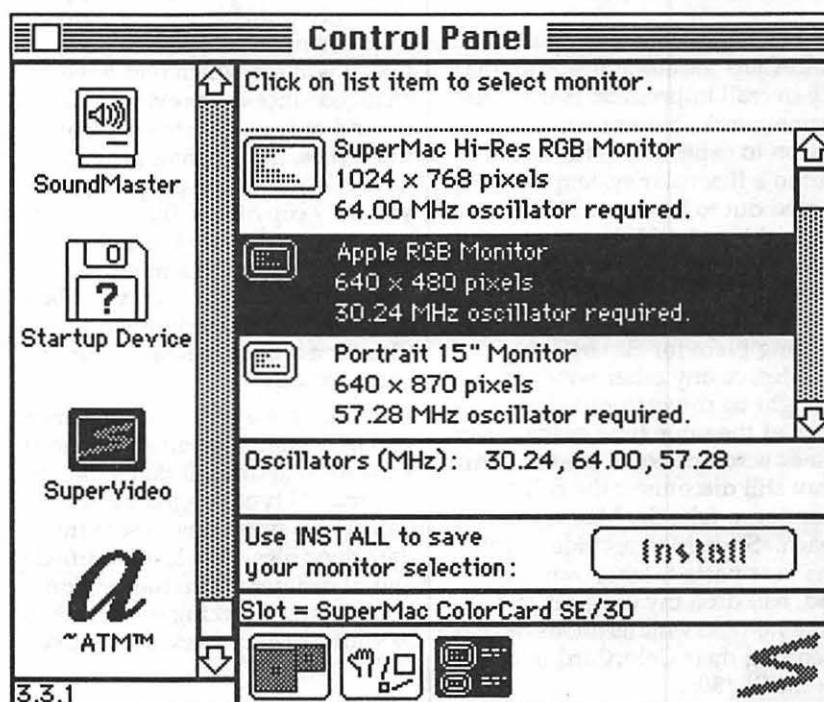
The SE/30 with the ColorCard can be configured to startup off with either the color monitor or the SE/30's internal monitor. The SuperVideo Cdev supplied with the ColorCard replaces Apple's "Monitors" and provides additional functions:

Control Utility (shown on page 30); Options Utility and Monitor Configuration Utility (below)

The Options utility enables you to choose the virtual desktop size for your display, as well as enable or disable the Zooming, Home Cursor, Dialog Centering, Hand Panning, and Menu Bar Lock utilities. You can also modify the special key sequences that are used to activate the



This utility lets you see which oscillators are installed in the ColorCard SE/30, and what type of display system is currently selected for your external monitor.





Hard Disk Hygiene: Resolutions for your health

by Robb Wolov

Resolution #1: Back-Up

The holidays have come and gone. Perhaps you were lucky; some thoughtful person supplied you with your biggest wish: a new hard disk. Well maybe it wasn't your heart's desire, but you got a hard disk anyway! Now for the care and feeding of the beast!

Nothing will so transform your computer and your work habits as having a hard disk. Today, in many cases, you simply can't run major software packages effectively without one. But, as basic as the operation of a hard disk may be, it is definitely not a "no-brainer." The user has to learn many of the administrative disciplines practiced traditionally by mainframe operators. Don't be intimidated by that last remark, but some things you once took for granted should now be given some thought.

Evaluation

I have now been using the ColorCard for about four months. My overall impression is that this system works better than I had any reason to expect. It is fully equivalent to a IIcx color system for what turned out to be about \$75 less and I was able to build the system up gradually instead of coughing up \$5k all at once. In addition, I have full use of the internal monitor as a holding place for clipart, tool palettes, or any other windows that it might be convenient to have open at the same time as the main window on the color monitor. And I can still disconnect the color monitor to take the Mac to the beach. SuperMac provides a full one year parts & labor warranty and, based on my experience, I have no reservations about recommending their ColorCard interface on the SE/30.

Hard disks are fast and big. Whether your hard disk is a modest 20-meg or a 300-meg behemoth, compared to a floppy-only system, having the ability to have so many applications and data online intoxicates! But, beware: probably the most data you could trash before was 800K. Now with a little thoughtlessness on your part, or just plain bad luck mechanically, the equivalent of multiple file cabinets worth of data can land in the "bit" bucket. So, New Year's resolution #1: back-up your hard disk. Resolution #1a: Back it up regularly and often!

You can use two basic types of back-up strategies: incremental (or mirror imaging) and archival. What type work you do will dictate which type is preferable, but a universal truth is that any back-up is better than no back-up.

Back-up software packages fall into one of these categories. I use DiskFit, which is an incremental program. This means the program will first make a complete copy of the entire contents of your hard disk. Then, on subsequent back-ups, it will see which files have changed since the previous back-up and only update the copy of those files. Incremental programs have the advantage of speed, since you only copy those files that you have changed, and your total back-up media is kept to a minimum. Their disadvantage is they deliberately overwrite previous copies of files. You will only retain your latest records.

If you are a writer, for instance, you may want to keep all previous versions of a draft. If that's the case, an archival type program is for you. These programs look at the date your files were last modified and, if different from the version you are now working on, add them to your previous back-up archive.

Your back-up will get progressively larger over time, but you will have everything! Depending on the value you place on your data, you might consider having two back-up copies, and possibly even three: one copy for general safety, a second in case of a rare floppy drive failure, and a third to be kept off-site.

Some of the 360K floppy drives once used in IBM machines had a problem with "eddy currents." The magnetic heads, under some conditions, could corrupt the files as the disk was read. Jerry Pournelle, the sci-fi writer and computer columnist, once told the story about some sadsack with one of these floppies-from-hell who had a hard disk crash. He reached for his first back-up copy and when he got garbage out, ruined his second and last copy before he realized that the fault lay in his floppy drive. Admittedly, this is a rare case. However, an off-site copy may not be over-kill for you. In time your data may be worth more than the computer that runs it. If there is a fire, or possibly a burglary, the data back-ups housed next to your machine will be of no use if they are consumed by fire or stolen with the equipment.

Resolution #2: Keep One System per Computer

While backing up is probably the most important rule in the care and feeding of a hard disk, you should heed some others. One is, "One system file per computer!" When you first get your hard disk, the temptation is to drag all of your original application disks onto it. A system folder from one or more of those applications could, even inadvertently, get copied over. If you ever want to see a Mac behave as if it were haunted, just boot-up from a disk with several system folders on it and watch a whole screenplay of bizarre actions

Until the release of System 7.0 this summer, with its "B-tree" directory (as used on AppleTalk networks), the Finder keeps track of all of your files within a hidden file called "Desktop." Type, creator, and icon information is kept here for all of the programs on your



disk. This method worked well enough for the 400 and 800 K floppies the Mac used to use, but its age is showing. As files are changed and erased, the old information is not completely updated. The result is that the Desktop file gets larger and larger, wasting storage space and slowing down your Mac. After all, the computer has to read through this file every time it redraws your desktop (the one on the screen). The cure is simple—rebuild your desktop periodically by holding down the OPTION and COMMAND keys (the one with the clover-leaf) while mounting a disk. Just answer OK to the on-screen prompts. This will compact your desktop (but also erase any comments you may have added to the "About..." box).

Resolution #3: Clean House Occasionally

The next tip falls under the category "waste not, want not." A basic understanding of how hard disks store data is in order. When you first get your hard disk (floppies too), it is like an empty parking lot with no lines painted. When you format your disk, using Apple's HD-Setup program or the formatting software supplied by 3rd parties for non-Apple disks, you define tracks and storage sectors, essentially painting the lines that define the spaces. These sectors are 512 bytes each. Regardless of the total size of a data file, any portion of it in a sector utilizes the entire sector. If you store many small files instead of a few large ones, you may actually be wasting space. This is more of a problem for MS-DOS users who deal with 1 and 2K sectors (depending on the version of DOS). Still, to keep your disk from starting to look like an attic, you may wish to assess whether you want to keep all of those small sample files that accompanied your applications. They just load up your directory and desktop files.

Another bit of insurance is the "Disaster Disk." It seems that the most commonly corrupted files are the System and Finder. Though it's no big deal to install fresh copies

from your original "System Tools" disk, it is a pain if you have customized them and have to redo it all. Keeping a floppy around with copies of your current *working* System and Finder, Apple's Disk First Aid and the file recovery program of your choice is cheap insurance which has saved me more than a bit of time.

Finally, as you use your disk you may find that it seems to be getting sluggish. It may be doing just that. Most operating systems, MS-DOS, Unix, and yes, the Mac's, store new data in the first available sector. Over time, you will find that active files physically get scattered over your disk. This requires the magnetic head to dance over the disk collecting all the pieces. This takes more time and may lead to additional wear. Some argue that by defragmenting your disk,

grouping together all the loose pieces, you not only help performance but improve the chance for success if you ever have to use a file recovery program. There are several defragging programs on the market.

Next month I'll touch on this topic and give my first impressions of DiskExpress II from AlSoft, a defragger which monitors how you use your computer and then arranges your files on disk to best match your habits. Stay tuned.

Until next time... 🍏

Robb Wolov, M.D., is a pathology resident-in-training at the Georgetown University School of Medicine. His areas of interest, besides molecular and orthopedic pathology, are digital analysis of microscopic images and designing computer applications for medical education.

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Mac Q&A

With the price of SIMMs going down, I'd like to increase the RAM in my machine. Should I have a store do it or can I do it myself?

It depends. If you have never opened up electronic equipment and inserted chips, it may be best to leave it to an 'expert' (someone who has done this enough times to realize it isn't difficult, just intimidating). For those interested in trying, the following advice is offered. First, if you are working with a Mac Plus or an SE you will need two special tools (although some sources sell them combined into a single tool). One is a Torx wrench for removing the screws (four on an SE, five on a Plus; the fifth is under the battery cover on the back!) Next, you will need a 'Mac Cracker' to open the case, though some have used a metal ruler to do this. Second, beware of touching anything near the power supply located at the top rear of the computer. Even though the computer is unplugged, there is voltage stored in a capacitor of sufficient strength to remind you of your mortality. In addition, you must be sure to remove static electricity from yourself before touching any of the chips. Some tool kits come with a grounding strap that connects you to the third, 'ground' pin on a power plug.

Now, if those last few comments did not intimidate you, read on!



by David Morgenstein & Marty Milrod

To upgrade a Plus, you have to disconnect the diskette drive cable and the power connector from the motherboard, after which the board will slide straight out. For an SE you have to disconnect either two diskette drive cables or one drive cable and the hard disk cable. The power connector is harder to remove than on the Plus because it has an 'inter-lock.' You have to get a finger around behind it and push in on a flexible tab to 'unlock' it. Next, you back the board out about an half inch and pivot one side out from the slide runners. As you do this, you will see the speaker cable connected to the mother board. After removing it, the mother board comes away easily.

At this point, there are two steps to a plus/SE upgrade. 1) Removing/inserting SIMMs and 2) making a change to the mother board to tell it you have 1 Meg SIMMs on board. If you have a Plus or older SE (one without a plastic 'jumper' situated near the SIMMs), you have to remove all of the 256K SIMMs, then insert 2 or 4 of the one Meg variety. If you only are inserting two, they must go into the 'back most' positions, which is why you had to remove all four of the existing SIMMs. Also, you can replace two of the original 256K SIMMs into the 'front most'

positions to provide a total of 2.5 Megs. If you have a newer SE, one with the plastic jumper, you need only swap the two 'front most' SIMMs with one Meg ones (leaving the back most 256K SIMMs untouched).

For a II family machine, you will have to remove the metal mounting plate holding the hard disk (after removing the power connector and ribbon cable).

Four screws hold it in place. After lifting the plate out of the way, you will have access to the SIMMs. As with the Plus or older SE, you must remove any 256K SIMMs and replace them with 1 Meg SIMMs. The 256K SIMMs must appear in the second bank of four sockets if the II is to use any 1 Meg ones.

To remove the SIMMs, gently (ever so gently) spread the two plastic tabs found at each end of the plastic holder in which the SIMMs are seated. This is really the only difficult task. If you press too hard you can break off the tab thereby incurring a massive financial penalty. Don't do it! Just press gently. As the tab is moved out of the way, press the SIMM into the retaining clip. (*Ed.—be sure that you have it in the right way around—this is said to be the biggest single source of problems in what is, and ought to be, a simple process.*)

After doing the SIMM shuffle on a Plus/SE, you need to make a change on the mother board. On the Plus or older SEs this means cutting a resistor. Take a side cutters and clip one end of the resistor labelled '256K bit RAM.' I only cut one end and move the wire out of the way just in case I want to replace the old SIMMs at a later date. On the Plus, this resistor is at the opposite end of the board from the SIMMs. On the SEs it is



just behind and to the left of them. On the newest SEs, there is a plastic jumper. You move it over to the next pair of connectors, also labelled '256K bit RAM.'

A final note on 'speed' of the SIMMs. Just about all of the SIMMs currently on sale have a small '80' on them indicating 80 ns (nanoseconds) speed. This speed is needed for the IIci but will not present any problem with any other Mac. The speed is the chip's capacity. It is the individual model (Plus, IIs, etc.) that determines the speed that the chips will run. The Plus/SE machines run fine on the oldest 150 ns chips. In fact we have used 150 ns (nanoseconds) chips in IIs without any trouble, despite dire warnings to the contrary.

I have used DiskExpress version 1 for a long time. I jumped at the new upgrade to version II but after using it (it is very fast now), my disk drive keeps crashing? Is there any connection?

Like you, we have used Disk Express for a long time and rely on it. Unfortunately, version 2.00 appeared in the market with inadequate testing. There have been several upgrades to fix the problems. The latest we have is 2.03 but we understand 2.04 will be out shortly. Backing up and reformatting your hard disk should eliminate any problems caused by version 2.00.

Do I need to upgrade to the "latest" System Version software issued by Apple? How do I learn about such upgrades and where can I get them?

By and large you should—if you have a hard disk—upgrade to the latest Apple System Version wherever possible. Many bug fixes and occasionally new features are incorporated into them. For instance, LaserWriter printer driver 6.0 or 6.01 improved greyscale printing on PostScript machines... and so on.

WAP is an authorized distributor of Apple software and you can learn of upgrades through the WAP Journal, by calling the office, by reading Mac publications or, if you have a good relationship with your local friendly dealer—if you can find one—they may let you

know of the new "System Version." But be warned that dealers are much more interested in selling you the new "package" of System software than in giving it away. Apple does a simply awful job about notifying users about such changes.

For most dual-disk system Macs, you may not have the available space to upgrade to the ever-increasing space hogs of new software. They get larger and larger with each issuance. You may have to settle for staying with your older System Version of Apple's software and, if you are not having any noticeable problems with running the "older" system software, stay with the older, sleeker product.

Please be aware that some software may be incompatible with newer System Versions and this

usually occurs where a software manufacturer departed from Apple's guidelines in its programming. An example is MacWrite 4.5 and older versions which frequently will not run with newer System Versions. So be careful to upgrade your older software when you upgrade your System Version. The latest released System Version is 6.0.4 which is required for the Mac IIci, but can also be run on all other Macs. Perhaps its greatest advantage is in its newer "reader head parking" function which will extend the life of your disk drives. System Version 6.0.5 should be released within the next two-three months and you can expect the much-awaited major release of System Version 7.0 (which requires 2 Megs of RAM in order to run) sometime this summer. 🍏

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Bits and Bytes

by Lynn R. Trusal

New CD-ROM Approach

Several months ago, I said that one of the major drawbacks to CD-ROM-based software was its cost. Buying the CD-ROM reader is actually the cheapest part of the process, sort of like buying ski equipment. A clip-art company cannot offer \$1,000 of clip-art for \$200 in a CD-ROM version, but users don't want to pay for an entire collection just to get 200 from a 1000 total clip art images either.

Now, the "AND Group" in Canada is offering a new approach to the problem. It has introduced a product called "The Vendor" that is an access system for CD-ROMs. The Vendor divides the CD-ROM data into a hierarchial volume and permits each volume to be mounted (or dismounted) individually and controlled from an init and the Control Panel. The user pays for only some of the many volumes on the total CD-ROM and is given access to only those volumes.

Image Club Graphics uses this approach for its font CD-ROM. The entire CD-ROM contains 615 fonts, but gives the user access to only 20. These 20 fonts on a CD-ROM called "Letter Press" cost \$199, but once purchased, the user can buy additional fonts for \$25 per font. The company supplies the user with codes to gain access to the additional fonts. This is an interesting concept and might help overcome the initial slow sales of CD-ROMs. (Source - *MacWeek*).

Tips

1. To group multiple objects near each other in a drawing program, there is a better way than clicking on each individually using the shift key. Instead, click outside them and then drag across all the objects to be grouped. Then select the group command. If you

accidentally get one wrong object in the group, use the shift to deselect it before grouping. This is the same technique used on the desktop to select multiple icons.

2. Programs such PowerStation can enhance organization of the desktop by overcoming the desktop's need to open multiple windows and multiple folders to find a file. Eventually each needs to be closed again. PowerStation enables often used files to be accessible from one hierarchial level, no matter how many folders deep they are located.

Lawsuits Involving Apple

1. Xerox is finally getting around to suing Apple—for the technology that, it says, Apple took from the Xerox Star to incorporate into the original Macintosh and Lisa. Xerox has had limited luck getting other companies to sign licensing agreements because Apple refused to do so; it may be trying to force a test case. Only Sun Microsystems and Metaphor Computer Systems have licensed the technology.

Xerox is asking for \$150 million and a declaratory judgement that Xerox is sole owner of the technology. It did not file a copyright infringement action, perhaps because it waited too long to challenge Apple's copyrights. Apple apparently has taken the position that Xerox is confusing the "expression of an idea," which can be copyrighted, with "the idea itself," which cannot be.

Apparently, a former Xerox employee tried to get Xerox to "patent" the software technology incorporated into the Xerox Star. He was unsuccessful; at that time most believed that software could not be patented. Now Xerox must depend on "copyrights," which do not have the same legal standing as "patents."

Apple is suing MicroSoft and Hewlett Packard for using the same technology and the whole legal arena has become a soap opera called "As the Technology Turns." Most industry observers contend that Xerox is "a day late" and will be "a dollar short" when the final verdict comes it, but stranger things have happened.

Maybe users would be better off if companies stopped suing each other and put the money paid lawyers into better products. If things continue, one day the computer industry's motto will become "Litigation is our most important product." (Source - *Investors Daily* and editorial opinion)

2. In an update to an earlier article, Apple has settled a lawsuit with Quickview Systems, Inc. over technology incorporated into HyperCard. Apple originally had filed a motion requesting its patents be voided, but evidently decided to settle out of court for an undisclosed but reportedly substantial sum of money. Apple will be able to continue to use the technology and will share other technology with the company. This agreement covers products designed to use with Apple computers only and Quickview Systems is now expected to go after additional companies for patent infringement. These may include database developers and Hypertext vendors. Apparently Apple decided that Quickview Systems had valid patents and decided it needed to put its legal energies into the Xerox, Microsoft and Hewlett Packard suits. (Source - *PC Week, InfoWorld*)

Apple's Future?

In case you haven't noticed, Apple stock took a big hit from the prediction that Apple's first quarter earnings (1990) would be lower than last year. The first quarter, which includes the Christmas buying season, is traditionally the biggest quarter of the year. Earning estimates were revised downward from \$1.25 per share to about \$1.10 per share.

William Zachmann in *PC Week* questioned if the Macintosh was



losing its supremacy because of the growth of Microsoft Windows and, eventually, Presentation Manager. Even though the Mac still represents better technology than both its pretenders, it costs more and is available from only one vendor. If the trend continues, Apple could be forced to see its limited market share reach its zenith (no pun intended) or to cut prices dramatically and be more competitive.

Which Mac Should I Buy?

Many people ask me what Mac to buy. I always ask first, "How much can you spend?", not "What are your computing needs?", even though the reverse should be true! It is very difficult to come in under \$2,000 for a low end Mac, a printer, one software package and sales tax. \$2000 represents a large cash outlay for most families, and it is disappointing that you cannot buy "more Mac" for that sum. If people "really need" a computer, and have less than \$2,000 to spend, I often recommend an MS-DOS clone. Do you know how much that pains me!

Apple is several years late in making a good entry level Mac, and that has hurt its latest earnings. It appears that a new low end Mac will replace the Plus and original SE some time in 1990. It definitely won't come too soon and, in some ways, it is way too late.

Apple Versus Macintosh

The motto "Apple II forever" rang true for many years, but no longer. Apple II sales accounted for less than 15 percent of the \$6 billion dollars that Apple racked up in 1989. Apple noted, in its 1989 Annual Report, that "net sales of Apple II family products continue to decline gradually, both in absolute terms and as a percentage of net sales, compared to the prior year." Apple promotion of the II line has all but ceased, and the handwriting appears to be on the wall in spite of Apple's claim it is pursuing hardware and systems development. Sort of like a vote of confidence in a football coach just before he's fired.

When Apple releases the

so-called "low end Mac" during 1990, it will probably push for the Mac to replace the Apple II in schools across the nation. By default, Apple seems to be beginning the process now. I am surprised that Apple still makes the Apple IIe and IIc; most development is II GS-related.

Eventually Apple and the marketplace will decide the fate of the Apple II and user groups, such as WAP, will gradually mirror those decisions. It would be a mistake to try and force some artificial balance between the two. The decision will be made by others and is beyond WAP's control! Let the marketplace decide!

New Viruses

Just when you thought it was safe to stop your flu shots, several new viruses appeared (Dec 89). They include a variant of the nVir virus called "Jude," and one called "WDEF." They were found in the U.S. and abroad, and authors of various anti-viral programs quickly rewrote their programs to address the problem. "Jude" is removed by Disinfectant version 1.3 and higher, Virus Rx 1.5, VirusDetective 3.1, and Vaccine 1.0.1 which only blocks it from spreading. The WDEF virus infection is not blocked by Vaccine 1.0.1, but VirusDetective 3.1 and Disinfectant 1.5 (*Ed.—now Disinfectant 1.6*) will remove it.

There are many commercial anti-viral programs, but most retail for \$50 to \$100. I suggest using the public domain ones available from user groups and bulletin board systems such as GENie in Rockville. If you can get a good public domain fix, why waste your money? Fixes are available almost immediately after discovery of new viruses.

Disinfectant 1.5 found an "nVir A" virus in MacWrite on one of my hard disks. Older anti-viral programs are not effective in coping with new viral strains which appear each year. It is sort of like "antigenic drift" which occurs with the real flu virus each year, and which requires a new yearly vaccine. Just be careful which

"computer orifice" you place your floppy disks into, and be sure to use the new anti-viral programs on floppies you have obtained from on-line services or friends before placing files on your hard disk.

Also remember to *lock* your new commercial floppy disks before inserting them into your computer for the first time. This will prevent any viral sequences from being written to your disk.

Utility Updaters

As a fan of Fifth Generation Systems programs, I like to use the latest versions of these popular utilities. Fifth Generation Systems places "updater" files on GENie and other bulletin boards for its programs. I downloaded updater files for Pyro, Suitcase II and PowerStation from GENie. As of December, the latest versions were Pyro 3.3.1, SuitCase 1.2.5 and PowerStation 2.5.2. They appear to address bugs or incompatibilities discovered since the last versions.

Remember these are only "updater" files and you must still have the original program to perform the update. I like the concept of a public domain updater file. It prevents piracy but enables registered users to benefit from minor revisions.

As an aside, Pyro is reportedly the most pirated Macintosh program. I guess it shows the importance of using screen dimmers.

Computer Insurance

In an earlier column, I mentioned the option of obtaining private insurance to cover computer theft, fire loss, or breakdown (mechanical, electrical) of your personal computer equipment. Apple Care is very expensive—but a good source of income to computer dealers who typically receive 50 percent of the fee charged.

This is an update for those who missed it the first time. Ask your local independent insurance agent if your insurance company deals with State Auto Mutual Insurance Company of 518 East Broad Street, Columbus, Ohio 43216 which offers an Inland Marine policy (not



boaters' insurance). For a cost of \$10 per \$1,000 worth of coverage, State Auto has a "Breakdown Coverage Extension Endorsement" available with its Information Systems Coverage. Fire, theft and electrical breakdown due to lightning are covered under the basic policy with a \$100 deductible, but other internal electrical and mechanical malfunctions of storage media are covered under the Breakdown Coverage Extension Endorsement. This endorsement had a \$250 deductible per occurrence. Mechanical breakdown does apply to internal and external hard disks which is a potential problem for Mac owners. It does not apply to other mechanical problems, such as a floppy disk drive. Check it out if you are looking for a cheaper alternative to Apple Care and are willing to shell out \$250 if you develop a problem. Remember that Apple Care does not have a deductible, if that is an important consideration!

Y and Z Modem Protocols

Anyone who uses a modem and telecommunication software has heard of XModem, but what about Y and Z modem? White Knight 11.0 supports X, Y and ZModem protocols among others. Recently, I was pleasantly surprised to find I could download a batch of consecutive files from GENie using the Y and Z modem protocols. Even as I type this column, White Knight is running under MultiFinder and downloading three anti-viral programs from the Macintosh Roundtable on GENie.

Y Modem adds the capability to send a consecutive string of files one after the other without user intervention. The file numbers are merely separated by "commas." This speeds up the downloading process, decreases errors and saves money. A variation of the Y modem protocol is called "YModem G" but does not perform error correction.

The Zmodem protocol supports sending multiple files and is almost as fast as YModem, but it does support error correction and is, therefore, the recommended protocol of Scott Watson (Red Ryder and White Knight author). The TCS system you use needs to support such protocols, and GENie is one commercial TCS that does.

White Knight supports a so-called "Flash Protocol" whose very name suggests speed. Its transmission format takes advantage of new "hardware error correcting modems," eliminating the need for software error correction. This protocol supports sending multiple consecutive files and is the fastest of the protocols discussed. (Source - Personal experience and White Knight 11.0 documentation)

Real Bits

1. Differences of opinion about why Scott Watson stopped using the name "Red Ryder" for his telecommunication program are surfacing. The owner of the "Red Ryder" trademark, Red Ryder Enterprises, essentially calls Scott a cheapskate who changed names to avoid paying any royalties (3-4 cents on the dollar), not to mention any royalties on his first use of the name. Say its isn't so Scott!?! (Source - *MacWeek*) (Ed.—Scott has posted a rebuttal as a letter to the most recent *MacWeek*, claiming essentially that he was giving away money for nothing.)

2. Maya Computer Co. of Waitsfield, VT is now offering a 1-year warranty for parts and labor on all NEW and USED Macintoshes it sells. Ironic, isn't it, that Apple only offers 90 days on its "NEW" Macintoshes? (Source - InfoWorld)

3. Things I would like to see changed: I would like to be able to rename files while within a document without creating a new file (and later having to throw out the old file when I get back to the desktop). 🍏

Lynn R. Trusal, Ph.D. may be reached at 301-845-2651 to answer questions about material that appears in the Bits and Bytes Column. The opinions expressed in this column are his.

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Joys of Illustrator

As introduced in 1987, Illustrator was limited to creating and outputting images in black, white and intermediate grays. Adobe released an enhanced version in 1988 capable of creating and outputting color images in addition to black and white called Illustrator 88. Aside from color capability and a few key improvements, the programs function similarly. For the most part this discussion shall deal with functions the two programs share in common. Features found only in 88 will be so described.

The marketplace offers a bewildering array of applications for creating graphic images, yet out of all of the paint and draw programs only two are worthy of consideration by professionals using high-resolution image setters—Adobe Illustrator or Aldus Freehand. Of the two, Illustrator is generally conceded to be better for creating and manipulating images; Freehand gets the nod for its facility with type. As this article will deal primarily with images it will focus on Illustrator.

Eliminating all imaging programs but Illustrator and Freehand from consideration undoubtedly got your attention, for many of you swear by such old friends as MacPaint, Superpaint, Canvas, MacDraw, and similar applications. What makes Illustrator and Freehand so great? Essentially three things: control; reliability; and speed.

Let's look at the first area, control. What a pro looks for in an illustration program is the ability to meet or exceed manual image creation methods. This means being able to precisely dictate the attributes of every element of an image. Paint programs (those producing bit-mapped images) offer very little control and are laborious to work with. Draw programs (those producing object-oriented images) offer much greater control but generally limit the user to a range of attributes rather than unlimited control. For many users the range offered may seem generous, but this shortcoming ultimately has the effect of imposing a feeling of sameness on

images. The end result is that images created by these programs begin to have a certain look that is easily identified. Death is when the medium gets in the way or controls the message.

Illustrator, on the other hand, offers deceptively simple control over only two attributes—an object's fill color and an object's outline. Color is definable from white to black with theoretically unlimited variations of gray in between (the controlling factor here is the imaging equipment's ability to differentiate one gray value from the next). Line quality may be set as fine as 0.1 point (0.00139") to as fat as required. Line termination may be a square butt, radiused, or projecting square butt. A line's color may also be set in much the same manner as fill color. The line may also be dashed or dotted but no menu of choices is available. The length of dashes and interstices is up to the user to define.

Once an object has been drawn it may be rotated, reduced, enlarged, distorted, or modified with the same degree of precision with which it was created. The units of measure may be specified as tight as a 1/1000 of a degree, inch, point, or centimeter. Further aiding control is the manner in which the created image is displayed on the screen. Object outlines only are displayed, all consistently one pixel in width, regardless of the level of screen magnification. This permits

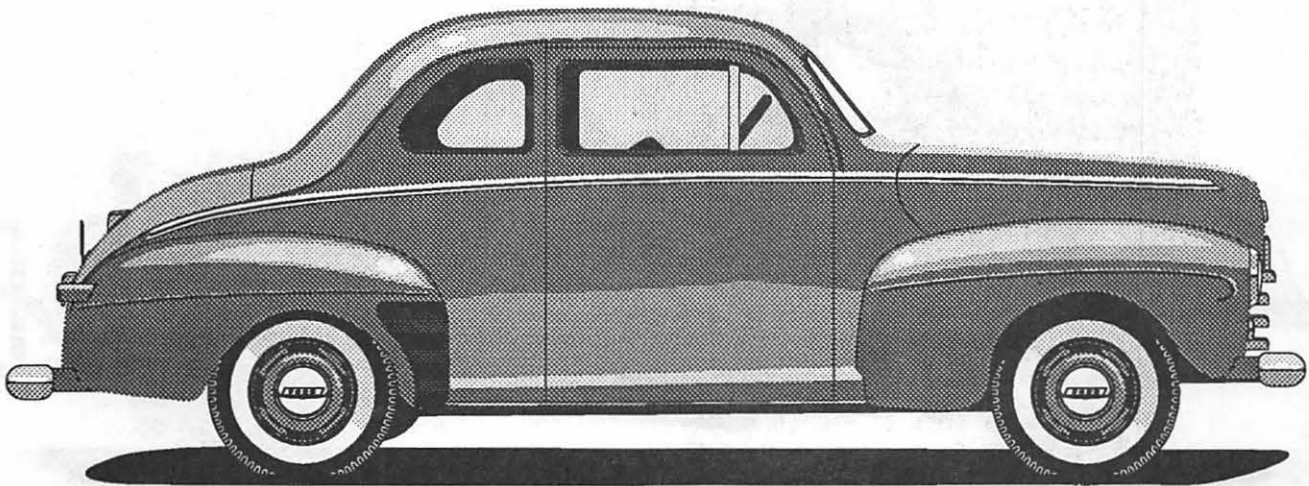


Fig.1



very accurate visual placement of images.

Reliability or consistency of behavior is something we take for granted with most applications. Quirky behavior, however, was the main reason I originally quit using draw programs. The first nit I became aware of with MacDraw was a minor but additive shift of one item relative to another when both were duplicated simultaneously multiple times. A title in a box, for instance, would migrate from being centered to a decidedly uncentered position by the time the box and title had been duplicated ten times. A call to Apple elicited the usual talk to your dealer response. The dealer in turn simply shrugged his shoulders as if to indicate it might be me rather than the software that was defective. The second problem was more serious and showed up when I first started importing images created in MacDraw into page-layout documents. Complex images that looked fine when created in the native program would exhibit a shifting of the image's components when saved in PICT. Superpaint behaved similarly. I then tried Cricket Draw. Not only was Cricket Draw incredibly slow, it too shifted. Out of desperation I began using Illustrator. It worked reliably and I haven't looked back.

When dealing with speed there are two components that come into

play—on-screen image manipulation and printing. Compounding low image quality, print speed for bit-mapped images is best measured with a calendar. Speed and bit-maps are incompatible concepts. Object-oriented images print more quickly but suffer from lengthy screen redraws. One reason is that object attribute (line weights, fills and colors) in most draw programs are visible when working with an image. This takes computational horsepower and can cause delays that are quite annoying on one meg machines. Illustrator, on the other hand, presents the user with only the outline of the object with no apparent attributes. This manner of representation is sometimes referred to as a wire-frame outline. Attributes in Illustrator may be previewed before printing but the image may not be manipulated in the preview mode (It's possible to work with a split screen having the working image on one half and the preview image on the other to view changes as they occur, but unless you have a large-screen monitor and lots of RAM, this manner of working isn't feasible). The result is measurably faster on-screen image handling. For the occasional user, slow screen manipulation may be an acceptable trade-off for real-time WYSIWYG, but this luxury pales in light of tight deadlines and decreased responsiveness for the heavy user.

When it comes time to print, Illustrator images print more quickly because they are pure PostScript. Laser printers and Linotronics love this, as they are, after all, PostScript printers, and no QuickDraw interpreters are needed to translate the job.

So much for apologetics, what about actually using Illustrator? I'm tempted to say that Illustrator is for the serious image creator, but the term serious long ago became a yuppie cliché. It hints at elitism, inaccessibility and makes paint program users feel like dirt. Let's just say Illustrator is not as accessible as your run-of-the-mill paint or draw program with attribute menus pasted all over the screen, object alignment capabilities (though this be hit or miss), ready-made arrow heads and the like. In fact, the Illustrator toolbox (even Illustrator 88) looks quite Spartan in comparison. No arc tools, no circle tools, none of the user-friendly aids lesser programs employ to coddle users. Illustrator demands that the user read the manual for it is here and in the accompanying videotape that the keys (literally the shift, option, and command keys) to Illustrator's power lie. Using the ellipse tools while holding down the option key returns a perfect circle. The same operation while using the rectangle tool returns a perfect square. In time, the Illustrator user will find

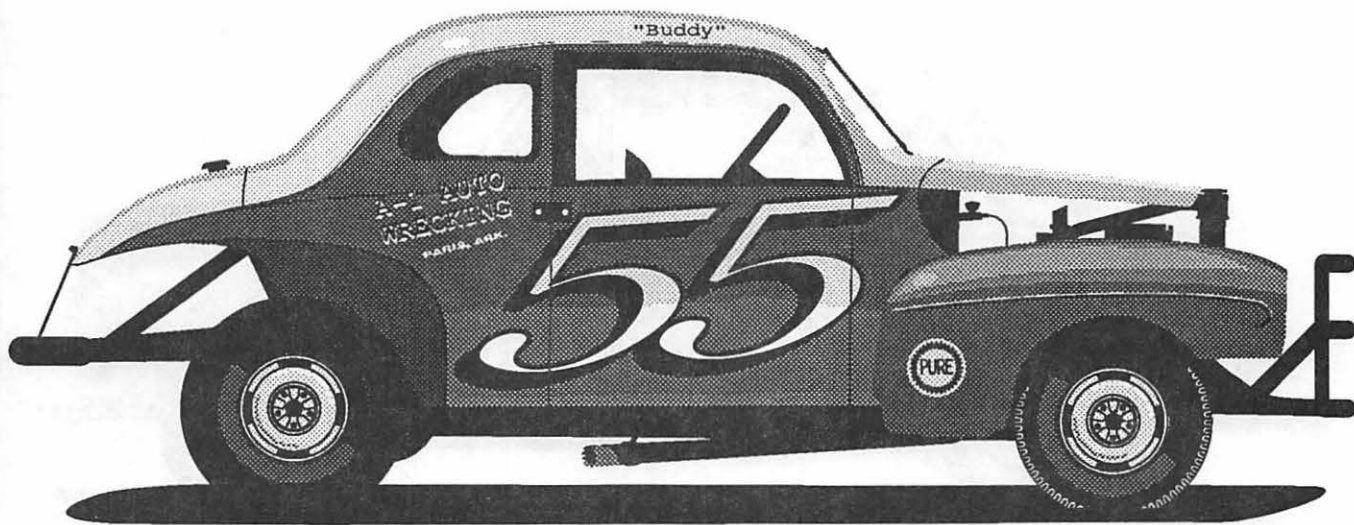


Fig. 2



time, the Illustrator user will find themselves using the keyboard to modify toolbox mouse activity to a far greater degree than with other draw programs.

One of the more frustrating aspects of learning Illustrator for me was modifying primitives. Every time I tried to break a primitive, such as a circle, into arcs with the scissors tool, I would get an infuriating dialog box telling me that only ungrouped object could be cut. Since I hadn't grouped the circle (as one would group objects in MacDraw) I was at a loss for what to do. After reviewing the video yet another time, I learned that primitives in Illustrator are automatically grouped upon creation and that to break apart such objects, the object must first be ungrouped. I tried it, it worked. After cussing out Adobe for burying this small but crucial bit of information in the manual, I began to use and love the program.

I learned to use Illustrator on a Plus. Aside from the limitations imposed by a single meg of RAM, I did a ton of work with Illustrator on this machine. The beauty of using a Plus with Illustrator is that the keys most heavily used, the shift, option, command and space bar, are all located next to each other. This makes it much easier to keep one's eyes on the screen when using the keys to modify the behavior of toolbox items. The SE

keyboard shoves the shift key into this neighborhood, and the extended keyboard inserts a useless control key. Both keys just get in the way.

Some draw programs let the user draw objects to a specific size by either a show size option or other method. Not so Illustrator, but I developed a work-around that was fairly successful. I drew a square, printed it on the Laser-writer, measured it, and then reduced it to precisely one inch. I saved and locked the square along with a one inch circle so that I now had a standard which I could enlarge or reduce with a great degree of accuracy. Clunky but effective.

Such a work-around is unnecessary in Illustrator 88. All you have to do is select the rectangle tool, press the option key, click, and you will be presented with a dialog box asking you to enter x and y dimensions. This and a number of enhancements make 88 a more powerful program than Illustrator, but there is a catch. Illustrator 88 is a veritable RAM hog and takes at least two meg to function as designed. That leaves a universe of one meg owners no choice but to use the original Illustrator. This isn't all bad. I find the original toolbox easier to use due to its simplicity. Even on machines with more than a meg of RAM, Illustrator is of value under Multifinder

since it requires far less RAM.

The deciding factor on whether to use Illustrator or 88 has now been made by Adobe for users with multimeg machines. Adobe Type Manager (ATM) only works with the latest edition of 88. If you work with Type 1 fonts, which until recently were available only from Adobe, ATM is the greatest thing since sliced bread. There's no going back.

One aspect of Illustrator that I have made no mention of is the use of templates for tracing. Were one to put undue credence in the scribbings of the Mac press, the impression derived is that Illustrator is useful only in conjunction with a scanner. Granted, the ability to use scanned images as tracing templates adds a degree of virtuosity that other draw programs can't touch, but the majority of the work I do does not involve the use of scanned images. I use Illustrator because it simply is the best program of its kind available.

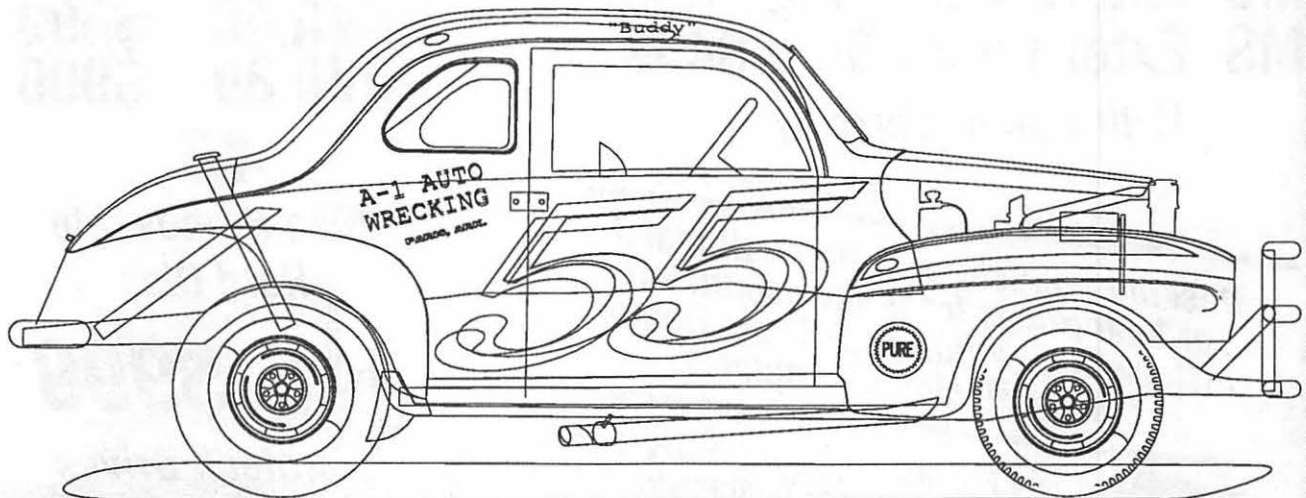
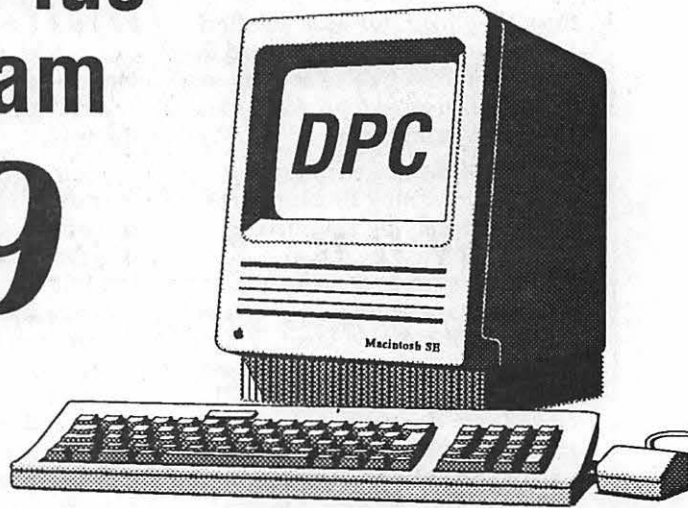



Fig. 3


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You write 'em (part two)...

by Ron Evry

Back in the old days (say, 1984 or so), personal computing was still a novelty. Every bookstore, newsstand and supermarket offered a wide selection of helpful books and magazines for the novice computer owner. At that time, it was assumed that if you owned a computer then you needed to learn how to program it to get any use out of the thing. To that end, these publications featured scads of instructions, lots of advice, and plenty of type-in programs. But as commercial software became readily available for just about any application, the programming magazines and books (especially for the Apple II owners) vanished from the shelves.

With the advent of truly low priced Apple II's and clones has come the new breed of computer owner. This person has a limited budget, and probably had to scrape up the money to get a computer in the first place. Having little cash left over to buy software, he or she would probably appreciate being able to write their own. Last issue, this column touched on magazine sources for type-in programs. But magazines are only a small part of the picture. To really learn about writing programs, the Cheap Computist needs to visit the library.

Bookstores carry a very small collection of basic instruction books. Some of the better computer supply shops have a few more to choose from, but generally they will be overpriced (a trade paperback takes up the same shelf space as a \$50 program; figure that one out). Also, it is very easy to spend a bundle on programming instruction books that soon prove to be useless. A retail store will only stock something if there is a demand for it. A book will stay on a library shelf until it is too dogeared to handle. Remember all

of those programming books I mentioned that came out years ago? They are still sitting on the shelves at the library right around Dewey Decimal Section 001.

A quick glance at the library shelves will turn up a number of titles with key-in programs for the Apple, ready to go. The more ambitious person will also find instructions for programming techniques in Applesoft BASIC, Logo, Pascal and even machine language for the very determined.

Those readers with little inclination to learn programming techniques will find an appropriate collection of books in the children's section of the library. There sit books that offer elaborate type-in programs for the little ones, all spelled out in easy to understand fashion. Of course, there is no need to be embarrassed when checking them out. A friendly smile and a mutter or two about "teaching the kids" will bring an understanding nod from any librarian.

There are so many books on the library shelves that finding them is an adventure in itself. But here are some I have found to be exceptional and relatively easy to find:

The Apple BASIC Manual by Thomas Milton Kenmitz and Lynne Mass; Children's Press, Chicago (1985). The picture on the cover shows a happy animated computer saying "Kids working with computers," but don't believe it. Any adult whose experience with computers has been limited to booting and loading commercial software will find this book a clear and easy entry-level guide to what the Apple can do. Everything is spelled out step by itsy-bitsy step.

Computer Battlegames by Daniel Isaaman and Jenny Tyler; Usborne Publishing Ltd., London (1982). This oldie from the stone age (1982) features a baker's dozen of type-in

programs for the Apple and a number of other fondly remembered computers. The games are easy to type-in and are fun to play. The amazing thing about Applesoft BASIC is that it still is usable on the latest and oldest models of the II line.

Write Your Own Program series; Gloucester Press, New York, Toronto (1985). Titles include: *Beginning Basic - Space Journey*; *Graphics - Hangman*; *Moving Graphics - Alien Invaders*; *Creating A Database - Adventure Game*; *Advanced Graphics - Haunted House*; and *Micro Sound - Synthesizer*. I have tried the last two in the series and they are quite remarkable. Written for both the Apple II and the Commodore 64, each computer is given color-coded pages of instructions to avoid the "changing lines" syndrome of other multi-machine books. Each routine (the part of a program that does a specific job) is highlighted and explained so that the reader not only can type in the program, but can also understand it. The impatient reader can flip to the back of the book and find the entire type-in program without explanations as well. But so much is covered so thoroughly here, that I strongly urge working through the books section by section.

There are many other books like this to be found in the library, and of course, the best thing about them is that they are FREE! The power that a computer gives you lies untapped at your fingertips. Learn which buttons to press and that power is yours.

Just for fun though, I am including a great little type-in program for you that will turn your computer into a light show. This works well in either monochrome or color screens, and has been around for years in various forms. Type this in and save it on a disk with ProDOS and BASIC.SYSTEM, or an initialized Dos 3.3 disk with BASIC. To make it self-booting it, name it "STARTUP" on ProDOS:

MicroPhone II version 3.0

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Here are seven reasons why, if you're serious about telecommunications, you should consider owning MicroPhone II:

POWER TRAIN. MicroPhone II is charged by the most powerful scripting engine for telecommunications, offering variables, string and math functions, arrays and file manipulation. You develop scripts with either the program's learn mode or its point-and-click script editor.

DESIGN. Surprisingly, with all its unparalleled power, MicroPhone II is simple to use. Menus, dialog boxes and on-screen controls are well organized and pleasant to look at. Its "outstanding" manual is easy to read, clearly laid out and contains a thorough index.

SPEED. Routinely clocked at 18,000 bits per second over ordinary telephone lines, MicroPhone II is the fastest telecom software around. Its file transfer protocols — XMODEM, 1K XMODEM, YMODEM, YMODEM-G, Kermit and ZMODEM — are all optimized to make your files fly across the country or around the world. The intelligent ZMODEM negotiates the most treacherous channels of a packet-switched network and resumes broken transfers with no loss of data.

COLOR OPTIONS. MicroPhone II lets you assign color icons to your scripts, thus turning the *icon bar*, shown here, into your control panel. The icon bar can be scrolled,



resized and placed vertically or horizontally anywhere on the screen, awaiting your next click. Choose icons from the large collection provided with the software, or create your own.

CRUISE CONTROL. Flexible scripting means that MicroPhone II can run on *automatic* while you're taking care of other important business. Whether collecting your electronic mail in the background, or calling Paris at midnight to transmit the daily sales report in French, the program is always at your service, saving you time and money.

RELIABILITY. Because Software Ventures' engineers value your time on-line, they spend countless hours applying the most rigorous testing procedures to ensure that the program is crash-resistant. In the words of *The Macintosh Buyer's Guide*, MicroPhone II is "the most reliable of all the telecom programs we tested."

TEST DRIVE. Software Ventures so firmly believes in its superior technology that it gives you an unprecedented chance to *test drive MicroPhone II for 30 days risk free*. If for any reason you wish to return the program, you may do so for a full refund of your purchase price directly from Software Ventures — no questions asked.

But enough talk. Start using MicroPhone II today and find out for yourself why Jim Seymour and John Dvorak are the great communicators. After all, having invested all this money in the best hardware in the world, don't you deserve the best software?

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"... arguably the best communications software ever written."

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BPI & Howardsoft (Tax)

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Ginny Spevak (202) 362-3887

Hard Disk

CMC (not CMS)

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Corvus Omninet

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Corvus

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Languages

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ProDOS 8 and 16

Barry Fox (717) 566-6709

RWTS, Disk structure

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

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Terry Prudden (301) 933-3065

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

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Henry Donahoe (202) 298-9107

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Paul Tarantino (703) 451-7670 (before 10P)
Neil Laubenthal (703) 691-1360
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Andy Gavin (703) 734-3049
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Leon Raesly (301) 220-0717

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

TimeOut Series & Utilities: ProSel

Chuck Ward bef. 9 pm (703) 830-3720
Barry Fox (717) 566-6709

VIP-Pro/Multibe

Jim Frison (703) 525-9395

816 Paint/Writ'rs Ch.El

Andy Gavin (703) 734-3049

Apple II Hardware Epson printers, hard drives,
Guy Durant (202) 363-0366

- Hotline is for club members only.
- Remember these are volunteers: be courteous; ask for help, not for a job to be done for you.
- Respect all telephone restrictions where listed—no calls after 10:00 PM except where indicated.

Beagle Buddies

MARYLAND

Paul Schlosser (Mt. Airy) (301) 831-9166
Ray Settles (Annapolis) (301) 647-9192
W. T. Cook (Columbia)
Gary Hayman (Greenbelt) (301) 345-3230
Lee Raesly (Adelphi) (301) 220-0717
Harvey Kaye (Bethesda) (301) 299-8994
Allan Levy (North Potomac) (301) 340-7839
David Page (301) 599-7630

VIRGINIA

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

MARCH

- 1 Thursday**
7:00 PM Columbia Slice Columbia
7:30 PM GameSIG office
💡 Editorial Deadline—April Issue
- 5 Monday**
7:30 PM PI-SIG office
- 7 Wednesday**
7:30 PM dPub SIG PEPCO
7:30 PM Mac Programmers office
- 8 Thursday**
8:00 PM StockSIG office
- 10 Saturday**
9:30 AM Annapolis Slice Anne Arundel Co.
9:30 AM Frederick Slice Frederick
Music SIG Call
- 14 Wednesday**
7:30 PM Board of Directors Meeting office
7:30 PM Database SIG/4D Computer Factory
- 21 Wednesday**
7:00 PM WorksSIG office
7:30 PM Excel SIG office
7:30 PM Fed SIG Call
7:30 PM HyperTalk SubSIG Arlington
- 22 Thursday**
7:30 PM Business SIG office
💡 Ad Space Deadline—May Issue
- 24 Saturday**
8:00 AM AppleWorks Sig Call
9:00 AM WAP General Mtg. Bethesda/CC H.S.
noon HyperCard SIG Call
noon Telecom SIG Call
- 26 Monday**
7:00 PM Apple Iigs NIH
💡 Ad Copy Deadline—May Issue
- 28 Wednesday**
7:30 PM AV SIG Call
7:30 PM Apple III SIG Call

Note the changes in deadline dates for the Journal articles and ads. We are shifting to a more accelerated schedule in order to be sure that the Journal gets into your hands before the monthly meeting date.

WAP General Meetings

Monthly General Meetings are generally held on the 4th Saturday of the month at Bethesda–Chevy Chase High School, 4301 East-West Highway, Bethesda MD.

Come as early as 8:30 AM to join, buy public domain disks, pick up your monthly WAP Journal. Attend the Q&A sessions to get your questions answered and hear the latest rumors. Listen to the main meeting topic at 9:30.

We also have a special session to welcome new computer users and get them started. Group purchase items can be bought at the office after the meeting begins at noon.

Meeting Notices

- Annapolis Slice 2nd Saturday;** Anne Arundel Community College - Careers Bldg. Lecture Hall, Arnold, MD, 9:30 AM.
- Apple Iigs SIG** Apple IIGS SIG (normally) the Monday after the regular WAP meeting; alternates between Dolley Madison Library in McLean and (NEW) NIH (building 31) in Bethesda at 7:00 PM. (February meeting Dolley Madison, February 26.) Call Gary Hayman 345-3230 for information.
- Apple III SIG** 4th Wednesday; WAP office, 7:30 PM.
- AppleWorks SIG** just prior to the regular WAP meeting at 8:00 AM in the USUHS cafeteria or other meeting room.
- AV SIG** (arts and video) 4th Wednesday; WAP office, 7:30 PM. May be subject to change; call Nancy Seferian (202) 333-0126 to confirm.
- Columbia Slice** 1st Thursday; at the Howard County Board of Education bldg., Route 108, Columbia, MD, 7:00 PM.
- Database SIG/4D** 2nd Wednesday; Computer Factory, Silver Spring, 7:30 PM. May be subject to change; call Eric Gutsche to confirm, (703) 379-1265.
- dPub SIG** (desktop publishing) 1st Wednesday; PEPCO Auditorium at 1900 Pennsylvania Ave., N.W., 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, 7:30 PM.

March

SU	MO	TU	W	TH	FR	SA
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Meeting Notices

Frederick Slice 2nd Saturday; at the library at 110 East Patrick St., Frederick, 9:30 AM.

GameSIG 1st Thursday; WAP office, 7:30 PM.

HyperCard SIG after the WAP general meeting; Uniformed Services University of the Health Sciences, Bethesda, 12:00 noon.

HyperTalk SubSIG 3rd Wednesday; Fairlington Community Center, 3300 S. Stafford St., Arlington, 7:30 PM.

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

NeXT SIG meets monthly. Call Hugh O'Neill, (202) 328-9510.

PI-SIG (Programmer's Interface) 1st Monday; WAP office, 7:30 PM (except for Monday holidays). Call office for information on January meeting.

StockSIG 2nd Thursday; WAP office, 8:00 PM.

Telecomm SIG after the WAP general meeting; Uniformed Services University of the Health Sciences, Bethesda, 12:00 noon.


Tutorials are held in the WAP office and at the Fairlington United Methodist Church, Rt. 7 and 395, Alexandria. Call the office for the location of any you wish to attend.

WorksSIG 3rd Wednesday; WAP office, 7:00 PM.

APRIL

2 Monday

7:30 PM PI-SIG office

 Editorial Deadline—May Issue

4 Wednesday

7:30 PM dPub SIG PEPCO

7:30 PM Mac Programmers office

5 Thursday

7:00 PM Columbia Slice Columbia

7:30 PM GameSIG office

11 Wednesday

7:30 PM Board of Directors Meeting office

7:30 PM Database SIG/4D Computer Factory

7:00 PM NeXT SIG NIH

12 Thursday

8:00 PM StockSIG office

14 Saturday

9:30 AM Annapolis Slice Anne Arundel Co.

9:30 AM Frederick Slice Frederick

Music SIG Call

18 Wednesday

7:00 PM WorksSIG office

7:30 PM Excel SIG office

7:30 PM Fed SIG Call

7:30 PM HyperTalk SubSIG Arlington


19 Thursday

7:30 PM Business SIG office

20 Friday

 Ad Space Deadline—June Issue

23 Monday

 Writers' Deadline—June Issue

7:00 PM Apple Iigs NIH

25 Wednesday

7:30 PM AV SIG Call

7:30 PM Apple III SIG Call

26 Thursday

 Ad Copy Deadline—June Issue

28 Saturday

8:00 AM AppleWorks Sig Call

9:00 AM WAP General Mtg Call

noon HyperCard SIG Call

noon Telecom SIG Call

April

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					

Macintosh

General

Jeff Alpher to midnight (301) 630-2036
Donald Schmitt (717) 334-3265

Art & Video

Nancy Seferian (202) 333-0126

Borland Products

Doug Ferris day only (800) 826-4768

Databases

Fourth Dimension

Bob Pulgino (301) 474-0634

FileMaker II

Tom Parrish (301) 654-8784

Helix

Jim Barry to midnight (703) 662-0640

Harvey Levine (301) 288-9380

MS-File

John Love (703) 569-2294

John Spencer (301) 730-1084

Omnis 3 & 3+

Paul Tabler (703) 278-8657

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

Frank Potter bef. 9 pm (703) 620-8886

Jay Rohr (301) 655-0875

ReadySetGo

Jim Graham (703) 370-5737

Marty Milrod (301) 464-5981

Graphics

General

Bill Baldrige (301) 779-8271

Jay Rohr (301) 655-0875

Adobe Illustrator

Ling Wong (703) 378-5102

Canvas

David Gursky (703) 522-8345

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

HyperCard

Holger Sommer (301) 474-3467

Rick Chapman (301) 989-9708

Inside Mac

Jon Hardis (301) 330-1422

John Love (703) 569-2294

Languages

Pascal

Michael Hartman (301) 445-1583

Machine

Ray Hobbs (301) 490-7484

MS BASIC

John Love (703) 569-2294

MacMoney

Chuck Sicard (301) 963-2879

MacProject

Jay Lucas (703) 751-3332

Spreadsheets & Graphics

General

David Morganstein (301) 972-4263

Bob Pulgino (301) 474-0634

Tom Cavanaugh (703) 750-9449

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 (703) 750-9449

MultiPlan

John Boblitz (301) 356-9384

John Love (703) 569-2294

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General

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ThinkTank-More

Jim Graham (703) 370-5737

Tom Parrish (301) 654-8784

Word Processors

Word

Marty Milrod (301) 464-5981

Harris Silverstone (301) 435-3582

Tom Cavanaugh (703) 750-9449

WriteNow

Bill Baldrige (301) 779-8271

WordPerfect—Mac

Curt Harpod (202) 547-8272

General

Franklin & Laser 128

Bob Martz (301) 795-5689

Games-Apple II

Charles Don Hall (703) 356-4229

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

IBM

Ray Hobbs (301) 490-7484

Leon Raesly (301) 220-0717

Math-OR AppIns

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

Music Systems

Ray Hobbs (301) 490-7484

Printers-General

Walt Francis (202) 966-5742

Leon Raesly (301) 220-0717

MX-80

Jeff Dillon (301) 662-2070

Stat Packages

David Morganstein (301) 972-4263

Stock Market

Robert Wood (703) 893-9591

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on the Hotline**

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(so we can call you)
654-8060**

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
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
Stephen Hadley	(Mt. Airy) 831-5353	Mac
R. Carl Myers	(Smithsburg) 824-7122	Mac & GS

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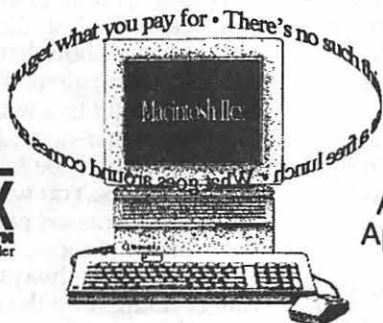
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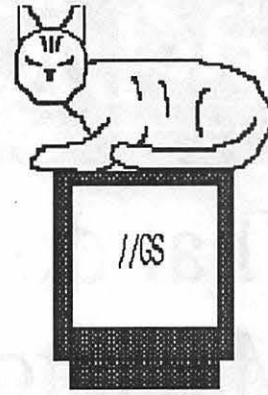
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View from the Cat House

by Kim Brennan



A nifty piece of hardware that may be in development for the GS is a video board. The rumor mill traffic has called it TurboRez. It would be something like a Transwarp of graphics. Plug the board into an expansion slot with a ribbon cable connected to the socket of your Video Graphics chip. It would allow more colors on the screen and also a video coprocessor, similar to the "blitter" chip used in Amiga computers. Probably for standard use you would see no difference in your GS other than lightning-fast graphics, but if you wished to make use of the improved graphics the capability would be there. Unfortunately, because it is an add-on board, game makers would probably not support it, just like some don't recognize or support the Transwarp. But just because the game or program doesn't support the hardware doesn't mean that you won't get any benefit from it. The increased speed of graphic redrawing alone would be a reason to get this board if the price is reasonable. More on this as time goes by as it probably won't be available until late in 1990.

An HP in the Driver's Seat?

Perhaps you've heard the ads for the new Hewlett-Packard LaserJet IIP on the radio. Or perhaps you have heard about the DeskWriter. The DeskWriter is HP's Deskjet printer with direct support for the Mac.

The LaserJet IIP is a small compact form of its Series II laser printer. It is not a Postscript printer but some font cartridges cleverly provide that capability. Both of these printers offer much improved resolution over the ImageWriter. And with a little help from other GS owners maybe more. HP, through a subcontractor, has made a Mac printer driver for the DeskWriter.

With some prompting they are being made aware that GS owners are interested in a driver too, and HP may create one. Daniel Slaven started the ball rolling with a couple of letters, and I'm asking you GS people to follow his lead. All you have to do is write a couple of letters (or one letter and one duplicate) to Hewlett-Packard and its subcontractor, Insight Development Corp. Here are the addresses and the names of the people they should be addressed to:

Mr. Burt Johnson
Insight Development Corp.
2200 Powell St.
Suite 500
Emeryville, CA 94608
1-800-825-4115
Ms. Lea Bailey, 49AS
Hewlett-Packard
19310 Pruneridge Ave.
Cupertino, CA 95014
1-800-752-0900
SCSI Support

I wonder how a Mac owner feel if the network server for his Mac had to be a NeXT computer or maybe a PS/2? That's pretty much my feelings about setting up a network for my IIGS and having to use a Mac as a File Server. I bought my GS not because it had a Mac interface but because it was an enhanced Apple II. I don't want a Mac, I just want to use the same peripherals without having to fight tooth and nail for the software support.

As I prepare to send this column off I am still working from my ancient (but trusty) Sider hard disk. I had hoped to be using a new hard disk by now, and I would be except for misplaced trust in a dealer. Though I have not had a SCSI drive for my GS I have had a SCSI controller board for quite

some time. Knowing that I had an early version shortly after I bought the controller board I took it to a local dealer for the (free) ROM upgrade to the Revision C ROM.

I learned this week, while attaching my new SCSI hard drive, that the dealer did not do the upgrade even though I was told at the time that the work had been done. I should have had the dealer demonstrate that it was updated when I picked it up. Live and learn. Meanwhile, I must now wait an additional two weeks before I can expand onto my 150 megabyte hard disk because none of the local dealers seem to stock this ROM. Sigh.

I realize that there are several "invisible" enhancements that people can do for their computers. By invisible, I mean something that you never really notice until it isn't there. The first is memory. Unless you happen to be running Appleworks GS, you aren't likely to notice the difference between a 1M GS and a 6M GS. For Appleworks GS, though, memory above 1M is almost a must. A similar statement could be said about hard disks. When you first get one you wonder how you could live without it. Getting a larger-capacity hard drive is one of those invisible enhancements. You won't really notice the increased capacity until you run out of room. But don't worry, you will always find some way of filling it up the extra room. ☹

Copy II Plus 9.0

by Bob Oringel

For most Apple II users some programs, like AppleWorks, for instance, have become old friends, requiring little thought, and getting just a whole lot of usage. Another such application program is Copy II Plus from Central Point Software. I'm sure that a week doesn't go by that I don't use one or more of its utilities, and I often use its Bit Copy programs as well.

I last reviewed Copy II Plus, version 6.6, in September 1986. I was happy with the program then and I'm still delighted with them. What is new about version 9.0 then? Well, it has grown with the times. It is in ProDOS, but still permits its use in DOS 3.3. It automatically converts files, or a data disk, from one operating system to the other, if the target disk and source disk are in differing systems. It copies the source files, converted to the target disk's operating system. It can copy

Pascal or CP/M disks. It has separate programs for copying 5.25" and 3.5" disks.

The first item on its extensive menu is Applications. It can be a launcher for other applications like AppleWorks, GEOS, or Smart Money. It can Edit Applications, Catalog a disk, Delete and Undelete, Lock and Unlock files, Rename, Sort a catalog, Format, Verify—files and 5.25" disk drive speed—and Compare files. It can display a Disk Map, change a DOS 3.3 boot program, Create a Subdirectory for ProDOS, and most of all it can Bit Copy.

Bit Copying permits you to make a backup copy of most copy-protected software for your own use. It does not authorize you to make copies for others. Bit copying permits changing, or otherwise reconstructing the hexadecimal parameters (called parms) of a

copy-protected program so that you can make a backup copy. There is a built-in file of parms covering perhaps hundreds of application programs, and this file is updated every few months. My only negative thought about the Copy II Plus parm file is that since it is found in a subdirectory, there should be other subdirectories containing all of the parms ever found in this program's long life. It would be helpful if one could use the file to back up a program which is several years old, its parms removed from the file, but which is new and useful to the user.

Copy II Plus V. 9.0 comes with 3.5" and 5.25" disks, in a handsome package which also contains a well-written 189-page manual. The documentation rightly assumes that the reader/user will not be primarily interested in the methods of copy protection, but simply how to defeat it. It therefore separates the "what to do" from the "how it's done." There is, however, plenty of material on the latter, for those who care to get into the technical stuff.

Finally, although Copy II Plus is reasonably priced, there is an upgrade program for registered users, which, at \$18, is more than reasonable. 🍏



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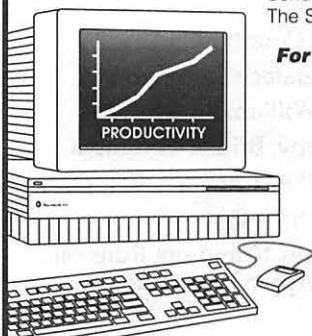
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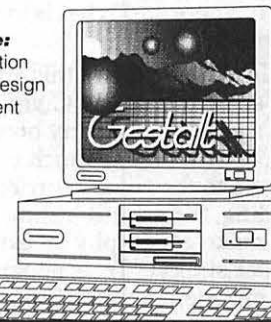


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Cross Country USA (Pt. 1)

by Phil Shapiro

Various newspaper studies have reported that American students' knowledge of geography ranks just a notch above abysmal. According to the studies, about half of all junior high school students would have a hard time telling you on which coast to find the fine state of California, and that many high school students would have a hard time listing eight different European countries.

But you can hardly blame students for this continental-sized gap in their knowledge. Schools from Pocatello, Idaho, to Jacksonville, Florida, have historically given students a cursory treatment of geography. Fifth-grade students are typically given a healthy dose of American geography with the lofty, but irrelevant goal of getting all the kids to chime out the capital cities of all the states.

For the next couple of grades, the subject of geography may crop up again once or twice in social studies class, usually as a short "unit," in between the Bushmen of the Kalahari and the French Revolution.

For whatever reason, our school systems do not give the subject of geography the attention it deserves. The prevailing attitude is that much of geography can be learned by osmosis: if you just read the daily newspapers, you're bound to learn where and what is important in this country.

In some respects this attitude has some merit to it. Given that there are only so many hours in a school day, and so much time to devote to the "core" curriculum of reading, 'riting and 'rithmetic, why not make geography an extracurricular subject? True, geography is an important subject, but students need no special expertise to learn it on their own.

Which brings us, by way of

small detour, to the present software review. Several programs on the market excel at bringing the subject of geography to life. The most widely known programs are the Carmen Sandiego series by Brøderbund, which entice students into playing a game of sleuth. Students fly from city to city, trying to track down a villain. All the while they learn facts and figures about important landmarks and locales.

The Carmen Sandiego series truly deserves the praise it has received from educators and parents. No other program gets children so quickly involved in working, and enjoying, the subject of geography. But you can't learn the lay of the land by jetting around from one city to another. To learn what this country looks like, you have to get out on the road. To experience American geography firsthand, you have to get out there and drive a truck.

The whole idea behind the program Cross Country USA is to get you to see the nation from the point of view of a truckdriver. The program gets you to pick up various "commodities" at different cities, and deliver them all to a final destination. In the process, you'll drive thru the cornfields of Kansas, past the great Rocky Mountains of Colorado and thru the fishing villages of Maine.

You actually see the scenery of these areas as you drive down the highway. The simulation is brought further to life with a realistic-looking dashboard across the bottom of the screen. You have to carefully monitor your gas gauge, windshield wipers, and lights, and take appropriate action when necessary.

The best part about Cross Country USA is the hundreds of little nuances that have been added

to the game. Even after your 15th or 20th game, you'll still encounter new and unfamiliar situations that have to be dealt with creatively. It's easy to start playing the game at a basic level, but the game is never tiring or predictable for experienced players.

Accompanying the disk is a large, desk-sized map of the United States, with all the major cities and "simulated" highways linking them up. (These "simulated" roads happen to approximate interstate highways.)

You also get a "city-commodity" cross-reference chart, listing 52 commodities and the cities in which they're sold. For example, cars are made in Detroit and Toledo, milk comes from Madison, Wisconsin, and steel can be found in Pittsburgh and Birmingham.

To round out the software package, you also receive a well-written booklet that tells you how to play the game. In the back of the booklet is a list of over 200 words to be used as "commands" when playing the game.

The first command you'll need to use is "Turn on truck." After you type this command, your truck springs to life with a diesel engine sound coming out of your Apple's speaker. You'll need to check your commodity-city chart to find out where to drive first. The desk-sized map comes in handy in planning your route.

Next month I will go into further detail about using the commands in Cross Country USA, and the hidden nuances that give the program its great appeal.

Cross Country USA

By Didatech Software Ltd.
3812 William Street
Burnaby, British Columbia
V5C 3H9 Canada
(604) 299-4435

For ages 10 and up. Runs on any 64K Apple II computer.

The author teaches computers in elementary school and develops educational software for the Apple II.

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Panasonic KX-1180 Printer

by Phil Shapiro

Struggling With an Electronic Pagan Ritual

A pagan ritual is a series of meaningless acts, performed for the purpose of "satisfying the gods." An electronic pagan ritual is a series of meaningless acts, performed for the purpose of satisfying the inner needs of various electronic devices.

The two best examples of electronic pagan rituals are:

- 1) Setting the time and alarm on your digital watch.
- 2) Setting your VCR to record a program sometime next week.

Both of these rituals are sufficiently bothersome as to irk even the most seasoned of computer users. The reason these rituals are so maddening is that you have to consult the instructions each time you perform the ritual. And they call this progress?

To the above two electronic pagan rituals, today we add a third: setting the near-letter-quality mode on one of the new Panasonic KX-1180 printers. You would think that Panasonic would like this task to be as simple as popping toast into a toaster. But no, that would be too simple.

To manually set the printer into the near-letter-quality mode, first you have to come to terms with the control panel on the front of the printer. Most normal printers have three switches for controlling the printer: the line feed button, the form feed button, and the select switch. To these three, Panasonic, in its great wisdom, has decided to add a fourth: the "function" toggle switch.

The purpose of this function switch is to allow you access to the EZ-Operator Panel. (Their words, not mine!) The EZ-Operator panel consists of three rows and three columns.

The idea behind this panel is to give you a range of options. Some of these options allow you to control the font. Some allow you to control the pitch of the type. The printer manual goes into a great deal of detail about your options. When examining the printer, I didn't have the time to explore all of these options, neither did I feel particularly inclined to spend the weekend figuring out the manual. All I really wanted to do was print out a simple document in near-letter-quality mode. And to my deep dismay, I found myself being forced to participate in a mind-numbing electronic pagan ritual.

The reason I'm so disappointed in this ritual on the KX-1180 printer is because I've been a devoted user of the previous model, the Panasonic KX-1080. One of the reasons I bought the Panasonic KX-1080 is the ease of setting the near-letter-quality mode. If you want high quality looking text, all you need to do is flick a switch on the left side of the printer from "Draft Mode" to "Near Letter Quality" mode.

The near-letter-quality mode on the KX-1080 produces a printout that is sharp and almost dot-free. In my view, the printout from my Panasonic KX-1080 surpasses the near-letter-quality mode on an ImageWriter. After all, the ImageWriter uses only seven pins, while most other dot matrix printers use nine pins (and 24 pins in some cases). The ImageWriter is fast, and good for certain tasks. But it falls short in producing presentable text in the near-letter-quality mode.

To be fair, I did not give the Panasonic KX-1180 a chance to show all it could do. I happened upon the printer at a friend's house, in the process of offering some AppleWorks counseling. My

friend had just bought his first computer. He was a touch disconcerted at finding out that he was going to have to wade thru the printer instructions as well as the hefty AppleWorks documentation. The computer was going to be used by young children, and we all agreed that it would be better not to have children perform pagan rituals in the house.

Upon further investigation, I have since learned that some programs allow you to send printer codes to access the near-letter-quality mode of the printer. In AppleWorks, for example, you might be able to set up a "custom printer," from the Other Activities menu. Software control of the printer would eliminate much of the pagan ritual associated with the EZ-Control Panel. But it still would require some effort to set up your software for the printer codes.

The manual accompanying the KX-P1180 contains a full twenty pages of "software commands" that aren't exactly gripping bedtime reading. The documentation is complete and clearly laid out, yet you have to be somewhat technically minded to figure out which options are exactly best for you.

There's a lesson here for all designers of new electronic equipment. Do not add features to your devices, if the features themselves can only be accessed by pressing a meaningless series of toggle switches. Progress, in itself, is generally a good thing. But progress should never be a slave to the electronic pagan ritual.

All the above comments apply equally well to the new Panasonic KX-P1190 (a faster, but similar, version of the KX-P1180).

- Panasonic KX-P1180
- Type: 9 pin dot-matrix
- Interface: Centronics parallel
- Price range: low-end (under \$200)
- Speed: 192 characters per second (draft mode); 38 characters per second (near-letter-quality)
- Weight: 14 pounds
- Font selection: elite or pica (draft mode); Courier, Bold PS, Prestige, and Sans Serif (NLQ mode)

Sounds and the IIGS

by Richard FitzHugh

The best-kept secret of the IIGS is that it contains an 8-bit analog-to-digital (A/D) converter that can be used to record electric signals in digital form using the Ensoniq sound chip. Various commercial devices are available to record and play back sounds, but I thought it would be more fun to figure out how to do this myself. The result is my program SONIC, written in ORCA/Pascal. It is too long to list here, but will become available later in the WAP Disk Library as well as an upload to the TCS, including source code. Here I will describe some of the problems encountered in writing the program.

Homemade hardware connects the computer to an audio tape deck for input and to an external speaker for output (Figures 1 - 4). Electronics buffs may like to experiment with these circuits.

I wanted to do the following things: (1) record sound using the A/D converter and store it in memory, (2) play the sound back from memory through the built-in speaker, (3) save the sound from memory to a disk file and (4) read a disk file back into memory.

Pages 21-35 of the Apple IIGS Toolbox Reference (abbreviated ATR) describes how to read the A/D converter using a low-level routine called Read Register. Unfortunately, the low-level routines cannot be called from Pascal. The Ensoniq chip can, however, be controlled directly through the Sound General Logic Unit (GLU) through 4 registers (E1/C03C - C03F) in the built-in I/O section of RAM (see p. 98 in the AHR).

I accessed the appropriate registers with two simple assembly language routines. One routine sets the GLU address pointer registers to the A/D converter address; the

other reads sound data from the converter. The electrical signal representing the sound is fed into two terminals on the connector J-25 (AHR 113 and Schematic Diagram, Part 8). This connector is located at the front right-hand corner of the motherboard and has seven pins sticking up from a plastic base. The terminals needed are pin 1, the A/D converter input, and pin 2, analog ground. These are located at the end of the connector toward the front of the computer, as indicated by the dot printed on the motherboard. I made a female connector to plug into J-25 by sawing a short section from one side of an IC socket from Radio Shack, just long enough to mate with the two pins. I soldered a pair of wires a couple of feet long to it, which I led out one of the holes in the rear of the computer.

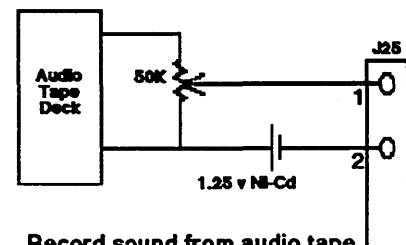
I recorded tapes with my audio cassette tape deck from both a record player and a microphone. When the recording volume on my tape deck is set to maximum, the resulting tape sends a signal of about 3 volts peak-to-peak through each of the two stereo output cables, one of which I fed into the computer. The A/D converter reads the incoming sound signal repeatedly at a specified sampling frequency or rate. The converter will read up to 32 kiloHertz (1 kHz = 1000 samples per second), but my program uses sampling frequencies only from 1 to 9 kHz. Higher values would require a faster machine language routine than provided by Pascal, and would also require excessive amounts of memory to store the data.

There is a tradeoff between recording quality and memory storage. According to information theory, the sampling rate for a signal must be at least twice the highest frequency component of the signal. Middle A on the piano is

440 Hz, about half a kHz, and each doubling of the frequency raises the tone by an octave. Human hearing has an upper limit of 10 to 18 kHz, depending on age. Fidelity increases with sampling rate, but so does the memory required to store the digitized signal. At 8 kHz, one can record one second of sound with 8 kbytes of memory. My program stores sound data in memory in data blocks, each of which holds 32k, or 4 seconds at 8 kHz. It has storage for 16 data blocks, which fit into 1 Meg of extended memory.

The digitized sound data can be saved to disk. Since each disk block holds 512 bytes, or 1/2 k, one data block requires 64 disk blocks. Disk files can thus get very large. A 3 1/2 inch disk holds 1600 disk blocks, or a maximum of 24 sound data blocks plus the necessary index blocks, corresponding to about 100 seconds of sound sampled at 8 kHz. Using a higher sampling rate requires proportionally more memory and disk storage.

The A/D converter will read any voltage between 0 and 2.5 volts, converting it to a numerical value between 0 and 255. Signals outside this range are clipped to 0 or 255. The signal from one of the stereo output cables from the tape deck can be connected through a 1.25 volt Ni-Cd rechargeable dry cell (to shift the zero point) and a potentiometer to the wires into J25 to provide this range (Fig. 1).



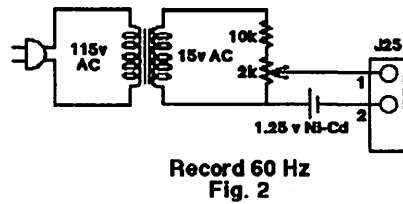
Record sound from audio tape
Fig. 1

The sampling frequency is determined by an adjustable delay in the program. The delay required for a given sampling rate is calculated. The required delays were found by calibrating with a 60 Hz signal fed into the A/D converter from a step-down transformer from





house current (Fig. 2). The digitized numbers obtained with different delays were dumped to the screen, and the resulting sampling rates calculated. From these results a formula was found to calculate the delay corresponding to any given sampling rate.



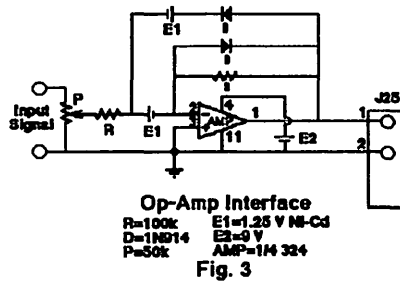
Record 60 Hz
Fig. 2

The sampling rate also depends on the speed of computation. The program is designed to run with the system speed set to Fast. A TransWarp GS accelerator card should be set to Normal speed. If the program were compiled with the Optimize directive on, this would also change the sampling rate, and the process would have to be recalibrated.

When I first examined the 60 Hz wave form recorded in this way, I found that there was a spurious spike added at the same place in each cycle. WAP member Ted Meyer suggested that this might be due to a Heartbeat Interrupt, which tests for events like a pressed mouse button 60 times a second. After I inserted a ClrHeartBeat tool call at the beginning of the main program, this spike went away. Success! Later I discovered that the Apple IIGS Technical Note #55 says sternly: "Nothing but System Software should make this call...anything from a system crash to media corruption may result." Oops! However, I haven't had any trouble from this source.

I don't know how big an input voltage it would take to fry the sound chip, and I don't want to find out. To avoid possible damage to the computer by feeding in too large a voltage, I made a hardware interface to limit it (Fig. 3).

Starting at the left side of Fig. 3, the signal passes through a gain control potentiometer P, then into an operational amplifier on a chip (one section of a quad amplifier chip, Radio Shack #324). The



Op-Amp Interface
R=100k E1=1.25 V Ni-Cd
D=1N914 E2=9 V
P=50k AMP=114 324
Fig. 3

amplifier is powered by a 9 volt dry cell. The diodes D (1N914) and the 1.25 volt Ni-Cd batteries E1 shift and clip the A.C. input signal so that it lies within the range 0 - 2.5 volts required by the converter. If signals smaller than 2 volts peak-to-peak are to be recorded, an extra stage of initial amplification could be added to the circuit.

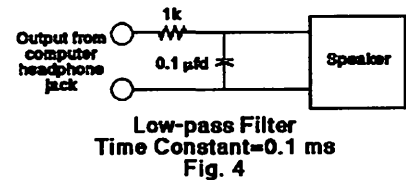
I built this circuit, including box, with about \$20 worth of parts from Radio Shack. A good introduction to operational amplifier circuits is the book "How to Build and Use Electronic Devices Without Frustration, Panic, Mountains of Money, or an Engineering Degree," second edition 1980, by Stuart A. Hoenig (Little, Brown & Co.).

To record a sound, choose "Record sound" from the program menu, specify the sampling frequency and the number of data blocks wanted, and start the tape playing. When the tape counter reaches the desired starting value, press RETURN to start the recording process, and RETURN again when it is over, to return to the menu.

The sound chip has 64k of dedicated RAM which it uses for storing sound data to be played. A 32k data block is stored in one half of this 64k RAM and sent to the speaker while another data block is being stored in the other half. When the end of the first half is reached, the data in the second half is played, while the first half is reloaded with a new data block, and so on alternating between the two halves of RAM until the last data block has been played. The information necessary to control this process is loaded into a number of parameter blocks (one for each data block) which are read in succession by the Sound Tool routine FFStartSound.

To play the sound, choose "Play Sound" from the menu, specify the sampling rate and the number of data blocks, and press RETURN. Since the internal speaker in the IIGS does not provide very good sound, I connected an external Yamaha speaker to the headphone jack in the back of the computer. This speaker has an amplifier and a gain control, which makes it more useful than a passive external speaker.

When I record music and play it back, there is a detectable buzzing sound, which appears to be caused by the high frequency components in the stepwise signal emitted by the D/A converter. To decrease this, I feed the signal to the speaker through a simple low-pass RC filter (Fig. 4).



Low-pass Filter
Time Constant=0.1 ms
Fig. 4

Higher quality sound can be produced by using a higher sampling rate on output. The sound chip can generate sound using much higher sampling rates. This is probably the reason that music produced with the Note Synthesizer tool set sounds so good. A simple example of this is the New Desk Accessory KEYS.PAS in the DESKTOP.SAMPLES folder of the ORCA/Pascal disk PASCAL.SAMPLES.

The menu also provides for saving a sound signal in a disk file, and loading it back from disk. As noted above, these files can be quite large. The signal can also be displayed on the text screen as numbers or as a curve on the graphics screen. With the latter display, the amplitude of the stored signal can be checked to see whether it has been clipped, instead of using an oscilloscope. Also, a musical scale can be loaded into memory for testing purposes.

This method of recording and

(Continued on next page)

Mousetext and Ultramacros

by Gary Hayman

I have been asked many questions concerning the use of MouseText characters on AppleWorks 3.0 screens in conjunction with Beagle Brothers' TimeOut UltraMacros. The characters can prove to be very useful when preparing macro help screens. (Please note that MouseText characters on TO.HELPSCREENS are a completely different matter.) Here are some examples of how you can exhibit the MouseText characters and their equivalents by using macros. If you aren't using UltraMacros 3.x (you should be—see your Beagle Buddy for the update) don't bother with these—they won't work, just keep the article handy for when you eventually upgrade. I have included a couple of little tricks that can make your macro life easier.

Compile this file using the TimeOut Macro Compiler and check them out.

(Continued from prev. page)

playing sound might be used to provide sound effects in games or other programs, or to analyze and synthesize speech sounds. Possible modifications of this technique might include making a Fourier analysis or sonogram of a sound and changing its frequency components for interesting effects.

You should be aware that any external equipment connected to your computer could conceivably cause damage, due either to faulty design or errors in construction. Although I have tested the circuits described here, neither the author nor Washington Apple Pi can be liable for any damage they might cause to your computer.

START

```
A:<ALL
  OA-Q RTN
  MSG "@ A B C D E F G H
I J K L M N O P Q R S T U
V W X Y Z [ \ ] ^ _ ":
  MSGXY 0, 21: {tell it
where to go}
  MSG &@ A B C D E F G H
I J K L M N O P Q R S T U
V W X Y Z [ \ ] ^ _ &:
  MSGXY 0,128>! {reset
please}
```

Notice the second line, OA-Q RTN. This is a quick way of removing ALL messages from any location.

Note that there are three spaces at the end of the strings. I have done that on purpose, in this case to "white out" any text material that may be on the screen that would interfere with your easy viewing of the characters.

This variation of the first macro is used to demonstrate that you can also use the last line of the screen for your message.

```
B:<ALL
  OA-Q RTN
  MSG "@ A B C D E F G H
I J K L M N O P Q R S T U
V W X Y Z [ \ ] ^ _ ":
  MSGXY 0, 23 {tell it
where to go}
  MSG &@ A B C D E F G H
I J K L M N O P Q R S T U
V W X Y Z [ \ ] ^ _ &:
  MSGXY 0,128>! {reset
please}
```

Now the following macro is a little CLASSIER. It places the chart in the middle of the screen TEMPORARILY blanking what was on the screen by using the CLS (clear) command. In addition, it uses one of the four new Ampersand commands and places a special comment automatically at the bottom of the screen and does an automatic wait for Space Bar press.

```
C:<ALL
  OA-Q RTN
  AHEAD CLS {TRICK: to
clear screen of ALL char-
acters}
  MSGXY 255, 5 {center
on line 5}
  MSG ` MY MOUSE TEXT
CONVERSION CHART `:
  MSGXY 7, 10 {tell it
where to go}
  MSG "@ A B C D E F G H
I J K L M N O P Q R S T U
V W X Y Z [ \ ] ^ _ ":
  MSGXY 7,12 {tell it
where to go}
  MSG &@ A B C D E F G H
I J K L M N O P Q R S T U
V W X Y Z [ \ ] ^ _ &:
  MSGXY 0,128 {reset
please}
  & "SPACE" : OA-Q RTN>!
{new Press Space comment
plus remove message}
```

OTHER HINTS: REMEMBER you must have ":" after PRINT statements, REM statements, MSG statements (see above) and AMPERSAND statements (see above)

Gary Hayman is Director-At-Large of the Washington Apple Pi board of Directors, is Chairman of both the AppleWorks and Apple IIGS Special Interest Groups and is SYSOP of several Boards on the WAP Telecommunications System. He also is a Beagle Buddy helping members with TimeOut problems.

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Fly Your GS Through a Massive Sort

by Chester H. Page

How to Cheat the Memory Manager

I had developed a set of programs for the Apple II+ and IIe with 64k RAM to search over 100 pages of text containing family history, genealogical data, and narrative accounts of some colorful ancestors; all proper names are extracted and labeled with all pages where the name appears. To alphabetically order this list in the limited 64k memory required batch manipulation. With the strings averaging about 40 bytes in length, I decided to break up the list into files of 200 entries, so that two such files could be in memory at the same time (for sorting), requiring 18 full files and one partial file using two 5.25" disks for storage. These 19 files, identified as INDEX1 thru INDEX19, were ordered by the following procedure:

Files 19 and 18 are loaded. This double-length list is sorted using a QuickSort routine. The top 200 strings are then held in memory, the remainder written back to disk as a new INDEX19. INDEX17 was then loaded, the memory sorted, 200 strings held back and the other 200 saved to disk as the new INDEX18. This is repeated until INDEX1 has been loaded and added to the top 200 strings accumulated from the other 18 files.

After sorting, the top 200 strings are indeed the top 200 in the whole set of files, so these are saved as the final version of INDEX1. The whole operation is then repeated, using INDEX19 thru INDEX2; the top 200 strings are now saved as the final INDEX2. This is repeated for INDEX19 through INDEX3, and so on, until all 3,468 strings have been ordered.

In this operation files are read by INPUT X\$ and saved by PRINT

X\$; the Applesoft string table data are used as pointers by QuickSort. This combination of QuickSort on batches of data plus a bubbling-up through a set of files is slow; it takes about 2.5 hours. This could be reduced by a batch loading instead of INPUT X\$, but the main limitation is the file bubbling required by the limited memory. Actually, this was my primary motivation for acquiring a IIGS.

My first experience with the IIGS was disappointing; I followed the procedures in Lichy and Eyes faithfully, but could not get the memory manager to allocate a block of more than 80k of memory, so I decided to do my own memory management as I always had. Since the IIGS can be used with only 256k, I thought that the added 256k (banks 2-5) should be available for my long text file, but immediately ran into a Catch-22 situation: ProDOS 8 does not allow addressing locations not in bank 0; ProDOS 16 allows long-file loading, but automatically invokes the ROM memory manager! This meant that I had to learn to cheat the system. First, however, the 19 files on 5.25" floppies had to be combined into a single file on a 3.5" disk. This was easily done in ProDOS 8 by a BASIC program reading one file at a time, as strings, then appending these strings to a single file on the 3.5" disk.

What the Program Does

This program, which will be distributed through the PI's Disk Library and TCS, allows loading 16,000 variable length strings, occupying up to 192k, alphabetizing the list, and saving it back to disk. To demonstrate the method, I have generated three programs that sort 4,000 strings, 8,000 and 16,000 strings of randomly chosen letters.

[Editor's Note: Although these

demo programs are a good demonstration of exploiting the expanded memory in the GS, they should be run from a ProDOS 8 disk with BASIC.SYSTEM, as the programs will not return to BASIC as described below under GSOS.]

First create a list of random strings. The BASIC program GEN.4000.10 will create a list of 4,000 random strings 10 characters in length; GEN.8000.20 will create a list of 4,000 random strings 20 characters in length; GEN.16000.10 will create a list of 16,000 random strings 10 characters in length.

After creating your list, RUN the program LISTIN. You will be prompted for the pathname of the list file (either DEMO.4000.10, DEMO.8000.20 or DEMO.16000.10, depending upon which program you used to generate the list). In seconds, the list will be loaded and you will be returned to BASIC. RUN the program ORDER, and the 4,000-string list is alphabetized in five seconds (after a 2-second program loading time). SHOWLIST prints the list to screen so you can view the list before or after ORDER. You can stop and resume the scrolling of SHOWLIST by using CTRL-S and CTRL-Q, or it can be aborted by CTRL-RESET. Progressing to 8,000 20-letter strings or 16,000 10-letter strings gives alphabetizing times of approximately 11 and 22 seconds respectively, less than 1.5 milliseconds per string!

The demo of 4,000 10-letter strings is ordered in about five seconds. The 8,000 strings need 11 seconds, and the 16,000 case needs 22 seconds. Thus in all three cases, more than 700 strings are ordered alphabetically per second!

How It Works

To cheat the system, I start with the IIGS in emulation mode and use ProDOS 8 with the MLI (Machine Language Interface) calls to load the file in \$400-byte batches (using \$9200-95FF as the buffer). After each batch is loaded, the program changes to native mode and moves the data by blocks to the added banks, 3-5. (Actually the data are |copied|, not |moved|.) The area \$20000-2FFFF is reserved

for a table of 16000 4-byte pointers to the strings, so the first move is from \$9200-95FF to \$30000-303FF. After reloading the buffer from the disk file, \$9200-95FF is moved to \$30400-307FF, etc.

With the entire file loaded (about 6 to 20 seconds depending on which demo list is loaded), a "string-table" is built in the area \$20000-2FFFF. This table uses three bytes for the 3-byte address of the location of the first character of a string, and a fourth byte for the length of the string. The key to this table-building operation, and in fact to all the manipulations of the string data, is the use of the only 65816 operation that allows accessing all locations without changing the data bank: Direct Page Indirect Long Indexed with Y Addressing—LDA [Ptr],y. (In my case, a string ends in a carriage return, but strings could comprise several lines each if an end-marker is used. If strings longer than 255 characters are wanted, 2 bytes can be assigned to hold the count.)

The table is built by first entering the string address, which is \$30000 for the first string, then searching from this address forward for a carriage return (\$D), using LDA [Ptr],y and incrementing y. When the carriage return is found, y gives the string length to be saved as the fourth byte in the table entry, and by addition we readily find the starting address of the next string. When there is no next string, the length 0 is attached to this last address.

LISTIN calls the file-reading routine and the table-making routine, followed by a return to BASIC to await the next command. This return-to-basic is handled by saving the stack pointer on entry to the machine-language program; at its conclusion, returning to emulation mode and restoring the stack pointer allows a simple RTS to return control to the basic program that made the call.

SHOWLIST and LISTOUT use SHOW to print the strings one-by-one to the screen or to an open disk file. The string table provides 3-byte pointers to the strings and a 1-byte string length; these data are supplied to the TextWriteBlock tool

in the Text Tool Set (in ROM). The null string at the end of the table terminates the operation.

The program ORDER calls a Quicksort machine language routine; the sorting routine doesn't move any strings, but interchanges table entries as appropriate so that the table entries reference the strings in alphabetical order. (The null-string pointer at the end of the table is left undisturbed.) Since SHOWLIST reads the strings by using successive table entries, the strings are output in alphabetical order without regard to their physical order in memory. If for some reason you want to put the strings in alphabetical physical order, save the ordered list to disk with the program LISTOUT and reload it with LISTIN. If you have enough RAM for the desktop, AppleWorks will even show the sorted list by creating a word processing file from the ASCII text file.

The heart of the operation lies in the Quicksort routine, which is based on an article by C. Bongers in Nibble, Vol. 3 No. 4, 1982. (Since the IIGS allows a large stack at an arbitrary location, Bongers' technique of checking for stack overflow and restarting is not needed.)

SORT ROUTINE

A set of five variable string pointers is used: F(first) L(ast), I, J, M(id). These variables are all addresses of string-table entries in bank 2, with effective addresses between \$0000 and \$FFFC, and with all values integral multiples of 4. Sorting involves sorting a number of batches, each starting at its own value of F and ending with its own L. Initially, F and L are set for the first and last strings in memory, but the process involves a sequence of sub-batches, each with its own F and L.

To start sorting an F to L batch, I is set equal to F and J to L. A reference string is chosen by adding the values (table addresses) I and J and dividing by 2. To avoid an answer that points to the middle of a table entry, i.e., one which is divisible by 2 but not by 4, the result is ANDed with \$FFFC. This "mid-string" M is at the middle of a set of string pointers; it would

point to the middle of the string sequence if the strings were already ordered. Consider the M string as dividing the F-L set into two subsets: the F-M subset, which is supposed to precede M, and the M-L subset, which would properly follow M. By using I as a running pointer in the F-M range, and J as a running pointer in the M-L range, these orderings can be checked.

The string pointed to by the table entry at I is compared with the one pointed to by the table entry at M; if the I string should precede the M string, it is OK where it is, so I is incremented (add 4 to get the next table entry) and the new I string compared to the M string. When an I string that should not precede the M string is encountered, the comparison is shifted to the ML half of the set. The M string is compared to the J string; if the M string should precede the J string, the J string is OK where it is and J is decremented (by 4) to get the next J pointer. When a J string that should not follow the M string is encountered (remember we have an I string that should not precede the M string), the I and J strings are interchanged by interchanging the contents of the I and J table pointers. These two strings are now in the proper half-ranges.

Then I is incremented and J decremented as the first step in continuing the comparisons. Eventually this process will lead to I and J passing each other, which means that this particular sorting run is finished—the I strings (F-M range) all properly precede the J strings (M-L range) and the set of strings has been divided into two subsets having the correct relative positions, so each of these subsets can be sorted within itself without regard to the other subset. If the sorting routine is applied to each subset, and then to each subset of each subset, etc., the whole original set will become ordered.

Since only one subset can be worked on at a time, the waiting subsets must be put on queue. This is readily done by saving the end pointers of each subset on the stack, planning to load these values as the F and L values for a later sort. When there are no more subsets waiting to be sorted, the



entire sort has been finished.

Further Exploration

I used an ORCA/M assembler, and named the source files LOAD.S, SHOW.S, and SORT.S. The typical operation is ASML LOAD.S followed by MAKEBIN LOAD. This converts the ProDOS 16 load file produced by ASML (assemble and link) into a ProDOS 8 binary load file at \$2000. (Having only one 3.5" drive, I find it convenient to put all my source files and assembled files on a 5.25" disk, keeping the assembler in the 3.5" drive. I just don't like the idea of putting program development onto the assembler disk, particularly while learning to use the assembler!)

Cheating the system has some special problems. Since it is assumed that you will not be

cheating, ORCA/M provides no straightforward way of assembling object code at a specified location, as we used to do in the II+ and IIe. After assembling and linking source code, ORCA provides for converting the ProDOS 16 load file to a ProDOS 8 binary load file at a requested location by using the command "MAKEBIN." A printout of the assembly, however, shows the data for an origin of \$0000, hence references to internal addresses have to be modified by hand if the object code is entered by hand. Such patches have to be made on internal JSRs and JMPs, so I have marked these by capitalizing JSR and JMP in the source code at points where the 00 address byte must be changed to 20. Addresses of variables (data cells) also present this problem, so I moved the variables in SORT to the zero-page

to avoid the need for patching numerous LDA and STA commands. In LOAD, the need to increment the destination of a block move (to the next bank) requires changing 00 to 20 in line 140.

Actually, I saved the assembly listings as text files and patched them (using Applewriter) so that LOAD.LISTING, SHOW.LISTING, and SORT.LISTING have correct memory addresses.

Note on bank moves with the ORCA/M assembler: this assembler is not a generic 65816 assembler; it was written for the Apple IIGS. The instruction MVN 0,3 will NOT assemble as 54 03 00, but yields 54 00 00! One way around this bug is to code MVN 0,\$abcd, where a-d are arbitrary hex digits. The assembler picks off the first byte and compiles 54 03 00.

The Intelligent Carriage Return Stripper

by Gary Hayman

The February issue of the Washington Apple Pi Journal carried my article "CR Stripper," which concerned the stripping of carriage returns from a document using a technique which involves AppleWorks and TimeOut Telecomm. I promised you in the article that I would show you another way of doing the stripping. This method involves the use of AppleWorks (3.0) and TimeOut UltraMacros (3.x). You will probably have a collection of these types of documents if you have gathered text files from various telecommunication services.

This UltraMacros macro set will process text files of the type that you may receive from an on-line service that have carriage returns at the end of each line, converting them into normal AppleWorks files by removing carriage returns at the ends of lines when, and only when, it is appropriate. It will work inside of

AppleWorks 3.0 which has UltraMacros 3.x properly installed.

The macro set retains the integrity of indented lines, such as at the start of each paragraph, and carriage return-only lines that may be in the document. After compiling, it is activated with an Option-Z or Solid Apple-Z. Depending upon how many lines are word wrapped, you may have to delete some left over carriage returns at the end of the file or you may witness some apparent do-nothing activity at the end of the file. IMPORTANT: if the text file contains a vertical listing that is flush with the left column, you will want to manually insert a space before each item in order to prevent word wrap and separate the listing from the previous paragraph with a carriage return.

We are assuming that the original writer of the message

either takes advantages of the word wrap capabilities of the bulletin board service, the writer's communication software or gets near the END of the line before pressing a return if composing a message on-line. The default number "66" which shows the "short line cut off" (65 or less would retain the CR and 66 or more would be word wrapped) could be adjusted down or up if you desired when the directions pop up on your screen.

You will find some of the newer commands and techniques that UltraMacros 3.x offers, such as: %J%, %K%, CLS, #MSGH, #MSHV, #CURSCHAR, ENDIF, SA-RTN, FIRST, ENDMACRO, and the use of variables inside of strings, which will add to your understanding of writing macros.

The program appears on the next two pages...

START

```
Z:<AWP $1 = %J% + " SET SHORT LINE CUT OFF " {%J% sets inverse}
    $2 = "Type number between 20 and 77"
    $3 = "and press RETURN"
    $4 = %J% + " OR "
    $5 = "Just press RETURN"
    $6 = "for standard DEFAULT of 66"
    $7 = "=== Type " + %J% + " 99 and a RETURN " + %K% +

        " to look at document again ===" {%K% resets to normal}

AHEAD CLS K = 2 {space between lines}
    Q = 4 {start position}
    Z = 0 {counter}
POKE #MSGH, 255 {set centering}
BEGIN Z = Z + 1 IFNOT Z > 7 THEN Q = Q + K
POKE #MSGV, Q MSG $(Z) : RPT {set vertical}
ELSE BELL POKE #MSGH, 0 POKE #MSGV, 128 {back to default}
$2 = GETSTR 2 V = VAL $2
IF V = 99 THEN OA-Q RTN ENDMACRO ELSE {look at document again}
IF $2 = "" THEN V = 66 OA-Q RTN GOTO SA-A ELSE
IF V > 77 OR V < 20 THEN BELL BELL MSG ` OUT OF RANGE ` : {filter}
WAIT 2000 GOTO SA-Z ELSE
OA-Q RTN GOTO SA-A ENDIF>!

.....REMOVE TOP OPTIONS

A:<AWP INSERT ZOOM OA-1 OA-O>LM<RTN>0<RTN ESC OA-1 {INSERT TEMP OPTION}
    OA-Z LEFT OA-D UP UP UP UP UP UP UP RTN {REMOVE ALL OPTIONS}
    {INSERT DESIRED OPTIONS}
    ZOOM OA-1 OA-O>RM<RTN>.3<RTN>LM<RTN>0<RTN ESC GOTO SA-B>!

.....DETERMINE NUMBER OF LINES

B:<AWP OA-9 POSN C,T OA-1 MSG ` REMOVING SPACES AND MARKING ` : GOTO SA-1>!

    {COUNTER AND REMOVE SPACES}

1:<AWP FIRST T = T - 1 IF T = 0 GOTO SA-7
    ELSE SA-6 {TO REMOVE SPACES} GOTO SA-2 ENDIF>!

    {IS THE FIRST CHARACTER OF THE FOLLOWING LINE A CR?}
    {THEN WORD WRAP IS NOT DESIRED}

2:<AWP FIRST SA-RTN SA-RTN POSN C,L IF C = 1
    THEN GOTO SA-1 {CR FOUND - NO ADJUSTMENTS}
    ELSE GOTO SA-3 ENDIF>! {CR NOT FOUND}

    {IS THE FIRST CHARACTER OF THE FOLLOWING LINE A SPACE?}
    {THEN WORD WRAP IS NOT DESIRED}

3:<AWP: FIRST: X = PEEK #CURSCHAR IF X = 160 {testing for space}
    THEN SA-1 ELSE
    GOTO SA-4 ENDIF>!
```





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```
{IS THE ORIGINAL LINE A SHORT LINE?}
{THEN WORD WRAP IS NOT DESIRED}
```

```
4:<AWP UP SA-RTN POSN C,L IF C < V
  THEN DOWN GOTO SA-1 ELSE GOTO SA-5 ENDIF>!
```

```
{CONDITIONS OK TO DO WORD WRAP - MAKE MARK}
```

```
5:<AWP FIRST DOWN>~<GOTO SA-1>! {making a mark "~"}
  {REMOVING EXTRANEIOUS SPACES AT END OF LINE}
```

```
6:<AWP BEGIN
  FIRST
  SA-RTN LEFT X = PEEK #CURSCHAR IF X = 160 {check for space}
  THEN RIGHT
  DEL RPT ELSE ENDIF>!
```

```
{DO THE ACTUAL WORD WRAP}
```

```
7:<AWP MSG ' WORD WRAPPING ' : OA-1
  BEGIN
  OA-F>T<OA-Y>~<RTN $1=SCREEN 1,24,3
  IF $1 = "Not" THEN {no more "~"}
  BELL MSG ' DONE ' : WAIT 1000 MSG "" : SPC STOP
  ELSE >N<RIGHT
  DEL DEL DEL SPC RPT ENDIF>!
```

END



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On the Trail of the Apple III

by David Ottalini



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First of all

Sorry about missing you in the January Journal. These new deadlines caused some problems, which I think are behind us now. I hope all of you received your copy of the January column in the mail along with the survey. If you haven't filled it out yet, please be sure to do so as soon as possible and send it back. It will help us serve you better!

Ten Year Anniversary

The Apple III Community will be celebrating its tenth year in just a few months. It was in May, 1980 that Apple introduced our SARA at the National Computer Conference in Anaheim, California. Next month, I'll start using a part of my columns to provide you with a little history and comment about that. I hope you'll find it all as interesting as I do!

NAUGC

The National Apple Users Group Conference is being planned for April 20 through 22 this year in Arlington Heights, Illinois, a suburb of Chicago. I mention it here because TAU's Lavona Rann is heading up the conference this year. Lavona and her husband, Richard, are long-time Apple III supporters and spear-headed TAU's Phase III Conference back in 1987 (that was the first true conference for Apple III users).

This particular conference is aimed at Apple user groups around the country, and will offer a number of presentations, workshops, hands-on demonstrations, discussions with developers and more.

Perhaps more importantly, Lavona has offered to make space available for any Apple IIIers who

might be interested in going. This could very well be the last chance for the III Community to get together in one place. So if you're interested, you can contact Lavona at: 1113 Wheaton Oaks Dr., Wheaton, IL 60187. Her phone number is (708) 518-2642.

I'm not sure if I am going at this point (I do not know if WAP is sending anyone either), but would encourage anyone interested to give me a call. If any III SIGer does go, we'd love to get an article for the Journal out of it.

On the PD front

I'm happy to report that Dr. Al Bloom has once again come through and submitted a disk full of his "Inpert's Corner" columns as originally published in the "TAU Journal." As we've come to expect, these columns are interesting and informative, and certainly well worth the price. Look for this disk to come into our library within the next few months.

Speaking of our PD, we're placing one disk into the hopper this time around. I call it "Ottalini Disk #4," certainly an original title for yet another disk full of your III SIG Co-Chairman's columns and other assorted rantings during 1989. We're going easy on you this month, while completing work on a number of disks we hope will help when your III takes ill. More on that next month!

Desktop Manager problem

I'm not sure if anyone else has had this problem, but it may be something to look out for. I was printing out a letter with my Star Powertype daisywheel printer and used On Three's Desktop Manager at the same time. In the process, the Powertype began printing gibberish. It doesn't affect my dot matrix

printer, so this may be a problem only the poor daisy wheels must deal with. Lesson here: Don't use DTM while using your daisy wheel (or at least, a Powertype!).

On Three news

On Three's Bob Consorti recently sent me a program called "Bad Block Fixer" to test. It's a neat little program that checks any disk (emphasis though on hard drives) and will flag any bad blocks. At that point, if you're willing, it will fix the disk in one of two ways. If you have a Profile, it will attempt to force it to 'spare' out the bad blocks. The second method is to create a file on the disk called "Bad.Blocks" which will hold all the bad blocks on the disk.

Unfortunately, to fix the disk, Bad Block Fixer must first format it. That means you have to back up everything first before proceeding. The program is being sold now, but users will be able to upgrade to a program called "Disk Fix III" that Bob is working on for future release. No indication when that will be ready.

As for On Three Magazine, it continues for the present in its bi-monthly format. But word has it the magazine may, in fact, become a newsletter due to a dwindling subscriber list. New members of WAP get a 10% discount on the \$20 subscription price. Even if you are NOT a new member, the price for the magazine is still right, and the information is always excellent (last time there was a super article on repairing ProFiles). On Three's order number is (206) 659-6245.

By the way, we still have Apple III T-Shirts available in the WAP office (originally from On Three) which we sell at cost—just \$9 each. Iller Steve Truax who attended our January SIG meeting got one, but there's still a good selection, so don't miss out.

IIIs company

I haven't been saying enough recently about all the wonderful stuff you'll find on Ed Gooding's IIIs Company BBS in Richmond, Virginia. For just the cost of a phone call, IIIs Company offers a



tremendous amount of III information, programs, etc.

Logging on myself the other day, I found that Ed continues to update and add on to what is already available. Here are the categories offered:

- 1 Important Bulletins
- 2 Files recently added or modified
- 3 Programming - 6502 Disassemblies
- 4 Programming - 6502 SOS Drivers
- 5 Programming - 6502 Invokable Progs.
- 6 Programming - 6502 Misc. Topics
- 7 Programming - 6502 Ques. & Ans.
- 8 Programming - Basic Misc. Topics
- 9 Programming - Basic Invokables Info
- 10 Programming - Basic Ques. & Ans.
- 11 Programming - Basic Sample

Programs

- 12 Programming - COBOL Sample Programs
 - 13 Programming - Fortran Misc. Topics
 - 14 Programming - Modula-2 Misc. Topics
 - 15 Programming - Modula-2 Unix Shell
 - 16 Programming - Pascal Misc. Topics
 - 17 Programming - Pascal Patches
 - 18 Programming - Pascal Ques. & Ans.
 - 19 Programming - Pascal Programs
 - 20 Programming - AppleWriter WPL
 - 21 Software Topics - CP/M Topics
 - 22 Software Topics - Questions/Answers
- Some of the recent additions include programs to print Pascal source code, an article on the best environment to keep your hard

disk running longer and more reliably, how to have both the Dvorak and Sholes (QWERTY) keyboards available at the same time, a program that will calculate what stamps to use on mail after you enter the weight and much more.

We already have two "Best of IIIs Company" disks in our PD, and will attempt to do some more downloading soon so we can provide you with another few disks. Ed has contibuted mightily to the III Community over the years and has made many of our disks much better than they would have been otherwise. You really owe it to yourself to try it at (804)-747-8752.

ENDIT

That's all for this month. I hope some of you got to the January Garage Sale. I didn't see a lot of IIers. But luckily, Jim Salerno was there. He's always one of my best customers! 🍏

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On Computers and Orphans

by David Ottalini

"Computer Shopper" has long been a supporter of older orphan computers (except—you guessed it—the III, but that's another story!). However, with the January, 1990 issue, Editor Bob Lindstrom says the magazine will no longer publish the "Classic Computer" columns for the Adam, Atari 8-bit, Timex-Sinclair and Commodore computers.

Lindstrom says all were dropped "in favor of providing other services and enlarging and improving our coverage of those systems that more fully represent the mainstream of modern computing." (Translation: we need more space for MS-DOS and Mac coverage and for more ads).

Time does move on, but I think the decision was unfortunate. First, because people subscribed to CS specifically for that coverage, and secondly because it still has advertisers selling products for those computers (and other orphans for that matter).

But there's an even more important lesson here for *all* users of orphan computers: With age comes an increasing dependence for support on user groups like WAP, who can provide the continuity others increasingly refuse to or can no longer provide.

For the Apple III Community, that fact is becoming increasingly important as we enter the 1990s. Of all the 1980's "computer orphans" there are probably fewer Apple IIIs (and Lisas) left in use than any other computer (simply because Apple only made about 100,000 copies of each).

The III Community has just one major developer left (On Three), while the Lisa has two (Sun Remarketing and The Lisa Shop). Looking at just the December "Classic Computer" columns

mentioned above (the last ones to appear), there were five developers listed for the Timex folks, four for the Adam, 19 for the Atari 8 bit. Many companies still support the Commodore too. The Atari and Commodore orphans remain stronger because they are still supported by their manufacturer (for the moment).

Yet the fact remains that the owners of orphan computers are steadily being pushed into the back of the bus by those touting new kids with faster brains, jazzier graphics and sleeker outputs. Progress marches on. But that doesn't mean the III or any other orphan user should have to accept second class citizenship. Orphans are still capable of a lot of work.

Members of ATUNC, the Apple Three Users of Northern California, have been discussing this new vs. old issue of late. John Lomartire writes: "Look at the magazine ads. All those wonderful new computers! Look at the prices for software. \$200, \$300, \$500 is not uncommon. And what can you do with these marvels once you have spent all your savings to acquire them? For the normal home computerist, not much more than the AIII can already provide. Obviously there are a few situations where desktop publishing, computer art or extremely large spreadsheets are of enough importance to warrant purchasing the new high power machines. But for most of us who use a home computer for word processing, spreadsheets, data bases, home finances, etc., the AIII functions just fine."

And Barry Downes says: "With the Apple III, the Apple Computer came of age. Oh, sure, you can add more memory, cut down all those extra nanoseconds of waiting around, add pull down screens, a mouse, and an endless supply of

desktop accessories. But most of them are window dressing. What the majority of people need is simply a hardworking, non-eccentric machine, with advanced database, spreadsheet and word processing capacities...Right now, you are part of an exclusive group who's in on a really terrific deal: you own one of the best and most practical computers ever dreamed up in Silicone Valley."

Last August, the Editor of ATUNC's Newsletter, Li Kung Shaw, published what he called "The Bill of Rights of the Users of Discontinued Equipment" or "BRUDE" for short. Agree with it or not, BRUDE does make for some interesting reading. I'll summarize some of the major points as follows:

- * When a computer manufacturer discontinues a product, all the patents and trade secrets related to that equipment go automatically into the public domain.
- * All equipment of different models...should have standardized, non-essential parts. No parts should be added to any equipment purely for the purpose of protecting its market.
- * The owner and user of discontinued equipment should have the right to turn in the discontinued units in exchange for the new ones, discounting the price paid for the original. The new ones should be compatible with the old ones.
- * New equipment to replace old should be tested by at least one percent of the users of the existing equipment.

Our experiences with the III provide an excellent example of why BRUDE (in some form) is something that might be worth more discussion. When the III was discontinued, a highly-placed representative at Apple promised this author that the operating system, SOS, would be moved into the public domain. It never happened. We were also told that the IIIs would be included in a trade-in program when the IIGS's came out. Apple reneged on that too. Had some form of BRUDE been in effect, this would not have happened and Apple would have



gained thousands of customers with current machines.

Once Apple got out of making IIIs, it almost immediately forgot that some 100,000 people had spent up to \$9000 or more for their systems. I said almost, since Apple did get Sun Remarketing to take on the support of SARA (and later Lisa). But once that happened, Apple wanted nothing more of us.

The lesson here is that computer manufacturers are a fickle lot, willing to drop older machines without remorse even if there's a huge base of users. The IBM PC (and PC Jr.) comes to mind immediately. And how about the Apple

II? How many ads have you seen for the GS lately? What does it tell you when the company's Annual Report shows no pictures of its Apple IIs and only mentions them twice in passing? Get ready folks. And there are an awful lot of Mac users who are already orphans or increasingly being stuck with machines that are no longer completely compatible.

The message is clear. Those of you with orphan-likely computers had better start fighting for your share now. Those of us who already own an "orphan computer" will keep paving the way, as you line up on the road to the orphanage.

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The Three Stooges

by David Wood

Some people may wonder why anyone would laugh at a pie fight or fingers in the eyes. Why, that sort of tasteless person would also laugh at Donald Duck, Mel Brooks, or certain earlier WAP Board of Directors meetings—Whoops! I'll start again.

Leonard Maltin once divided people into two groups: People who understood the Stooges, and people who didn't. They defy scientific explanation. If you try to think about it, you're lost. And that could be why so many people don't understand them: they try to understand them.

The Three Stooges from Cinemaware runs on the IIGS with 1.25MB (Load up that mem'ry card, Maw, the kids brought home a doozy...) and at least one 3.5" disk drive. It supports stereo cards, and can be put on a hard drive.

The story so far: The Evil Banker is going to foreclose on Ma's Orphanage in 30 days. The Stooges come upon them, and offer their assistance. They'd better, or this is gonna be a really short game. Oh, did I forget to mention the three beautiful daughters?

They need \$5,000 to keep E.B. from foreclosing. For \$10,000, Ma can not only save the orphanage, but fix it up too. For an incredible sum, you get the results from Plan B AND a more romantic ending. Remember the daughters?

So how do you earn this money? "Stoogeville" is laid out like a gigantic board game, a path of 180 squares. On any given day, you may move forward from one to six squares. The selection mechanism is simple: Moe's hand will bounce from day to day, and you press the button on the keyboard or joystick when it's where you want to be. Each day, it moves faster and faster, getting harder and harder to control (Don't

worry, there's a way to slow it down).

When you land on a square, you could get Money For Nothing, you could get jobs (as Doctors or Waiters), you could enter a competition (Boxing or Cracker-Eating), or you could run into trouble: the Evil Banker wants to stop you, so he could make you lose a day, or make you pay 10 percent taxes on what you've earned so far. Pain. There's also the Slapping Game square, which can slow down Moe's hand and make picking days easier. When done right, this scene is noisy, violent, and a whole lot o' fun. As in the shorts, don't think about what you're doing.

The scenes are very well drawn, or often digitized from the movies and short subjects. The animation is just a little rough at times, but not enough to cause any real trouble in play. The sounds are also almost completely digitized from existing footage, and the music is outstanding.

There's only one problem: after you finish each of the more involved games, there's a phenomenal wait. I'm not sure what it's doing, but there ought to be some way to make scene changes more efficient.

Overall, it was a lot of fun. Was? That's right, I already went through to the Optimal Ending (a few days after I got it), but that's because I was exceptionally clever and spend most of my time playing games anyway. But I intend to keep playing it, and keep playing it until I master the pie fight in the Hoidy Toidy Club and get some more of those trivia questions right...

Look: 10/10 (Great artwork, great sound. It's almost like lost footage.)

Feel: 9/10 (The joystick does the most natural-feeling >*THWACK!*< Once in a while, the animation did get in the way, but I learned to work around it.)

Play: 9/10 (It's a simple enough game, rich in detail and all, but make one observation like I did, and you'll finish the game really early too.)

Overall: 10/10 (In the Hoidy Toidy club, watch out for the guy in the middle. He's got a killer arm.) 🍏

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Jack Nicklaus Golf

by Paul Moore

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This new golf game, produced by Sculptured Software and distributed by Accolade, lists for \$49.95 and requires an Apple IIGS with 512 RAM. Play covers three golf courses, the first an amalgam of Jack Nicklaus' favorite holes from courses all over the world, and the two others the Nicklaus-designed Castle Pines and Desert Mountain courses.

The closest point of comparison is *Mean 18 Ultimate Golf*, also distributed by Accolade, and which I've played extensively on the IIGS and the Mac. The basic organization of the screen is the same in both games, with the player given a view down the course from slightly behind a golfer whose swing the player controls through a series of clicks on the mouse. *Jack Nicklaus Golf* (JNG) has a number of welcome features that *Mean 18* does not: wind factors; variable pin

placements; a stable of computer opponents with individual golf personalities, including the great Jack N. himself; and the ability to play both tournament and "skins" formats. Putting in JNG is different from *Mean 18* in that here your view is not overhead but the same view from behind your golfer, and also you have a small gauge to help you determine the slope and break of your putt. I judged putting to be much harder in JNG.

JNG has the same agonizingly slow boot up on the IIGS as *Mean 18* (3.5 minutes on my GS with a one-meg ramcard); but where things really get disappointing is when you hit a shot. First, while in *Mean 18* you have very much an analog relationship with the swing of the golfer you control, in JNG there is a disconcerting time lapse and also a short delay at impact, meaning that you can see the golfer

come to a full stop in his swing at impact and watch the ball sail away, and only then will the golfer follow through with the rest of his swing. I found this disconcerting and do not understand the reason for it, especially since things worked so smoothly in *Mean 18*.

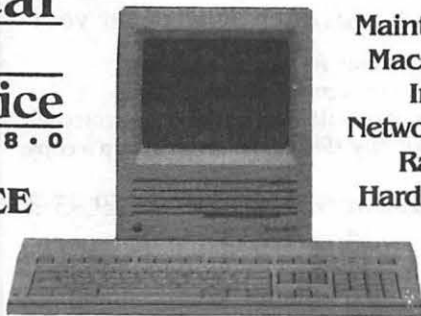
The real problems, however, start after the ball has landed and it's time for the computer to redraw the screen to show you the view from the place where the ball landed. In *Mean 18*, it takes about 9 seconds to redraw the screen on my RGB monitor, and much less than that in black & white or color on the Mac. In JNG, however, it takes a mind-numbing 45 seconds to do the screen, which is drawn from left to right in strips of about five pixels at a time. This means that, for a round of golf where you shoot an excellent par 72, you'll spend at least 54 minutes waiting for the screen to fill in. If you happen to play a computer-generated opponent such as "Jack N.," you'll have to spend the same time waiting for his screen to be drawn, as well as some 20 or 25 seconds while the computer plans his shot. So if Jack N. shoots the same score you do, you'll spend an extra hour and twenty-four minutes waiting for his shots. To be honest, I consider life too short for me to attempt a "skins" game with four players.

Since there is no long disk access during the interminable delays, I don't think loading the program on a hard disk will help any. I'm not sure what effect an accelerator card would have on performance, either; but having more than the minimum 512 RAM didn't seem to speed things up.

I was hoping that *Jack Nicklaus Golf* would be an advance on the excellent enjoyment offered by *Mean 18*, but now I think purchase of the program represents more a trade-off than a trade-up. You do get some nice new features, but you'll have to pay for them with many minutes of your life. 🍏

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The Ugly Duckling

by Dan Slaven

This program might well be termed "talking lapware." Similar in intent to other software of the "lapware" genre, *The Ugly Duckling* also takes full advantage of the Apple IIGS' super hi-res graphics, animation, and sound capabilities.

A very well thought out and well executed program for the youngest GS users, *The Ugly Duckling* incorporates its own "StoryTeller," which uses digitized speech to tell the story. Written by Mike Westerfield of ByteWorks, and apparently beta-tested by his own children, this program can be used and enjoyed by any child (or adult, for that matter) who can reach the keyboard.

The StoryTeller is put through its paces simply by pressing any key on the keyboard—a real plus for small children who may not yet have the motor skills to operate a mouse or joystick precisely. Of course, the program can be driven with a mouse, but random key presses result in a pleasant and predictable response. The *Ugly Duckling* also includes an automatic mode, which will run the program after waiting one minute for a keypress. This is useful for young users who are a bit shy about pressing the keys.

For users with a single 3.5" floppy drive, the program was designed to be as painless as possible. The disks are color-coded and the program always shows which disk it needs and will eject the unneeded disk. If the wrong disk is inserted into the drive, the program will eject it and wait for the right one.

On bootup, a title page is displayed, then a "choices" page. This screen has "kid's buttons" and "parent's buttons" on it. The kid's buttons cycle through the four reading choices (more on that below), with each button high-

lighted in turn. When a button is highlighted, the StoryTeller reads the choice. When any key is pressed, the highlighted choice is selected. The mouse can also be used to select the kid's buttons. The parent's buttons can be operated only with the mouse. These allow you to print out the story in color, if you have an ImageWriter II with a color ribbon, print a coloring book and quit the program.

The Choices

The kid's buttons allow four choices: 1. The StoryTeller reads the story; 2. Read and Wait; 3. Wait and Read; and 4. No Sound. With the first choice, the program runs automatically, with the StoryTeller highlighting each word as it is read. This will probably be the most frequently used mode, since the speech is smoothest and the words easy to understand as the StoryTeller speaks in normal phrases.

The voice quality, on my copy at least, is fair to good, although a bit raspy and scratchy at times. This is true whether I used the built-in speaker or external powered speakers. The quality may be the result of not using a high-grade microphone and digitizer when the voice was recorded, or a result of using a relatively low sampling rate to keep the sound files as small as possible.

In the Read and Wait mode, a word is highlighted and pronounced, then the program waits for a keypress before moving to the next word. This allows the user to see and hear the word, with time to think about it. Unfortunately, in this mode and its companion, Wait and Read, sounds of words tend to be somewhat truncated. This is especially noticeable with very short sounds, such as "the" and "a." I found it disconcerting and, at

times, difficult to understand. This is undoubtedly the result of trying to represent an analog process—human speech—in digital form, and I'm not sure there is a real cure for digital hiccups.

The Wait and Read mode highlights a word and waits for a keypress before pronouncing the word. The No Sound mode is the "lapware," best used by placing your child on your lap and reading the story with him or her.

All modes display the delightful animated screens. While there are many interesting characters in the story, my personal favorites are the animated ladybugs. My daughter, however, prefers the story's hero, the Ugly Duckling.

The parent's buttons, as noted above, allow printing of the story. The preferred printout in our home is the coloring book. This mode prints out the entire story, although the pictures are somewhat modified from their screen appearance to make it easier to color or paint.

Hard Disks, Floppies, and Copyrights

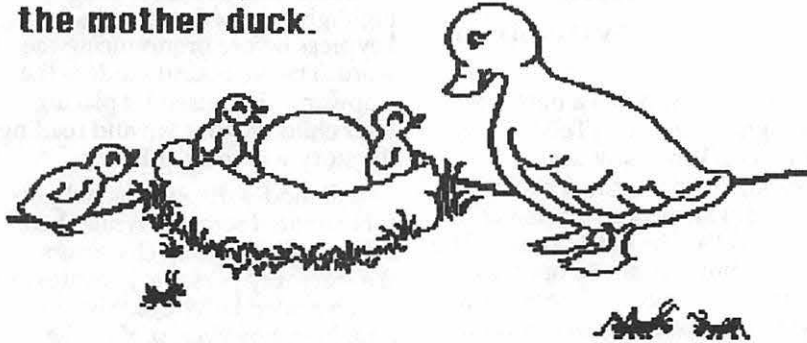
ByteWorks has an unusual and refreshing attitude about educational programs and copy protection. The *Ugly Duckling* is truly a rare bird in this arena—it is unprotected, period. You can make copies onto floppy disks, or copy it to your hard disk without difficulty.

See How It Runs

The *Ugly Duckling* was written to run under GS/OS v.5.x and has, so far, performed flawlessly. As noted earlier, it will run from one floppy drive, two drives, or from a hard disk, all without pain. My only real complaint, aside from the previously mentioned sound quality, is that once the program is booted, you cannot access the control panel. This means you need to be sure the sound level is set and the appropriate printer driver selected prior to running the program. Otherwise, you will have to quit and back out of the program to set these items, then restart. On the other hand, I wouldn't be surprised to discover that this



Three cute little baby ducks broke open the first three eggs. "Cheep, cheep, cheep," said the baby ducks. "Quack, quack," said the mother duck.



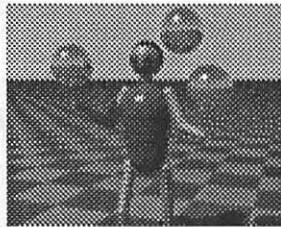
minor shortcoming is already being addressed by ByteWorks. Overall, this is a very solid and fun-to-use educational program and is highly recommended for anyone with an early reader around the house or for use in pre-schools and kindergartens.

More to Come

ByteWorks plans to extend this into a series of StoryTeller programs. They are asking for user comments and suggestions to improve the program, as well as soliciting ideas for future programs. If you or your children have a favorite story you would like to see in this form, let them know.

The Ugly Duckling is available directly from the ByteWorks for \$49.95. Street price is around \$32 mail-order. An introductory price of \$25 from ByteWorks is in effect through the end of February. It requires a GS with at least 768K and one 3.5" drive.

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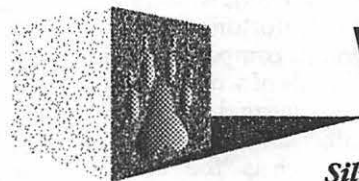


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Leprechaun

If you are looking for something a little out of the ordinary in the way of games for your Macintosh, a recent product you might want to consider is the new game by Shodan, called Leprechaun. The designer, Greg Hale, has come up with a non-violent, multi-level, animation game. This game is a throw back to the style of animation game previously designed for such game systems as the Apple //, the Amiga, or the Comodore. The rules are simple; it is figuring out the levels, (and if the alternate scenarios are included, there are over 190 of them,) that provides the challenge. This game is a must buy for Macintosh game players who prefer this style of game, and especially those who own a color Macintosh.

The game can be run in either black and white or color, but it does require System 6.0 or later, and at least one megabyte of memory. It also requires a Mac Plus or later system, with two disk drives or a hard drive, as all the necessary information to play the game fills an entire disk, thus requiring a second disk or drive for the system folder. On older machines, there can also be a problem with the speed of play on some levels; although this does not make any level unplayable, it does detract from the smoothness of several, (and makes the 'best time' values as displayed on the screen during play completely meaningless).

Leprechaun comes in an appealing box, with cute a rendition of the little man himself, carrying his pot of gold under a rainbow. The hazards of the game are represented, embodied in a nasty looking troll. Shamrocks, snails, and thorns are present in the playing fields. The box is cute, but not as eye catching as others; the colors are not so gaudy as those used by some software marketers.

This one may have to be searched for when looking on the software shelves.

Upon opening, the box yields up a manual and, appropriately, an emerald green disk. (I particularly like the green disk, as it is the only one I have. This makes for immediate identification.) The manual is small, but neat, and manages to be both clear and concise. There is an explanation of the rules, and an item by item clarification of the menu selections (more on these later). There is also a pictorial illustration of all the objects and creatures that may be encountered in the rooms of the game.

The basic premise of Leprechaun is simple - the player controls the leprechaun, who must push the big pot of gold onto the rainbow. Of course, it is not quite that simple, as there are a whole range of critters, from stupidly predictable birds to uncomfortably 'clever' trolls, that try to prevent the player from achieving his goal. These critters can be crushed with rocks, put to sleep with shamrocks, or pulverized with balloons. The rocks and balloons can also be used to help push the big pot of gold through clever and often tricky screens. There are also extra lives and extra pots of gold to be picked up on the way through some screens. The theme is cute, narrowly missing cutesy, and makes a nice change from the shoot-everything-in-sight type of games that there seem to be so many of on the market. Levels require a certain amount of thinking ability, and mouse coordination, which makes for challenging play.

There are three different 'Scenarios' present on the Leprechaun disk; Leprechaun (the game itself), Basic Techniques, and Kiddy Land. Basic Techniques is the tutorial program. (This tutorial is the program Shodan has released as a demo through Public Domain.)

It is a particularly nice set of step by step levels (with titles that 'hint') showcasing the features of the game. This Scenario (and therefore the demo) ends with five or six 'real' levels, just interesting enough to leave you itching to play the whole game.

Kiddy Land is a kind of game within a game. Designed for children, the early levels are easy and colorful, sure to catch the interest of any computer literate child. The last levels of Kiddy Land are the equal of some of the screens of Leprechaun itself. Complex enough to be interesting, adults will find Kiddy Land fun, and it makes a soothing balm to frustrations in Leprechaun to be able to complete the entire game.

Besides the ability to change scenarios, there is a "Start At..." feature which allows a player to practice on any particular level. Players may select any of the levels in the game to 'start at'. The level selected, and those following it, can then be played in a non-game mode; that is, score is not kept, and you have unlimited lives. Difficult levels, and there are plenty, can be done over and over until you get the right method of solving them. There is a pause function, and also an abandon, which lets you end a screen that has become insolvable. (This will cost you a life).

Leprechaun allows the player to configure the controls for the game several different ways. First the mouse has two types of control. Either the mouse sets the direction of movement (ie. move the mouse to the left, the Leprechaun runs left, move right, runs right) or the Leprechaun can seek the absolute position of the mouse. Both methods are useful when running long distance, or dodging through mazes and critters. However for more delicate work, like placing a rock in the exact spot, there is also keyboard control of the little green man. Exactly which keys control movement, of course, can be set at will.

Perhaps the most interesting feature of Leprechaun, however, is that it comes with a built in editor for creating new screens. It is possible to create an entire new

game. (One note: it takes a lot of memory to do this). The various graphics used in the game itself are made available on tear away menus, (a la hypercard,) and can be organized onto the screen in easy steps, using the mouse.

Of course, the game, as even its creator admits, isn't perfect. One of the chief difficulties with it lies in the fact that the game levels don't really seem to progress from easiest to most difficult. It is possible to do many of the later levels without a hitch when using the "Start At..." function, but when playing the game players are often defeated hopelessly at much lower levels. This can make the game frustrating to play. Another problem has to do with black and white graphics. Although Leprechaun does run in black and white, it is far more eye-catching and appealing to play in 256 RGB color. What looks distinct and enticing on a 256 color machine is confusing and sometimes almost unplayable on a black and white screen. This is a problem many games, as well as other types of software, share. Fatal thorns, which are quite recognizable on the color screen, become nearly indistinguishable from other, harmless items on the black and white screen. Especially on maze type levels, this can be a quick game-ender.

Slight faults like these aside, Shodan, and Greg Hale, have come up with a really playable product. There is a hint of a Leprechaun sequel in the works; levels designed using the editor can be sent to Shodan for publication as a part of this second game, in return for a free copy of said sequel. (You have to be a registered owner to be eligible to do this.) So send in your ideas soon so that we can all enjoy another trip through the emerald isle. Hopefully, there will also be other entries in the Macintosh game market from these innovators.

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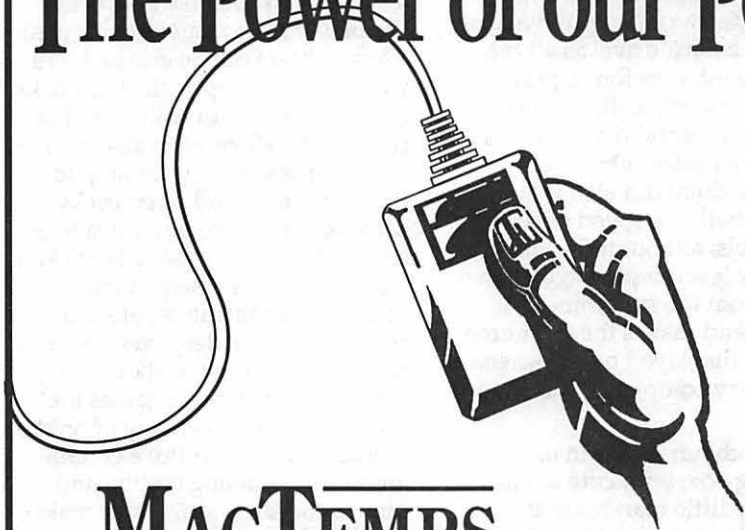
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Pixel's Revenge 167A

by Charles Don Hall

Pixel's Revenge CLXVII-A: Brave New World (Parser St. Inc., \$29.95) is technically not a computer game at all, but rather a computer-assisted live-action political role-playing game.

Some background: for a long time, the programmers at Parser St. Inc. have wanted to do a Pixel's Revenge game set in the real world. Now it would certainly be possible to make a game where the players fought (for example) Metrobuses and Zsa Zsa Gabor instead of dragons and banshees. But such a game would take place in a *simulation* of the real world...not the real world itself.

The project seemed impossible, until, by a wonderful stroke of luck, lead programmer Jack "Eraserhead" Turing suffered a severe nervous breakdown. The strain of working 16 hours a day, 7 days a week on the Pixel's Revenge series was too much for him, and his personality disintegrated from the stress. He apparently now believes that he is really Emmanuel Goldstein, the evil delicatessen owner who is the villain of the series. Since Goldstein's ambition has always been to rule the world, Turing has set out on a similar quest; those programmers who have not remained loyal to him are now imprisoned in the vast network of catacombs somewhere below corporate headquarters. Your goal is to defeat Turing/Goldstein, and rescue the surviving programmers so they can write more games.

In addition to the software, the game comes with a modem, ten security cameras, some interface cards, and a set of posters with slogans like "The Computer is Your Friend" and "Emmanuel Goldstein is Watching You." It takes a while to set up: before playing, you must take down all of your wall decorations, replacing them with the posters, and then mount at least

one security camera in every room of your house. After installing the interface cards in your computer and connecting the cameras and modem to them, you're finally ready to start playing.

The software will monitor everything you say and do, and, using the modem, will inform Parser St., Inc. (PSI) of anything potentially subversive it sees. PSI also uses the modem to allow your computer to give you orders (when to get up, how to vote in the next election, how much income tax to pay them, etc., etc.). This simulates life in a totalitarian state.

In the early stages of the game, you have a great deal of leeway. You can only be watched while inside the house, and since there are only a limited number of people at PSI, they won't be able to look at every single transmission from every single player's computer. Of course, if you get clumsy, you will find yourself abducted by Turing/Goldstein's minions and taken to corporate headquarters. At this point, you've lost the game...but things aren't as bad as they sound. PSI gives you a copy of their new software package, **ReelPain™ Behavior Modification TherapyWare** (also available in stores at a list price of \$19.95). Once you've finished using that program, they offer you a job. You still get to play the game; you've just changed to the other side! Obviously, as the game progresses, PSI will get more powerful, and the game will become harder. (There are also plans to start mounting hidden security cameras in public places, if in fact they haven't started doing that already.)

The game's biggest problem only applies to Apple owners: since the program must be run 24 hours a day, you can't use your computer for anything else while you're playing. This is not a problem for Mac users, since it will run under

MultiFinder.

Another flaw in the game is that you're not in an actual police state, only a simulated one. This flaw will be corrected in the sequel, **Pixel's Revenge 167B: 1994**. As the title suggests, by 1994, it is expected that PSI will be powerful enough to take over the country; the new government will distribute free hardware and software, allowing everyone in the United States to play. (Overseas editions will be released gradually in the next 8 to 10 years.)

This is one of the more difficult games I've played. After six months, I still haven't been able to get into the Pentagon or NORAD, and I have no idea where corporate headquarters are. I have discovered, however, that *Soldier of Fortune* magazine is a good place to look for possible clues and useful items, and the classified ads in the back will help you find secret societies where you can trade information with your fellow players. PSI estimates that the game will probably take several generations to finish...in fact, in some of Turing's speeches that have been sent across the modem, he describes his government as a "Thousand Year Reign."

Some useful hints for novice players: don't rely too much on magic, as many of the spells from earlier **Pixel's Revenge** games no longer work. It is also best not to rely too much on weapons; your game will end abruptly if PSI discovers you have too large a cache. Treachery and blackmail are the keys to survival in the earlier stages of the game. For example, you'll find the Department of Agriculture much more cooperative after you have the secret missile launch codes. [EDITORS' NOTE: the following several paragraphs of this review were illegible. We tried to contact Charles to sent us a clean copy, but were unable to reach him.]

BOTTOM LINE: One of the most imaginative games I've seen in a long time. Macintosh owners will probably want to run out immediately and buy it. Apple owners might want to wait for the sequel.

Download City

by Paul Schlosser

Members uploaded the following files to the Teleconference System during the last thirty days. This listing represents only a small portion of the files available for downloading on the TCS. Call the Pi office at 654-8060 to obtain a password.

File area 1 - Apple II Games

016 MONOPOLY.SHK Monopoly game.
015 MATH.INVDRS.SHK Fun "arcade-style" math game. Shareware.

File area 2 - Apple II Misc.

032 SAT.TRACK Small Basic satellite-tracking program.

File area 4 - Apple II Utils

135 DIU.V1.0B.SHK Disk Inventory Utility.

File area 5 - GS Desk Accs

069 WRITEIT1.2.SHK WriteIt! NDA (v1.2).

068 FILE.MGR1.0.SHK File Manager NDA, v1.0.

067 CARPET2.0.SHK CarpetBag V2.0 (for System 5.0.2).

066 DISKWITCH1.4.SHK DiskWitch CDA (v1.4).

065 SHOWPIC4.13.SHK Showpic 4.13 NDA.

064 PAPERSAVER1.1 Paper Saver Version 1.1.

File area 8 - GS Graphics

039 PLASMALAB.SHK Much improved and faster version!

038 ANIMATOR.SHK Pw/PWG animation display.

File area 9 - GS Misc.

042 HS.MAUG.SHK Hyperstudio MAUG messages-lots info.

041 SNDSMITH.SHK Soundsmith v0.7

040 AXEL.F.SHK Soundsmith song.

039 COPILOT.SHK TIC/Point to Point C1\$ Navigator.

038 GENERICON.SHK HS ICONS clipart converted to \$CA icons.

037 DHW.ICONS2.SHK DHW Icons, Group 1, Revised.

036 LNCHICON2.SHK Examples of launcher files and icons.

035 LNCH.ICON.SHK How to optimize Finder for launching.

034 MASKED.ICN2.SHK "Color Masked" Icons, second edition.

File area 10 - GS Utilities

058 UPDAT5.02.SHK Update sys 5.0 to 5.02 script.

057 PHOTONIXV1.46 Update to v1.46 of Photonix.

File area 11 - AppleWorks

054 CHECKBAL.SHK Checkbook balancing template for AW3.0.

053 PATCHER.1.4.SHK Version 1.4 of AW 3.0 Patcher from Munz.

052 FIXPATCH20.SHK V.2 of FixPatch for AW 3.0 Patcher v1.2.

051 FCM.MENU.SHK AW Menu kit.

050 TO.CALENDAR.SHK 1990 calendar for TimeOut.

049 PHONE.DIAL3.SHK Reupload of Better Screen Dialing Macro.

048 SCREEN.SHOT.SHK Macro to Copy any Screen to AWP file.

047 AW.QUIT. Patch to Appleworks quit routine.

File area 12 - ProSel Updates

021 DEMO4.SHK ProSel-16 graphic demo screen #4.

020 PROSEL.8.37.SHK ProSel-16, V 8.37.

019 REVISION16.SHK 2 of my Screens.

017 DEMO3.SHK A 3rd demo screen from Bredon.

016 DEMO2.SHK8.31 2nd demo screen (rev. w/ 8.31).

015 PIXELS.SHK8.31 Description of the pixel graphic chars.

014 DOC8.31.SHK ProSel-16 Docs - V8.31.

013 DEMO.SPECS.SHK Demo

PROSEL.SPECS file (from a user).

012 CMD58.3.SHK External CMDS for ProSel-16, v8.3 (new).

011 DEMO.SHK8.3 Demo Screen for ProSel-16, v8.3.

010 HELP.SHK8.3 New help files for ProSel-16, v8.3.

File area 14 - Mac Games

074 ELEMENTS.SIT Elements chart, shareware.

073 IAGO.SIT Nice board game, with instructions.

072 HIDEAQUOTE.SIT Create word puzzles.

File area 15 - Mac Graphs

069 BIG.C.SIT Ceausescu startup screen, TSCN/MPNT.

068 DTPIDEAS.SIT Graphic art samples.

File area 16 - Mac Hypercard

078 MENUMAKER.SIT Make custom menus for your stacks.

077 JESU.SIT Water chime & Graphics from 4Arts.

File area 18 - Mac Utilities

167 EZSHARE.SIT Demo AppleTalk INIT. Stuffed with Docs.

166 TIDY.UP.SIT Personalize your system folder.

165 TERMULATOR.SIT New telecomm program, very nice.

164 MENU.TUNER.SIT CDEV for adjusting menu performance.

163 RESCICN.SIT Color icon utility.

162 FACADE.SIT Icon utility, version 1.0

161 SURPRISE.SIT SoundMaster file, see browse desc.

160 DAFONT.SIT Display fonts and DA's.

159 BEEPSHUFFLE.SIT Random sounds in the Finder.

158 MOIRE.CDEV.SIT Moire screen saver v3.02.

157 BATMAN.SIT Batman logo startup screen, in color.

156 WILD.SNDS.SIT For SoundMaster. See browse.

155 NAKED.GUN.SIT Two sounds from 'Naked Gun' movie.

154 FINDER.SNDS.SIT Configure the Finder for sounds.

153 SC.UPDATE.SIT Update to Suitcase 1.2.6.

152 SOUNDMASTER.SIT SoundMaster, version 1.3.1.

151 RANDOMIZER.SIT Init to enhance other inits.

150 PUBLICFLDR.SIT New Claris file transfer utility. Free.

149 TAXES.89 Tax Forms 89 Excel.

148 APPLE.LOGO.SIT Apple logo (in color) for Mac II's.

147 COLOR.DEMO.SIT Very nice color demo's.

File area 22 - Hyper/Tutor * Stacks

010 STEREOPTIC.STK View some Stereograms in HS stack.

009 XCMD.DEMO.SHK 320 mode digitized photos in HS stack.

008 HBRAIN.1.5 HyperBrain v1.5.

007 CHESS.MOVES Basic chess moves.

006 READ.LISTEN Early reading demo.

005 HYPERKEYS Play kids' songs.

004 HYPERTUBES Kiddie xylophone.

File area 25 - PC Transporter

004 TELIX311.ZIP Best Communications program for PCT.

Best of the Mac TCS

by Lou Pastura

Free (and near free) Disks

First, I want to make a small correction to one of my advertisements. Some misleading information crept into last month's article during the editing process. My February column indicated the WAP TCS disk for the Mac includes the shareware telecommunications program called "ZTerm" and that it comes free as a benefit of membership. Not quite true. The free disk is the New Member disk which contains a lot of goodies, but no ZTerm. You can get ZTerm from the Mac Disketeria by purchasing it from the office or at a meeting. You can charge it to your credit card, if you call the Office, and the staff will gladly mail it to you. A reminder though: ZTerm is shareware, not freeware. Try it. If you use it, PLEASE pay the very reasonable fee. This will encourage further development of this and other excellent applications at reasonable prices.

Another shareware telecommunications program called "Termulator" has recently been made available for downloading from the TCS. Initial reports indicate that the interface is very intuitive and that the scripting language is powerful and easy to use. More on this as folks gain experience with this new arrival and provide their reactions.

My Favorite Hints and Things

There have been a number of recent bulletin board exchanges regarding Macintosh tips and tricks, those little shortcuts that make life with your Mac a little more bearable, and perhaps a little more fun. These discussions inspired me to begin a search for my own favorite hints. During my search I identified three books you may want to consider as possible additions to your library. They are Dr. Macintosh (Addison-Wesley)

by Bob LeVitus, former Editor-in-Chief of MACazine; Encyclopedia Macintosh (Sybex), by Craig Daniloff and Deke McClelland; and the Macintosh Bible (Goldstein & Blair), by Arthur Naiman. My personal all-around favorite is the Macintosh Bible, but you should peruse all three to determine which best fits your own needs.

Many of my tips may be old hat to more experienced hands, but they intrigued me and seemed useful for every day use:

1. Program Selection: Many people use On Cue, Master Juggler, DiskTop or a macro program such as QuickKeys to simplify application selection. You can accomplish many of the same tasks by creating a document for each often-used application and placing those documents in the topmost folder on your hard disk. Double clicking on the appropriate document will open the application, even if it is buried many layers deep in your hard disk structure. Also, closing the application will leave you at the original folder and you'll not have all those annoying folders to close. If you're using MultiFinder, you can select a group of documents, each from a different application, by shift clicking or by using the selection rectangle and open all their applications at once.

2. Closing folders: An alternative to avoid closing all those folders is to hold down the Option key as you go down through the levels looking for a document or application. When you subsequently close the file, all the windows you opened will close automatically. (Note—this does not work under MultiFinder, only under Finder.) Don't forget that holding down the option key when you close a window will close all windows on the Desktop—another handy shortcut.

3. Printing from the Finder: If you have a large number of

documents to print, you can do so without opening the application they were created with. All the documents must be in the same window. In the Finder, shift click or use the selection rectangle to select all the documents that you want to print and then click on "Print" in the File Menu. All the documents you've selected will be printed in turn. All you'll have to do is respond to the print dialogue boxes that will appear for each document. When all of the printing is finished you will be left back at the Finder, in the window that contained documents you selected.

Copying Files & Folders on the Same Disk: Need to make a second copy of a file or folder? Holding down the Option key while dragging the file/folder to a second location on the drive will copy, rather than move the data. Another alternative is to click on the file/folder and then select Duplicate from the File Menu. This will create a file/folder with the name "Copy of (file/folder)" in the same window as the original. This is a handy feature if you're about to do some "risky" work on a file and want to be absolutely, positively sure you retain an unchanged copy for safety's sake.

Don't Forget the Clipboard: Almost every day I see a message or two from someone desperately seeking a way to transfer graphics or text from one application to another. While the responses are always helpful (and almost always successful) a simple procedure is very often neglected. Depending on your needs, try using the Clipboard for less complicated transfers. It may work just fine, and for simple transfers it sure beats investing in translators, or even worse, an expensive application that happens to read and write the formats you need.

Comparing Files/Folders: You can open more than one Get Info box on the screen at a time. This is very useful for comparing files/folders and much easier than opening one box, trying to remember the information you're interested in, closing the box and opening another. 🍏

Best of the Apple II TCS

by Harvey Kaye

Two Column Word Processing Files

FROM NORVAN MEYER

My next door neighbor wants to print an AppleWorks file in two columns. I recall seeing something about multicolumn printing, possibly here on this board. I didn't make a note of the info because I've never had the need to print in multicolumn form. In short does anyone remember where such info can be found? Maybe it was an Ultramacro or a utility program of some sort. Can someone help?

FROM SAM UPTON

I don't know about other methods, but there is a file in the Apple II Utilities download area called "columnist." From the browse information, it sounds like what your neighbor wants. It's \$5.00 shareware and will do AW or any other "text" file.

AW3.0 Mail Merge

FROM PAUL TARANTINO

HELP! As I sit here at my trusty IIGS, preparing to send a Christmas letter to a host of friends and relatives, I have made the startling and loathesome discovery that my shiny new AW3.0 Reference manual is DEFECTIVE, missing all the pages which discuss mail merge. My database is ready, my letter is almost written; all I lack is an understanding of the means of using the MM command in the OA-O options menu. Can someone please provide a capsule summary?

FROM HARRY BACAS

I have not used mail merge, but my AW3 manual says there are three main steps:

1. Put the data base records you want to use on the clipboard.
2. Write a word processor document using the Mail Merge printer option to show where to

include information from the data base file.

3. Print the letter.

FROM LEE RAESLY

Mail merge is very easy.

1. Place the DataBase on the Desktop
2. Print ANY record to Clipboard (for Mail Merge).
3. Go to letter.
4. Put cursor where you want Data imported from DB
5. oa-O then MM
6. Will now show you all fields.
7. Move cursor to field you want.
8. Hit return.
9. esc to return to letter.
10. repeat steps 4 to 9 until finished.

FROM LEE RAESLY

I forgot. Once letter set up, do the following to print:

1. Go to DB
2. oa-P to print.
3. oa-R to select records you want.
4. esc back to DB
5. oa-P to print.
6. Select Print to Clipboard (for Mail Merge)
7. esc when finished.
8. oa-Q and select letter.
9. oa-P to print.
10. select Merge data (Mail Merge)

Photography

FROM DIRK BAKKER

I would appreciate comments, experiences about copying the monitor's screen into slides. What exposures have been tried, what film type? I would like to make inexpensive, but good, color slides of the GS's RGB screen. What's worked?

FROM TIM MCGRAW

I have assisted a friend who has beaucoup experience photographing screens. First, the room must be

ABSOLUTELY DARK, with no light leaks whatsoever. You will need a tripod, because exposure times will be one second or more. On the GS, I suggest setting your border color to black, and make a "mask" out of thick, black paper that will essentially be a window slightly larger than the square screen area that your graphics will appear in. Otherwise, you'll get a glow from the edges of the monitor.

As far as film goes, you'll get the richest color with Kodachrome, which generally is 60 ASA. You could try a faster film (100 ASA to 400 ASA), but the colors will be more washed out. There was a "Speaking of Graphics" column in A+ late last year or early this year that covered this.

Oh yeah, cover up all the power lights on your computer, power center, and disk drive that might come on during the shoot. Can't help you much with the times, but try bracketing from 1 sec. to 3 or 4 sec. Write down the times, and send off a roll before doing a whole slew of pix.

FROM RICK ZEMAN

You hit every nail on the head except for two. First, elementary, but easy to forget, is make sure that the screen is spotless and that the glareshield is off if you have one. Then adjust the contrast/brightness controls to get the sharpest image (a little darker than one views it normally)—the shot will compensate for it!

FROM EUCLID COUKOUMA

If your pictures appear blue, then try using a light orange gel over the monitor or a similarly colored filter on your lens. The studio crews use the gels over the color monitors on sets to get a better match the lights. OOPS! I just remembered that that is for a set lit at about 3200K (incandescent). If you use ordinary daylight film you will probably be fine without any filtering, or just a very light yellow or straw. Kodachrome used to always be very red which may be part of the reason some find it best for this type of work.

FROM RICK ZEMAN

Jackpot, Euclid, actually, the

OLD Kodachrome was reddish. Newer (and especially Professional) are VERY neutral. Kodachrome 25 pro is THE BEST FILM MADE!!! imho.

FROM DAVID KREISBERG

I don't get on this board a lot, but I just saw your message about wanting to capture an image from video tape. I have Computer Eyes at school. Give me a call there and perhaps you can stop by to convert the image. The board is fast (20 seconds) and flexible (lets you save in all popular Iie and GS formats). Its ability to manipulate images that have been saved is incredible.

FROM ED MOSER

Really, it seems to me that actually pointing a camera at the monitor and firing away isn't the solution. I was surprised to see that so many people have been working that way. I don't know what software is available to support the graphics overlay card, but I've worked with a pro video system that uses a very similar device with the Amiga to generate slides from computer graphics. I understand the hardware is available for the Mac as well. Even if they don't have the hardware available to shoot slides directly from a GS yet, how about ULing the data in GIF format to a system that does?

FROM TIM MCGRAW

True, and unfortunately there are no slide recorders for the IIGS. The GIF standard, while novel for exchanging files between different computers, is lacking in many ways. There are instances where pointing a camera at the monitor and firing away IS the solution. For one, if you want true "continuous tones" and not 3200-line resolution.

FROM TIM MCGRAW

1. GIF files still have their limitations. How can you transfer a graphic made with, say, 256Paint to a GIF? You can't. Taking a pic of the screen is about the ONLY way you can get a slide out of it.

2. Personally, I don't think VGA colors are as bright as the GS monitor. They appear more washed out.

FROM RICK ZEMAN

Take a graphics program such

as Nucleus. The chroma of the screen BLOWS VGA out of the water. Of course, it's not as sharp. If (WHEN!) we get 640x400 or even 640x320, the sharpness and the colors would make it look totally better than, er...I*m!

FROM KEN DE VITO

I'm not familiar with 256Paint but, could it be that no one wrote a 256Paint to GIF program be the real problem? There is also Super VGA which far increases the 640 x 400 x 256 color barrier.

I don't consider GIF files i*m files. I just *strongly* feel that GIF files which I can see on a Commodore an Atari, a Zenith 248, a Mac, a][+,//c, and an //e will soon become the graphic medium of the future and that we should be working toward that effort instead of machine-specific graphics that only one group of individuals can appreciate.

FROM TIM MCGRAW

I never implied that GIF files were IBM files, I don't think. The graphic medium of the future is the computer graphics metafile (CGM) developed by the Computer Graphics Association. It even has extensions to animation. I think my point about GIF is this: If I create a computer graphic with a GS program, and GIF it to an I*M, M*C or A*IGA, it looks different. You'll never get exactly the same results. Despite this, I think GIF is a GREAT standard. A true feat of software engineering.

FROM KEN DE VITO

I know you didn't imply that they were I*M files, someone else within the discussion did and that portion of my message was for his benefit. I agree that GIF files look different on different types of machines. I guess that it's like using the old KodaChrome (reddish) and the old EktaChrome (bright and bluish). I couldn't believe how the same GIF file I was used to seeing on a EGA monitor looked on a NEC MultiSynch!! It was (honestly) 33-percent better and more detailed—just a fantastic difference. I also think GIF is a great standard (If you couldn't tell). Tell me more about CGM. Is it machine independent like GIF? The animation capability sounds neat!

Animation

FROM DIRK BAKKER

How many people out there (yes, you!) have tried playing/working around with Animation. How many people have tried FANTAVISION, //e or GS versions? What about the other programs available. Has anybody used Fantavision's capability for creating a bootable disk for showing your creations, which does NOT require HAVING the actual program. Could we upload these? Are there any unseen masterpieces out there?

FROM DAVID KREISBERG

My students have done a lot of flip book style animation in Paintworks Plus. We have just gotten a lab pack of Fantavision GS and the classes have started working with it this week. They haven't started their own projects yet, but I'll let you know if anything good comes from it. We also purchased Art and Film Director from Epyx which is a GS specific, cel-type animation program. I haven't learned all the in's and out's of it yet, but what I've seen so far looks good. I've seen Cartooners. It has a lot of canned animation characters that you can manipulate on the screen. It is GS-specific. The animation is very smooth, but it doesn't seem as creative as working from scratch.

Have you seen Fantavision on the Amiga? It is much more powerful than the GS version: supports more colors, more in-between frames, more points on objects, etc. The new version of Deluxe Paint III for that machine also allows animation within it (you can even have animated brushes!).

FROM CHRIS HUTMIRE

I almost purchased Fantavision GS, until I noticed that it was an 8 bit application that made use of the GS' graphics screen. I have played a couple of GS games that were also 8 bit applications that made use of the GS' graphics screen, and at times, was not entirely happy with the result. I have decided to wait for a true 16 bit animation package.

FROM GARY HAYMAN

I did a lot of work with Fantavision when it first came out for the II +e. In fact, at that time I sent some of my works to Broderbund, as they were planning to publish a disk of users' animations. They did a similar thing with Print Shop and I was lucky enough to have some of mine accepted and published in the Graphics Collection 2. Look on the box, you will see my name.

Broderbund did not publish a users' contribution disk. Around that time I put a call out—as you are doing here—to get a collection of Fantavision animations so that I could produce a disk for the WAP Library, such as I did for the Print Shop. That one was a success, and we had many Pi contributors. It is still in the Library and being purchased. Well, to make a long story short, I tried to do the same thing for Fantavision and there were no takers. Not one person was interested in contributing.

Now that Fantavision GS is out perhaps more people would be interested. I have Fantavision GS, but I haven't used it. To become interested in it you really need others to see your movies, and you to see theirs. Perhaps you can stimulate interest again and we could be sharing movies and producing a disk for the WAP library.

Do you know, off hand, if movies produced using Fantavision GS can be seen on a II+e. If so, we could make self-playing movie disks that could be seen by all from the Apple II family.

FROM DIRK BAKKER

Great!! This is the kind of response I was hoping for. I think you are very correct in thinking that it's really encouragement that most people need. Well, what about any other readers out there. Would a demo/tutorial session be in order? Leave your comments here. After all we've got to start somewhere!

FROM DIRK BAKKER

I too was somewhat disappointed with the GS "improvement," but find that within that limitation (and it is there) you can create perhaps even better in that

you have to be more creative. I do like the added "goodies" of the GS version: the ability to supplement the action with sound effects, the TRUE GS (320 SHR) backgrounds. The GS's CPU would probably have to be much faster in order to achieve useful animation at a higher resolution, but then why wait when the process is really the challenge.

FROM DIRK BAKKER

I'm hoping that the Deluxe Paint III version for the GS gets off the ground. It certainly has a lot of potential. Of the three you mentioned, except for Cartooners, which do you find best from a creativity view-point? What about using any paint program to create the "cells" which then are animated by using 8 or 16mm film? Anyone out there tried this?

FROM DAVID KREISBERG

Using Paintworks is similar to transferring the screens from a GS to film. What you do is create a series of paint files (ending in numbers: Ball10, Ball 20, etc.) and the program compresses them and allows you to adjust the rate of playback. We've run out of memory occasionally, but the students have been able to create animations of up to 15 frames with this method.

I haven't worked much w/ Art and Film Director, yet, but it seems to be the only one written specifically for the GS. It uses the cel technique, allowing you to import backgrounds and create each animated object separately to be placed on top of it. The demo files are impressive. It was written up in A+ last year (not sure of the month, though).

Fantavision lets me show students how the computer relieves them of the tedious part of animation (creating many frames w/ slight changes) and speeds up the process. You can try out more ideas in less time, because the computer is quickly generating the in-between frames. The trade off is that you don't have the precision in painting the figures as you do in other programs.

One technique that we are going to try in the Super 8 animation projects is to use a digitizer to

capture images that will be printed, colored and then filmed. We will probably use MacVision on the Mac, but Computer Eyes GS would produce some great effects, too.

FROM CHRIS HUTMIRE

The "sound effects" feature was a nice addition to the GS version. I have a Sonic Blaster stereo card and would like to find a use for its sound digitizing capabilities. Do you happen to know if it possible to record and then import new sounds into Fantavision GS? The "Tweening & (Twining?)" process used by Fantavision appears to be best suited for simple object-styled animations. "Cell animation" can be more detailed, but likely requires more effort and time to create the animation. I have yet to investigate color cycling. There are many type of "tools" to pick from. Is there a single application which features all or most of these features? Do you or anyone else know if animations of any type can be imported into HyperStudio?

FROM DIRK BAKKER

I don't know if the sound files in Fantavision GS is expandable. I'll check it out. "Cell Animation" really requires the same techniques as in using celluloids, except you have the advantage of copying, pasting, and setting backgrounds that most paint programs provided standard. Therefore, the planning is what is up to you and that can be very complex, unless, somehow you maintain a log or some sort in a database. I have tried color cycling and I believe you can see a sample in part of a file I recently uploaded called "STEREOPTIC2.SHK." In it is a stereogram based on a graphic I made using color cycling. In DPII, you can engage the "brush" to cycle as you draw. Then when you view it, engage color cycling. You can have both types of cycling on at the same time but it can be a little dizzying.

A package that seems to promise these features in one application is DeluxePaint III, if it makes it to the GS. I've only read about the Amiga and PC versions. I have no idea about options of HyperStudio. Any truth to Apple providing a HyperCard type

program for the GS that, in a sense, competes with (bettering?) HyperStudio. That's what's kept me from buying HyperStudio. BTW, I logged-off and prepared an SHK file which I named CYCLE.ANIMA.SHK of the cycle experiments I've made. Let me know your reactions. Should be now in Transfer area GS Graphics.

FROM DIRK BAKKER

Have you considered the graphic potential of using the new Apple Overlay card for animation? I would think that especially for the last technique, it would give you a tremendous source of imagery. As a way of "rehearsing," I think Fantavision is useful. You're correct about the resolution issue. Have you read the message about Turbo Rez card? Once something like that becomes available, new software can certainly proliferate. Do you or your students have any material ready for "publishing," i.e., making available in disk form? Once people start seeing what others are up to they're more likely to start using these programs. If sufficient material is available or interesting, we could schedule a tutorial/demo in an upcoming AV SIG meeting (Ok, Nancy?) or in someone's home. Let's keep the dialogue going.

FROM DAVID KREISBERG

We haven't used the overlay card to help with animation, yet; although it definitely has potential. My students started their first Fantavision animation project today, and it was slow going. They are used to DPII and Paintworks. Fantavision seems awkward to them at this point. A few teams were making progress, but there won't be anything worth sharing for a while.

BTW, the photography thread was very helpful - we photographed about 20 DPII pictures. We experimented w/ some of settings suggested. I'll let you know how things turned out when the slides come back.

FROM DIRK BAKKER

I'm hoping to put together info about photographing the screen and perhaps write an article for the Journal. So far I've used Ektachrome and find the best

exposure to be underexposing one stop from that suggested by the automatic meter. Also, I'm using a 50mm macro lens which helps a lot. Another thing, I changed the aspect ratio of the screen to better "fit" the slide's.

FROM RICK ZEMAN

The macro lens is a good idea. I sort of do the same: I use a 35-70 zoom with an extension tube. Doesn't changing the aspect ratio (to make it more of a 2:3 ratio) change the way your graphics look too much?

FROM CHRIS HUTMIRE

I downloaded "CYCLE.ANIMA.SHK," but had problems with PWG's color cycling. I believe that there is a compatibility problem between GS/OS and my "patched" version of PWG. I can load the files but can't activate the cycling. I will download "STEREOPTIC2.SHK," cross my eyes and SEE what happens! <Grin>

FROM DAVID KREISBERG

I tried another technique for getting GS files onto the Mac that worked well. I called up the GS file in DPII and ran the output from the video overlay card into the MacVision digitizer connected to a Mac. I was able to digitize the image (up to 256 shades of grey), print it to the LaserWriter and save it as a TIFF file. Of course, I missed the color, but it was handy for converting files, and printed nicely.

FROM DAVID KREISBERG

You can input a video source to the overlay card from video tape, VCR camera, or laserdisc. The quality of the image is outstanding. Part of the DA that comes with the card allows you to adjust the color and tint of the video source as it appears on the monitor.

The card gives you a separate connector for the monitor. If you use the regular monitor cable, you will only see the computer image. If you use the connector off of the card, you will get the computer/video mix. There is also an RCA output on the card to send the mix to tape or television. You can also use that output to send the computer image to tape or tv (just don't send any video into the GS). The

output from the card seems better than the composite from the GS.

3-D images!!!

FROM ED MOSER

I'd be very interested in exchanging info/files/whatever on this subject. I have some files which I will UL to the board showing some of the work I've done. Unlike you, I've been fooling with Red-Blue color separation, which you need cheapo glasses for. The color separation is obviously a lot more work. Whether the results are worth it, you'll be able to judge for yourself when you take a look at the pics. I'm using Paintworks Gold to achieve the separation. As the program isn't exactly designed for this, I haven't yet found a way to get the process under 7 major steps PER PLANE of depth, meaning that if you create a pic with 6 planes of depth, you've got to duplicate, color & carefully move objects around a LOT, 43 steps in all. I'd be mighty interested in talking to a programmer familiar with \$C0 files about co-authoring an NDA that would automate this process. Anyway, I'll UL my first experiment, which started out as digitized pic of Marc Gastineau and wound up as a kinda Peter Max nightmare.

FROM DIRK BAKKER

You don't say in your message whether you've looked at the DPII files I uploaded. I'm interested to know if after you've converted them (hope you have SHRConvert) to your file format, the effect is still appreciable in PWG. I've also experimented with/considered the use of red/blue or red/green, but because you give up full color, the "glasses," and the logistical "nightmare" of drawing them, I simply put it aside. As to the experiments with the RB/RG approach, I simply used the stereogram approach first on a pair of images to "create" them. Then I colored one green, the other red, and superimposed them (lifting one as a brush). I got the benefit of ease of preparing them as a pair, i.e. initially separated. The effect was there, but as I said the color was gone and, where the pixels overlapped, just MUD.

Mac Disketeria

by Dave Weikert

New and Recent Disks

We have six new disks this month. They include the next disk in our series of INITs and cdevs (Mac Disk #9.05), two disks for the Programmer/Hacker Series (Mac Disks #14.02 and 14.03) and three of HyperCard StackWare (Mac Disks #19.30 through #19.32). William Jones continues his prodigious testing and annotation efforts on the INITs and cdevs. We also welcome a new testing, assembly and annotation volunteer, Tim Buehrer, who makes his debut with the Programmer Hacker Utilities. David Condit, our HyperCard StackWare librarian, has received some needed help; Brian Bassindale, Peter Crawford and James Newton all contributed program notes for the new StackWare disks.

Recent disks include Anti-Virus Utilities (Mac Disks #1.01B through #1.03B), FKeys (Mac Disks #4.01A and #4.02A), the initial disks of the INITs/cdevs Series (Mac Disks #9.01 through #9.04), the first of the Miscellaneous Series (Mac Disk #10.01 - Excel Templates), a Telecommunications disk featuring WAP's own TCS (Mac Disk #13.09), Miscellaneous Utilities (Mac Disks #15.01A through #15.07A, only the last of which has updates to programs previously in our collection) and the revised Adobe Screen Fonts series (Mac Disks #18.01A through #18.16A) which include NFNT ID numbers.

More INITs and cdevs

From the pen, er...keyboard of William Jones comes another disk of INITs and cdevs, Mac Disk #9.05. INITs are small programs which, when placed in the System Folder, are run on system startup to modify the operation of the System File, Finder, or a subsequently opened application. cdevs

(or control panel documents) are similar, except that they also show up in the Control Panel, where they often can be turned on or off or customized. This disk includes files that alphabetically range from the letter "M" into the letter "P."

Programmer/Hacker Series

Tim Buehrer has completed assembly, test and annotation of his first two disks in the Programmer/Hacker Utilities series. Tim sets the record for long distance as a Disketeria volunteer, he resides in Somerville, Massachusetts, near Boston. Tim was previously chairman of the Mac Programming SIG when he last lived in the Washington metro area. Mac Disk #14.02 has color icon tools and color icons and contains everything you need to colorize the icons on your desktop. Mac Disk #14.03 is primarily ResEdit and related tools and resources. Tim points out that you do not have to be a sophisticated user to use these two disks to make your computer more useful. Just make sure you observe his caution to work on copies of files, not on the originals.

HyperCard StackWare Series

We noted last month that new StackWare was on its way—here it is. David Condit, our HyperCard librarian, has completed three more disks in this continuing series. Mac Disk #19.30 includes utilities helpful in developing and modifying stacks and as learning tools in developing your HyperTalk programming abilities. This disk was ably annotated by Brian W. Bassindale. Mac Disk #19.31, annotated by Peter Crawford, contains a mix of educational and utility stacks. James R. Newton wrote the program notes for Mac

Disk #19.32, a collection of miscellaneous stacks that range from educational to useful and fun.

Duplicator Kudos

Our stalwart crew of duplicators continues their unstinting service to the members by copying the disks each month for member purchase. This effort is spearheaded by Tony Salerno who duplicates Master disks used by the other duplicators and also handles the overflow duplication when necessary. The rest of the duplicating crew includes Hampton Dejarnette, John DeMarco, Garry Elliott, Ben Frank, Andy Gallant, Gary Grey, Mary Hockmeyer, Fred Rodgers, Joe Swick and Bob Vandegrift. In addition, many of the staff at Synertech Associates, Inc. rotate duplicating assignments monthly. Duplicators John DeMarco and Andy Gallant share the award for longevity; they have been copying disks since early 1985.

StackWare & Externals Help

David Condit, our HyperCard librarian, is still looking for help. He has over 50 disks with stacks and XCMDs/XFNCs needing evaluation (and annotation if they are good enough to be included in the Disketeria). Give David a call at (703) 349-8752 if you can help. There are still a number of volunteers who have received stacks for evaluation and annotation and have not returned them. You know who you are so give David a call and let him know when you will have them done.

Tax Templates

Paul Koskos has completed his tax templates for Apple II AppleWorks and has also produced a version that runs under MS Works on the Macintosh. The template includes Federal Form 1040 with Schedules A, B, C, D, E, SE and Form 6251 and MD Form 502 for residents. Paul's notes indicate that the spreadsheet could be converted to Excel (and one would presume Wingz) formats. The disk may be purchased from the office and at

the general membership meetings; ask for the Macintosh Tax Templates disk.

DISK #9.05 — I/C 5 INITs & CDEVS 5

Moire f (v3.02): **Moire:** By John Lim.

A color Moire screensaver with a built-in menu clock. The program **Moire cdev => INIT** makes it a smaller startup document, not configurable from the control panel. **Moire Docs (MacWrite)** is the documentation in MacWrite II format *Shareware - \$10.*

Morse CDEV f: **Morse CDEV:** A cdev, an FKey, and a HyperCard XCMD to allow Morse strings to be keyed and heard. **Morse.doc** is the documentation in text format.

Mouse2 f (v1.4a): **Mouse2:** By Ryoji Watanabe. This cdev doubles the speed of your mouse. **Mouse2 CDEV (Mouse Speedup)** is a note in MacWrite format. The read me file referenced in the cdev info screen was not available. *Shareware - \$5.*

Mouse Pad f: **Mouse Pad (MP)O:** By Bill Toleman. Turns a keypad into a directional pad for the mouse. According to the **Mouse Pad.Info** text format documentation, it was developed and tested on a 512Ke with a third-party keyboard. *Shareware - \$2.*

Murphy (v2.0): By Mark Beamish. Puts one of Murphy's laws of computing up on the screen on startup.

Narrator f: **Narrator:** By Robert Churchill. An INIT which speaks on startup whatever is in the "Startup-Speech" text file. Requires Macintalk. *Shareware - A few dollars.*

NeVR (v0.01): An alternate Window Definition that modifies the window to resemble those used by Steve's new machines.

No IBM f: **No IBM.** A simple illustration of the name, displayed on startup. **How to Move "NO IBM"** document in MacWrite format explains how to edit No IBMs with ResEdit to center it on a larger Mac Screen.

not-ITM f: **not-ITM:** By Linda Custer. A system document that interrupts a disk event to keep the first disk after the startup disk from mounting.

Useful to keep an internal drive from mounting when using a faster external drive. **not-ITM notes** is the documentation in text format.

Obnoxious: Randomly makes your Mac give out an obnoxious moan.

Oliver's Buttons (v1.0): By Oliver Steele. Changes the format of the various types of boxes in dialogs boxes and cdevs, putting shadow boxes around text buttons and changing the look of checked round and square radio buttons.

On Cue™ 1.3 Demo: By Fred D. Reed. An application and document launching utility; puts an extra icon in the menu bar from which applications and documents can be opened. *Shareware - This is a demo; a fully configured version is available from dealers or the publisher.*

PhoneMate f: **PhoneMate:** By Kevin Housen. A utility which plays a digitized sound file (**PhoneSound**) when a phone (attached to a Mac via a modem) rings. Witten to help discriminate one phone's ring from another in work areas where all the phones sound the same. **PhoneMate.doc** is the MacWrite format documentation. Not tested. *Shareware - Send him a beer sometime.*

PopChar f (v1.0): **PopChar:** By Günther Blaschek. Enables you to generate every possible character that is available in the current font without having to remember keyboard combinations or to resort to Key Caps. Its all done with the mouse as described in the MacWrite document **PopChar.doc**.

PopIt! 1.6 f: **PopIt!:** By Pete Helme. Activated by holding down the shift & command keys simultaneously. A popup menu cursor will then appear letting you know PopIt! is active. Click the mouse and the menu will appear at the upper left corner of the screen, not at the cursor location. **PopIt! docs** is the text format documentation. *Shareware - \$10.93.*

Popup 2.0 f: **Popup 2.0:** By Robert Stromberg. Allows access to the menu bar from anywhere on the screen. Unlike PopIt!, above, puts the menus at the cursor location on the desktop. About Popup is the documentation in MacWrite format. Per the documentation, there were some display problems under Multi-Finder. It froze up the application

quit. It also overrides the standard menu bar; a significant disadvantage. *Shareware - \$10.*

PopWMenu (v1.0): By Douglas S. Wyatt. Another popup menu. *Shareware - Demo version; quits 30 minutes after startup. Real version \$79.95.*

PortDev 2.1.0 f: **PortDev 2.1.0 and ResetPorts 1.0.0:** Mathew Alan Milroy. (Previously named **BBaud**.) Adjust the parameter RAM settings for the modem port, (.portA), and printer port, (.portB) and store them until you decide to alter them again. **@PortDev 2.1.0 docs** is the MacWrite format documentation. *Charityware - Tax deductible donation to The Church Of St. James The Apostle.*

POWERmenus Demo f (v1.0.1) f: **POWERMenus demo:** By John Foster. A Cdev/INIT package that will pop-up the whole menu bar anywhere the mouse is located on the screen. Eight utility programs (in the **POWERgadgets f**) are included in the pop up menu: **POWERalarms** (a reminder program), **POWERcontrols** (a fast way to access items in the control panel), **POWERdas** (easy access to DAS), **POWERdialer** (dials the phone through a modem), **POWERnotes** (POP up notes), **POWERtime** (puts the time and date on the menu list), and **POWERwindows** (a window navigation aid). **POWERmenus—ReadMe** is the text documentation. *Shareware - This demo works for 30 minutes after each powerup; a full version is \$79.95.*

PowerStation™ 2.1/E f: **PowerStation™ 2/E:** By Steve Brecher. A software control center (an alternative to the Finder) to organize documents and applications. **PowerStation™ Orientation** is the Teachtext documentation. *Shareware - This is a demo version; the full version is \$59.95.*

Programmer's Key INIT f: **Programmer's Key INIT:** By Paul Mercer. An INIT that allows the use of the 'power-on' key of an Apple Desktop Bus keyboard as a substitute for the Programmer's Switch. **Programmer's Key Docs** and **Read ME!** are MacWrite and text documentation respectively.

Public Folder f (v1.0): **Public Folder:**

By Michael Peirce, Claris Corporation. 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. **Public Folder Release Notes 1.0** is the TeachText documentation.

DISK #14.02 — P/H 2 PROGRAMMER/HACKER 2 COLOR ICONS

CIcon Edit f: CIcon Edit: By Ben Haller. Graphically edits cicon (color icon) resources. Color icons can then be displayed using the ColorFinder or Icon Colorizer INITs included on this disk. Can only be used on a Macintosh with a color screen. The **CIcon Edit Docs** explain the use of this program.

ColorFinder f: ColorFinder: By Chris DeRossi. Operates at startup (it is an INIT) to modify the operation of the system so that color icons are displayed by Finder and other applications instead of the normal black and white icons. It works only on those ICN#s and cicons that have been copied into the ColorFinder file using ResEdit. Better handling of highlighting than Icon Colorizer. **ColorFinder Release Notes** describes the operation of ColorFinder.

Icon Colorizer f: Icon Colorizer (v1.2): By Robert P. Munafo. Operates at startup (it is an INIT) to modify the operation of the system so that color icons are displayed by Finder and other applications instead of the normal black and white icons. It works only on those ICN#s and cicons that have been copied into the Icon Colorizer file using ResEdit. **Icon Colorizer Doc** describes the operation of the program. **Source Code f** contains the following source code files for the INIT: 68K-Macros.asm, EquIP.txt, IconPatch.asm, IconPatch.link, initIP.asm, installIP.asm, patchIP.asm, and README. Can be assembled using the MDS Development System.

Loony Tunes Icons f: Looney Tunes Icons. By François Boucher. A collection of cicons and ICN#s of your favorite Looney Tunes characters. **Icons Info** is a short file by the author describing the icons.

Mega CICONs f: Icon Resources. By Wayne Kauffman. A collection of cicons and their ICN#s for use with Icon Colorizer or ColorFinder. **CICON resource readme** is a short description of the file by the author.

newICN#/CICON's: A file containing a number of cicons and corresponding ICN#s for use with ColorFinder or Icon Colorizer.

ResColors f: ResColors 1.0b8. By Frédéric Miserey. A series of resources that are added to ResEdit to allow ResEdit to edit cicons. Requires version 1.2d4 or higher of ResEdit. **Preliminary Notes** describe an earlier version of ResColors and its use.

DISK #14.03 — P/H 3 PROGRAMMER/HACKER 3 RESEDIT, EXTENSIONS & TOOLS

ResEdit 1.3d1 f: ResEdit 1.3d1: Apple Computer. ResEdit is the resource editor produced by Apple Computer. 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. This version is a pre-release version, and may have bugs. The current release version is 1.2. **ResEdit Manual - Word:** Instructions for the use of ResEdit. These instructions are for version 1.0.

ResEdit Helper f: ResEdit Helper - MacWrite: By Sam Kass. Hints on the proper use of ResEdit. **ResEdit Helper II - MacWrite:** By Sam Kass. More hints on the proper use of ResEdit.

ResEdit IPS™: By MacSolutions. This is a HyperCard stack that teaches you about the use of ResEdit. It is an excellent resource for new users of ResEdit. Unfortunately, it does not cover some of the newer features of this tool.

ResColors f: ResColors 1.0b8. By Frédéric Miserey. A set of resources to add to ResEdit to allow ResEdit to edit cicons (color icons). Requires version 1.2d4 or higher of ResEdit. **Preliminary Notes** describe an earlier version of ResColors and its use.

ResCounter 0.81: By Loftus Becker. This application will count the number of resources types in any file and count the total number of resources.

Resource Handler 2.11 FKey: By John Holder. This is an FKey that allows you to examine resources that are currently in memory or resources of any file. No editing is possible. Can be installed using ResEdit or FKey Installer. **ResHandler Regist. Form** is a file that contains information regarding the operation of this FKey and a shareware registration form. **Shareware - \$10.**

ResList: This application will prepare a list of all of the resources in any file.

ResMenu f (v1.2): ResMENU: By Alan T. Goates. A set of resources for ResEdit to improve the method for editing MENU resources. Requires ResEdit v1.2d0 or higher. Must be copied into ResEdit using ResEdit. Remember, work only on a copy. **ResMENU.doc:** Documentation for ResMENU.

ResPICT f: ResPICT: By Alan T. Goates. A set of resources for ResEdit to improve the method for displaying PICT resources. Contents of this file must be copied into ResEdit using ResEdit. Remember, work only on a copy. **ResPICT.doc:** Documentation for ResPict.

ResPreloader: By Mark Hickenbottom. An application that allows you to modify an application to require that certain resources are loaded upon opening the application and to make them non-purgeable. Why would you do this? You may have noticed that sometimes your Mac waits a moment before executing some menu item or other command. This is often because it must load a resource from the disk to do that operation. By loading the resource at the beginning of the program, there will be fewer subsequent delays. However, this may cause some applications to run low on memory. Making a resource non-purgeable means that the Mac will not unload it from memory. This can lead to out-of-memory condi-

tions. Only modify a copy of an application. *Shareware* - \$5.

DISK #19.30 — SW 30 STACKWARE — UTILITIES

FileFinder 1.0: By Scott Neufeld. **FileFinder** is a powerful finder-replacement stack that can perform most of the functions of the Finder, including copy, delete, rename, move, get info, etc. It is primarily designed for the person with a hard disk and can increase productivity because you don't have to go poking around in folders to find what you are looking for, you just switch through a set of cards. *Shareware* - \$15.00.

MemoNoteStack*™:** By Peter Fraterdeus, Alphabets, Inc. This stack contains routines for making "post-it" type notes which can be used within your stacks. The "MemoNote" routine makes a note field on a card with attached buttons to hide/show the field, and to "re-size" it. Also included is a "Do Me Note" routine which makes a button and an associated pop-up field which can contain executable HyperTalk code. The code is executed when the associated button is Command-clicked. *Shareware* - \$20.00.

Pops 1.0: By Christopher Allen. Uses HyperCard V1.2.x HyperTalk features to provide "pop-up", "pop-down", and "pop-center" fields which can act as pop-up menus. Items in the menus are selected with the mouse, and the selected item is placed in the message box, or can be passed to a handler for further processing.

ResourceLibrary Manager: By Dave Bezaire. Provides a simple and painless way for the HyperCard beginner to deal with resources, those illusive chunks of program code which can extend the capabilities of HyperCard but require that ominous program know as ResEdit to capture and use. It enables you to find and list resources in any given stack, and then copy them to any other stack. This stack can also be used quite easily to look at the resources in any stack.

SearchReplace XCMD1.5: By Maurice Volaski. **SearchReplace** version 1.5 is a freeware XCMD that provides you with a word processor style method for searching and replacing strings and words within your

HyperCard stacks.

Sideways Scroller: By Mark Safire, Safire Consulting. A stack showing how to simulate horizontal scroll bars to "flip" sideways through multiple fields on a card or multiple cards in a stack. It gives instructions on installing routines, and how to customize them. It even has the thumb button on the horizontal scroll bar showing "page" numbers of fields or cards.

Stack Editor: By Mark Jaffe, Computer Wizards. An alternative to the standard HyperCard script editor dialog box. This stack allows the user to edit the script of any existing object in a chosen stack by selecting the object from a scrolling list. The script of the selected object is placed in a scrolling field where it can be edited as desired. A "save script" button allows the edited script to replace the original.

Shareware - \$15.00.

The Stack Reporter V1.3: By Laurance O. Hill. Allows the user to select specific cards from a stack and build a new stack from those cards, or append them to another stack. It also allows an in-depth, but complicated, method of sorting information contained within a stack, enabling the user to print that information in the standard HyperCard columnar format. Also imports and exports text. On-line help is provided. *Shareware* - \$10.

StackCOMPACTOR 1.21: By Lawrence J. Byrne. Allows compacting of all stacks within a specified HFS folder or directory. Gives the user the option to compact all stacks or only those with free space, and to modify write-protection of stacks, if necessary or desired, prior to compaction. Provides a quick and easy way to compact many stacks at once. On-line help is provided.

Transfer Utility V1.0: By Evan Browne, Jonathan™ Software. This stack can "resurrect" cards in a stack containing "data errors" by transferring the information on the damaged cards to new cards. Includes on-line Help. *Shareware* - \$10 + \$2 for disk and update.

HyperWrite f. HyperWrite 2.0: By Scott Harris. A full-featured HyperCard word processing stack that updates **HyperWrite 1.1** on Mac Disk 19.19. Supports standard file

manipulation, importing and exporting of text, printing, standard cut and paste, formatting and line spacing, tabs, and font sizes and styles. The **Address Button** stack can automatically install a "HyperWrite Link" button into Apple's Address stack, allowing the **HyperWrite** user to automatically address a letter to anyone whose name is recorded in that stack. The **HyperWrite Printer** application is a stand-alone utility designed to be used only with **HyperWrite** to allow more normal word processing printing features, as opposed to those provided in **HyperCard**.

DISK #19.31 — SW 31 STACKWARE — EDUCATIONAL & UTILITY

BrainStack: By Robert Slotnick and John Mack. The **BrainStack** contains much information about the various functions of the human brain. You can access information by clicking on different brain areas.

MacSpeedo 1.9.5: By Ric Ford, Ford Associates. **MacSpeedo** is a HyperCard stack that tests and shows the performance of your Macintosh when you push the Test buttons. Push the test button to see how your Mac processing speed compares to the speed of a particular type Mac (e.g. does it have the speed of a Mac Plus, SE, IICx, etc.).

Shuttle Information89: By Rick Stickle. This stack was produced from NASA's public information packages and Flight manifests. It is very informative and includes some outstanding graphics. *Postcardware* - send a picture postcard of a local landmark.

Sol's Neighbors: By John G. Cramer. The **Sol's Neighbors** stack contains organized information about the stars that lie within 16 light years of the Solar System, the Earth's nearest stellar neighbors. The information is informative and the stack has the ability to plot out a 3D approximation of the location of neighbors.

MacAnimo 1.0 f. MacAnimo™ 1.0: By Murray M. Altheim. **MacAnimo™** is a HyperCard based animation toolkit designed to provide screen animation capability without the high

cost or complication of commercial animation software. An excellent help stack, **MacAnimo™ Help** is also included. A good introduction to HyperCard animation. *Shareware - Fee depending on formula given for how useful this stack is to you.*

DISK #19.32 — SW 32

STACKWARE — MISCELLANEOUS 6

Anti-Viral Doc Stack 2.0: by Joe McMahon. This stack lists and describes nine anti-viral programs. It also lists all known viruses at the time of publication and what you can do to purge your disks of them. Gives some good advice on creating a "Clean Up" disk. An excellent stack with a lot of good information.

AutoCat4.01: by Oscar F Hills. A disk cataloger using a disk box metaphor in which you catalog a disk by placing each card into the "box" for as many cards as you wish. There are differences in cataloging floppies and a hard disk, but the box metaphor remains. The program includes search, launch, and printing functions. It is extensively help-documented, and walks you through each phase and facet. A truly massive effort

with good results. *Shareware — \$15.00.*

AutoScripter: By Gavin Young as adapted from Dan Shafer's book *HyperTalk Programming*. A stack of HyperTalk programming templates that lets you create scripts by clicking on pre-designed commands which either present you with a dialog box for setting options or puts the commands into a holding field. When completed, your script can be saved to a text file or pasted directly into the appropriate script or stack.

Button Mover: By Tom Gill. Puts basic navigation buttons and their icons in the background of a stack without having to go to the normal icon screen in the Home Stack. And there are lots of "vacant" buttons for your own creations. You can drag the buttons to wherever you need them. A clever piece of Hyperware.

Character Counter: By André Hinds for Fanques, Inc. Does just what the title says, counts characters in a document, paragraph by paragraph. Also includes save, find, and print functions. For the writer who needs a quick count for articles and stories being sent to the typesetter.

ClickyButton1: By John J. Anderson, The Acme Dot Company. A collection of eight animated buttons, from push buttons to knobs to on-off

switches to a sliding linear pot. Requires ResEdit or another resource mover to put these clever buttons into your own stacks.

Crazy HyperCard Icons: By Skip Rockey. Here are 363 different icons, go ahead, count 'em!, available for ResEditing or ResCopping into your stacks. This stack has lots of old and lots of new graphics in icon size and format, enough for any user. Great!

Disk Labeler: By Oscar F. Hills. A disk with two label templates (in the background). Over one template you create your label, centered over the background template on the card level. When finished, select, from card level only, duplicate over the second template. Select and copy the card level data onto a second, clear background, and print. Sounds rather complicated, but it actually works quite well.

Dueling ScrollFields V1.1: By Michael Waite & Ted Jones. Explains and demonstrates how to superimpose buttons over the scroll bar of a field to make two distinct scrolling text fields so that they operate as one entity. Dueling ScrollFields consists of a collection of fields, buttons, and scripts, and are extracted from The Waite Group's *Tricks of the HyperTalk Masters*.

History: By Scot Kamins. After installing this in your Home Stack, it keeps a pictorial record of target cards. Works like HyperCard's Recent, but lets you select which card to record. Features delete and search functions, and you can add notes in pop-up fields which are part of each stored card.

Hyperedit stack: By Doug Werner. Once installed in the Home Stack, this free, XCMD HyperCard script editor lets you call the editor whenever you are in a button or field and press command-shift-click.

Pixie!: By Leigh Lundin. A HyperCard pixel locator (in a button) that provides coordinates of any point on your screen. Works nicely, and is very utilitarian for those who want, or need, to locate precise screen points. 🍎

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FOR SALE

SuperPaint 2.0 (original documentation, warranty card) = \$99, PowerPoint 2.0 (original documentation) = \$99, More II (shrink wrapped, with warranty card) =

\$150, Oracle for the Mac, (original documentation, warranty card) = \$99, Trapeze 2.1 (original documentation, warranty card) = \$80, MindWrite Express 2.1 (original documentation, warranty card) = \$75, Super 3-D 1.0 (original documentation) = \$50. Call Lynn, 301-845-2651 evenings before 10:30 PM.

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 52 Apollinaire Biography
 53 Albert Camus Interview
 54 Tic-Tac-Toe in Spanish
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 70 Business/Math/Statistics
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 76 Education
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 91 Spreadsheet D Investment
 92 Spreadsheet E Bus. Recd.
 93 VisiPlot & VisiTrend
 94 CALCULINK***
 95 Spreadsheet F: Coin Collect.
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 101 Utilities B
 102 Games A
 104 Business A
 106 Science Engineering
 107 Games B
 108 IAC 10(Graphics)
 109 IAC 11(Applesoft Tutorial)
 110 Personal/Education
 111 Games C
 112 Utilities C
 113 Business B
 115 IAC 12/13 Misc.
 116 IAC 14 Micromodem I
 117 Picture Packer
 118 Utilities D
 119 IAC 15 Misc.
 120 IAC 16 Misc.
 121 WAPABBS 1.1 Doc**
 122 IAC 17 Misc.
 123 French Vocabulary
 124 Utilities E
 125 IAC 18 Misc.
 126 Sights and Sounds
 127 Math/Science
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Apple IIgs
 3 1/2" DISKS

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 2002 Demo Disk A
 2003 Freeterm
 2004 Slide Show I
 2005 Demo Source Code 1
 2006 Demo Source Code 2
 2007 M18 Courses
 2008 Odd Bits I
 2009 GS Fonts I
 2010 GS Fonts II
 2011 GS Fonts III
 2012 AppleWorks Tax
 Template IRS 1988***
 2013 Odd Bits II
 2014 Sounds I
 2015 Sounds II Nostalgia
 2016 Slide Show II
 2017 Slide Show III
 2018 Mean 18 Courses
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 IIGS Systems Disk

Apple III Disks

WAP /// SIG PD LIBRARY
 1000 WAP /// SIG PD Catalog
 1001 Games 1
 1002 Basic Utilities 1
 1003 Footnote ///
 1004 System Utilities & Data Disk
 1005 New Member Disk
 1006 Word Processing and WPL
 1007 Games for Kids
 1008 The Best of MAUG
 1009 The Best of the Source
 1010 The Best of TAU
 1011 D3.Backup
 1012 Sketchpad and Slideshow
 1013 A3 Diagnostics
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 1060 3EZPIAW Business Templates
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 1062 Graphics Disk #1
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 1064 Telecommunications Disk #2
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 1066 Kermit ///
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Footnotes

* Requires disk #181 to start game
 ** Set of 3
 *** Shareware: Pay author fee to
 continue using after trial period.

Anti-Virus Utilities	INTs & cdms	Telecommunications	Adobe Screen Fonts	Mac II Series	Serially Numbered
3 disk set	5 disk set; \$15.00	9 disk set; \$27.00	16 disk set; \$48.00	14 disk set; \$42.00	___ Disk 76 •
___ 1.01B - AV 1	___ 9.01 - I/C 1	___ 13.01 - T 1	___ 18.01A - AF 1	___ 20.01 - M II 1	___ Disk 77 •
___ 1.02B - AV 2	___ 9.02 - I/C 2	___ 13.02 - T 2	___ 18.02A - AF 2	___ 20.02 - M II 2	___ Disk 78 •
___ 1.03B - AV 3	___ 9.03 - I/C 3	___ 13.03 - T 3	___ 18.03A - AF 3	___ 20.03 - M II 3	___ Disk 79 •
	___ 9.04 - I/C 4	___ 13.04 - T 4	___ 18.04A - AF 4	___ 20.04 - M II 4	___ Disk 80 •
	___ 9.05 - I/C 5	___ 13.05 - T 5	___ 18.05A - AF 5	___ 20.05A - M II 5A	___ Disk 84 •
Desk Accessories	Miscellaneous		___ 18.06A - AF 6	___ 20.05B - M II 5B	___ Disk 85 •
10 disk set; \$30.00	1 disk set		___ 18.07A - AF 7	___ 20.06 - M II 6	___ Disk 89 •
___ 2.01B - DAs 1	___ 10.01 - M 1		___ 18.08A - AF 8	___ 20.07A - M II 7	___ Disk 91 •
___ 2.02B - DAs 2			___ 18.09A - AF 9	___ 20.08 - M II 8	___ Disk 92 •
___ 2.03B - DAs 3			___ 18.10A - AF 10	___ 20.09 - M II 9	___ Disk 95 •
___ 2.04B - DAs 4	Paintings (MacPaint)	Programmer/Hacker	___ 18.11A - AF 11	___ 20.10 - M II 10	___ Disk 96 •
___ 2.05B - DAs 5	5 disk set; \$15.00	2 disk set	___ 18.12A - AF 12	___ 20.11 - M II 11	___ Disk 104 •
___ 2.06B - DAs 6	___ 11.01 - P 1	___ 14.01 - PH 1	___ 18.13A - AF 13	___ 20.12 - M II 12	___ Disk 105 •
___ 2.07B - DAs 7	___ 11.02 - P 2	___ 14.02 - PH 2	___ 18.14A - AF 14	___ 20.13 - M II 13	___ Disk 106 •
___ 2.08B - DAs 8	___ 11.03 - P 3	___ 14.03 - PH 3	___ 18.15A - AF 15		___ Disk 108 •
___ 2.09B - DAs 9	___ 11.04 - P 4		___ 18.16A - AF 16	HyperCard Externals	___ Disk 123 •
___ 2.10B - DAs 10	___ 11.05 - P 5			4 disk set	___ Disk 134 •
				___ 21.01 - HE 1	___ Disk 143 •
				___ 21.02 - HE 2	___ Disk 147
				___ 21.03 - HE 3	___ Disk 150 •
				___ 21.04 - HE 4	___ Disk 151 •
					___ Disk 153
FKeys (Function Keys)	Digitized Sounds	Miscellaneous Utils	HyperCard StackWare	System Software 6.0.3	
2 disk set	31 disk set; \$93.00	7 disk set; \$21.00	32 disk set; \$96.00	6 disk set; \$18.00	
___ 4.01A - FKs 1	___ 12.01 - S 1	___ 15.01A - MU 1	___ 19.01A - SW 1	___ SS.ST	
___ 4.02A - FKs 2	___ 12.02 - S 2	___ 15.02A - MU 2	___ 19.02A - SW 2	___ SS.PT	
	___ 12.03 - S 3	___ 15.03A - MU 3	___ 19.03 - SW 3	___ SS.U1	
	___ 12.04 - S 4	___ 15.04A - MU 4	___ 19.04 - SW 4	___ SS.U2	
	___ 12.05 - S 5	___ 15.05A - MU 5	___ 19.05 - SW 5	___ SS.LW 6.0	
	___ 12.06 - S 6	___ 15.06A - MU 6	___ 19.06 - SW 6	___ SS.32 Bit QDraw	
	___ 12.07 - S 7	___ 15.07A - MU 7	___ 19.07 - SW 7		
	___ 12.08 - S 8		___ 19.08 - SW 8	HyperCard Update 1.2.2	
	___ 12.09 - S 9		___ 19.09 - SW 9	___ HC & Stacks - HC.01	
	___ 12.10 - S 10		___ 19.10 - SW 10	___ HC Ideas - HC.02	
	___ 12.11 - S 11		___ 19.11 - SW 11		
	___ 12.12 - S 12	System Utils	___ 19.12 - SW 12		
	___ 12.13 - S 13	8 disk set; \$24.00	___ 19.13 - SW 13		
	___ 12.14 - S 14	___ 16.01B - SU 1	___ 19.14 - SW 14		
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	___ 12.20 - S 20	___ 16.07B - SU 7	___ 19.20 - SW 20	___ Disk 29 •	
	___ 12.21 - S 21	___ 16.08B - SU 8	___ 19.21 - SW 21	___ Disk 30 •	
	___ 12.22 - S 22		___ 19.22 - SW 22	___ Disk 31.1 •	
	___ 12.23 - S 23		___ 19.23 - SW 23	___ Disk 32 •	
	___ 12.24 - S 24		___ 19.24 - SW 24	___ Disk 35 •	
	___ 12.25 - S 25		___ 19.25 - SW 25	___ Disk 41 •	
	___ 12.26 - S 26		___ 19.26 - SW 26	___ Disk 45 •	
	___ 12.27 - S 27		___ 19.27 - SW 27	___ Disk 46 •	
	___ 12.28 - S 28	Word Processing Utils	___ 19.28 - SW 28	___ Disk 54 •	
	___ 12.29 - S 29	3 disk set	___ 19.29 - SW 29	___ Disk 55 •	
	___ 12.30 - S 30	___ 17.01 - WP 1	___ 19.30 - SW 30	___ Disk 56 •	
	___ 12.31 - S 31	___ 17.02 - WP 2	___ 19.31 - SW 31	___ Disk 74 •	
		___ 17.03 - WP 3	___ 19.32 - SW 32	___ Disk 75 •	

HyperCard Upgrade requires HyperCard proof of purchase; any of original disk, first page of manual, receipt or previous HyperCard Upgrade disk.
 Disks marked with a bullet are in 400K single side disk format; all others are 800K double side disk format.

Mail this form with your check to: Disketeria Washington Apple PI, Ltd. 7910 Woodmont Ave., Ste. 910 Bethesda, MD 20814		Are you a member of Washington Apple PI, Ltd? Yes/No ____ If Yes, Member Number ____. All payments must be in U.S. funds drawn against U.S. banking institutions. Non-members add \$3.00 per disk to listed prices.	
Number of Disks	Member Price each	Name	
___ Singles		Box Number, Apartment, Suite, etc.	
___ 4 or less @	\$ 4.00 - _____	Street Address	
___ 5 or more @	\$ 3.50 - _____	City	
___ Sets (marked above)	\$ (above) _____	State	
___ + Postage - \$ 1.00 /disk,		ZIP Code	
___ max \$ 5.00		Daytime telephone	
___ Disk Catalogs	\$ 3.00 - _____	Evening telephone	
___ + Postage @ \$ 1.50 ea.			
TOTAL AMOUNT	_____		

Washington Apple Pi Tutorials

Washington Apple Pi provides training to its members and to nonmembers on a regular basis. We've provided complete course descriptions for the Macintosh tutorials, and a general description for the Apple II courses.

The fee for each session is \$15 for members, \$20 for nonmembers. Mail or phone in your registration to the WAP Office. You *must* pre-register the class or classes you wish to attend. We urge you to bring your computer with you to class, since we have no computers 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. Tutorials without a minimum of two students registered 48 hours before classes are scheduled to begin will be cancelled; so we recommend you confirm that your class is still scheduled about 24 hours prior to the scheduled starting time.

Apple II e/c Tutorials for March

We're providing the Apple II e/c Introductory Tutorials, a three part series in March. Please refer to the calendar for times and course titles. You may sign up for just one, or for all three, if you wish. Of course all three course provide you with the most benefit. These classes are designed for beginners, not experienced users.

Also scheduled is a class on telecommunications, taught by Leon Raesly.!

Next month, we hope to have a more complete description for each class.

Also in April, we'll have the same tutorials for the Apple II GS as we'll have for the Apple II e/c this month (March).

Washington Apple Pi		Washington Apple Pi	
Tutorial Registration Form		910 Woodmont Avenue, Suite 910 Bethesda, Maryland 20814 301-654-8060	
Basic Information		Course Numbers	
Name _____		AE1390	M1390
Address _____		AE2390	M2390
City/State/Zip _____		AE3390	M3390
Phone (day) _____ (Eve) _____		GS1290	M1490
Member Number _____ Non-Member _____		GS2290	M2490
Number of Classes _____ x Class Fee \$ _____ = Total Fees \$ _____		GS3290	M3490
Check/Money Order _____ Credit Card _____ Card Number _____		GS1490	PM1390
Card Expiration _____ Signature _____		GS2490	PM2390
WAP Form #CL006 (new 1/90) _____ Mail registration and payment to the above address _____		GS3490	EX1390
		M1290	EX2390
		M2290	MV1390
		M3290	AC1390

Macintosh Tutorials for March

More and better Macintosh tutorials are now available! A detailed description for each is listed below:

Introduction to Macintosh I

This class is designed for the beginning user. You should go through the *Guided Tour* disk that came with your computer before you come to this class. You'll learn each of the components of your Macintosh, both hardware and software. You'll discover what the *System*, *Finder*, *Icons*, the *Active Window*, and how they all work. You'll also investigate the components of the *Control Panel*.

Materials required: Your Macintosh, external drive, startup disk, and an unformatted disk.

Date: March 12, 1990

Instructor: Jack Crawford

Introduction to Macintosh II

This class is designed for the beginning user. You should go through the *Guided Tour* disk that came with your computer before you come to this class. You'll learn each of the components of your Macintosh, both hardware and software. You'll learn the finer points of the *Menu Bar*, various error messages, what the *Clipboard* and the *Scrapbook* are, various peripherals and how they are connected to your Macintosh, and, finally, you'll learn about command key equivalents (key board shortcut for *Menu Bar* commands).

Materials required: Your Macintosh, external drive, startup disk, and an unformatted disk.

Date: March 19, 1990

Instructor: John Rogers

Introduction to Macintosh III

This class is designed for the beginning user. You should go through the *Guided Tour* disk that came with your computer before you come to this class. You'll learn which version of the *System* software you should be using; you'll learn how to update your system files; about the *Set Start-up* command; how to use the *Font/DA Mover*; learn about what a RAM disk is and how to use one, if you wish; how to use *Switcher* or *Multifinder*; and finally, you'll learn about the various RAM configurations possible with each Macintosh.

Materials required: Your Macintosh, external drive, startup disk, and an unformatted disk.

Date: March 26, 1990

Instructor: Marty Milrod

Introduction to Excel

This class is primarily intended for those who know little or nothing about *Excel*. If you've used *Excel* before, or have a little bit of experience on another spreadsheet program like *Full Impact*, and want to learn more, then this class can be of benefit to you, too. The course covers spreadsheet basics, and overview of *Excel* menus and functions, formatting commands, formula basics, built-in functions, database functions, charting and graphing, and more advanced formula techniques.

Materials required: Your Macintosh, external drive, startup disk, and *Microsoft Excel* or other spreadsheet program.

Date: March 10, 1990

Instructor: Dick Byrd

Introduction to Excel Macros

This class is intended for the user who has a little more experience with *Excel*. Topics include: an overview of macro commands, using the recorder, function macros, command macros, and designing useful applications using *Excel* macros. Prerequisite: *Introduction to Excel*, or equivalent experience is recommended.

Materials required: Your Macintosh, external drive, startup disk, and *Microsoft Excel* or other spreadsheet program.

Date: March 17, 1990

Instructor: Dick Byrd

Virus Protection

If you want to know more about the virus threat out there, this course is for you. Topics include what viruses are, what they can do to your system, searching your system for viruses, eradicating viruses, and virus prevention.

Materials required: If you have a Macintosh with a hard drive, bring it and your computer with you to class.

Date: March 3, 1990

Instructor: Rob Clark

Introduction to PageMaker

This class is designed specifically for *PageMaker* users — since *PageMaker* is so specialized, there will be little, if any, carry over to other page layout programs like *Quark Express*, and *Ready Set Go!*. Approximately half of the class period will be spent discussing the uses of the program, and how to use its tools. The other half of the period will be a “hands-on” session — each student will assemble his or her own *PageMaker* document. A tutorial disk will be furnished for the attendees.

Materials required: A Macintosh computer, hard drive, and your own copy of the *PageMaker* application.

Date: March 15, 1990

Instructor: Rob Clark

Introduction to PageMaker

If you're already somewhat familiar with *PageMaker* and now want to produce a newsletter, then this is the class for you. Again, this class is designed specifically for *PageMaker* users. Since this program is so specialized, there will be little, if any carry over to other page layout programs like *Quark Express*, *Ready Set Go!*, etc. Approximately half of the class time will be spent discussing some design tips, what the various components of a good newsletter are, what tools will particularly be useful for assembling your newsletter, and designing your own newsletter template. The other half of the class period will be a “hands-on” session. Each student will assemble his or her own *PageMaker* newsletter template. A tutorial disk will be furnished.

Materials required: A Macintosh computer, hard drive, and your own copy of the *PageMaker* application.

Date: March 22, 1990

Instructor: Rob Clark

Apple II Tutorials

AppleWorks 3.0

Learn the ins and outs of “Classic AppleWorks” including word processing, data base and spreadsheets. Discover tricks and techniques and how and why to move data between the three modules. Only open to current users of AppleWorks of beginning and intermediate levels. Not appropriate for the novice or the advanced user. DO NOT bring your computer. You

Date: March 27, 1990

Instructor: Gary Hayman

Ultramacros 3.1

TimeOut UltraMacros makes AppleWorks 3.0 tasks a breeze. Learn keyboard macros, how to write macros, and the writing and use of macro task files. Learn some of the new commands and tokens and how to put them to use. We will write macros in class but your computer IS NOT needed. Valuable to those who have UltraMacros or are thinking of purchasing the disk. The presentation will be a mix of technical and non-technical information. Free macros will be given out so bring a blank disk.

Date: 2 Parts: Pt. 1. April 19 (Thursday) 7-9:30 PM.; Pt. 2 (To be scheduled later)

Instructor: Gary Hayman

Publish It! -

Publish It! is the most popular Desk Top Publishing program for the Apple II series and is top rated by many experts. It will run on the Apple IIc, c+, e and IIGS with only 128K memory requirements. Learn efficient and rapid ways of producing letters, newsletters, signs, forms, ads, reports, menus, brochures, cards etc. Discover the tricks of the trade. See how easy it is to import graphics, changing their size and placing them wherever you want. If Publish It! 3 has been released at the time of the course, it too will be discussed and demonstrated. Your computer IS NOT needed for this course; and no previous experience is necessary.

Date: April 26 (Thursday), 7-9:30 PM.

Instructor: Gary Hayman

Alert!!

**Party animals and others
(and anyone else that might
fit this description)**

WAP is having a ...PICNIC!

Plan on attending

When: May 12, 1990

Where: Cabin John Regional Park

**Why: It seemed like a good idea
at the time.**

**If you don't come, your hard disk
is going to crash, disastrously, within
the following moon cycle.**

**(If you don't have a hard disk, it will be even more
unpleasant.)**

Honest.

Would we lie?