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washington pple pi

The Journal of Washington Apple Pi, Ltd.

Volume 11, Number 11

November 1989

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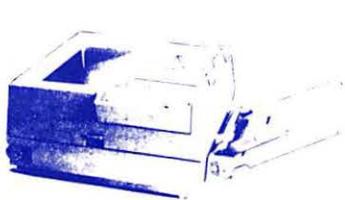
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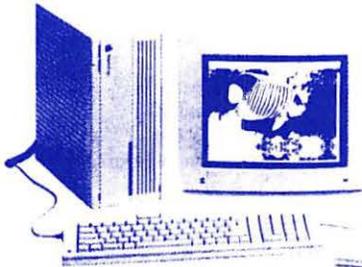
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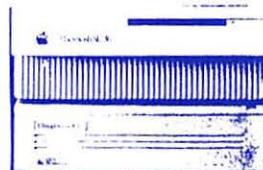
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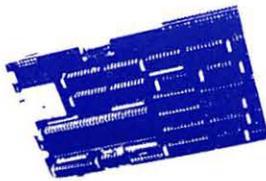
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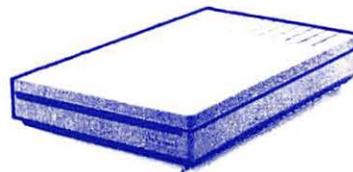
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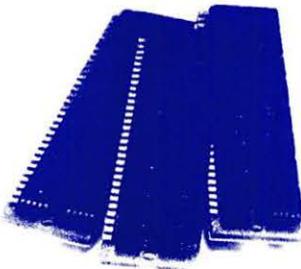
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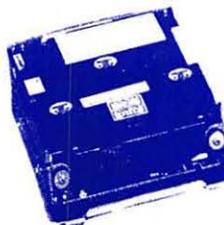
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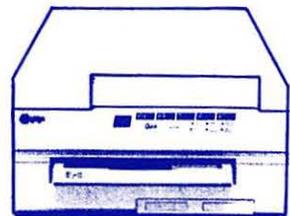
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Meeting dates

The complexities of meetings persist. For a lot of reasons, it seemed best not to hold the regular November meeting at the regular meeting time and date. The board was concerned, among other things, that any kind of motion so soon after Thanksgiving might be painful.

So we won't meet in November at all. Instead, we meet at the USUHS facility on December 3, just two weeks before the semiannual garage sale, when everyone will find exactly what they have been looking for in their stockings—at a fraction of list price—and will sell all the old stuff that has been lying around the house for far more than any reasonable person would pay for it.

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<i>DecemberNovember 6</i>
<i>JanuaryDecember 4</i>
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<i>December ...November 13</i>
<i>JanuaryDecember 18</i>
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<i>DecemberNovember 8</i>
<i>JanuaryDecember 6</i>
Camera-ready ad copy
<i>December ...November 15</i>
<i>JanuaryDecember 13</i>
Distribution dates
<i>December ...November 25</i>
<i>JanuaryDecember 23</i>

Format

This issue of the WAP Journal was created on a Macintosh IICx, and printed on a LaserWriter IINT. The principal layout software used was Aldus PageMaker 3.0; the word processing program was Microsoft Word 4.0. The principal typeface used in the Journal is Palatino; the headlines are in Helvetica Bold.

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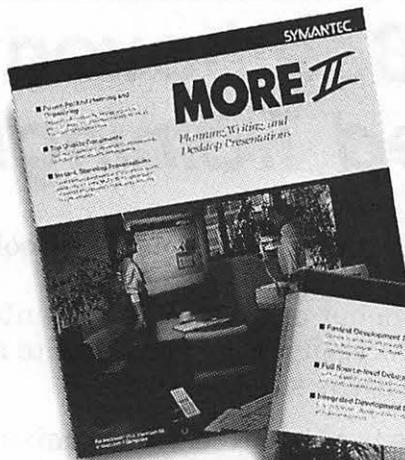
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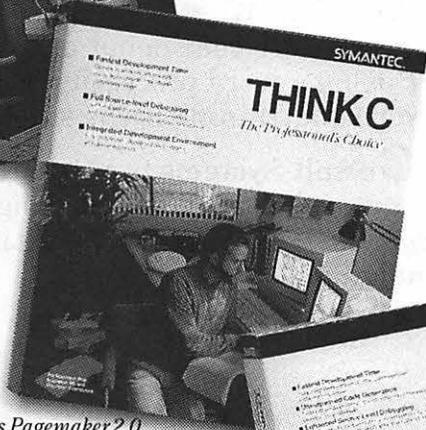
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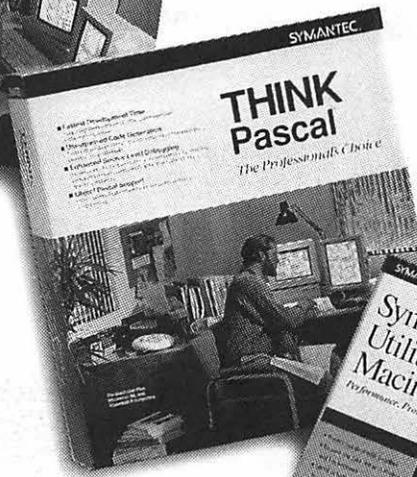
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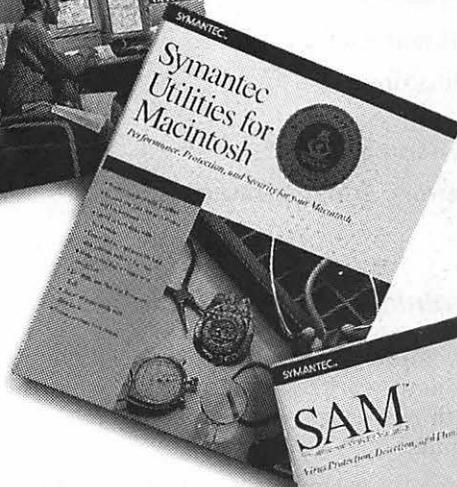
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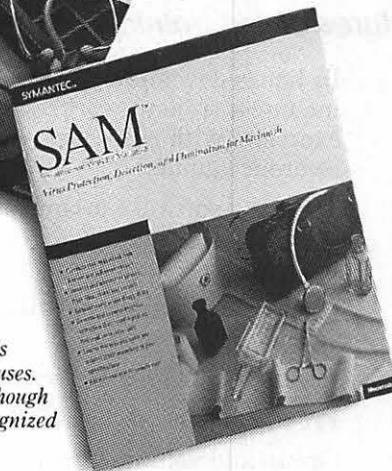
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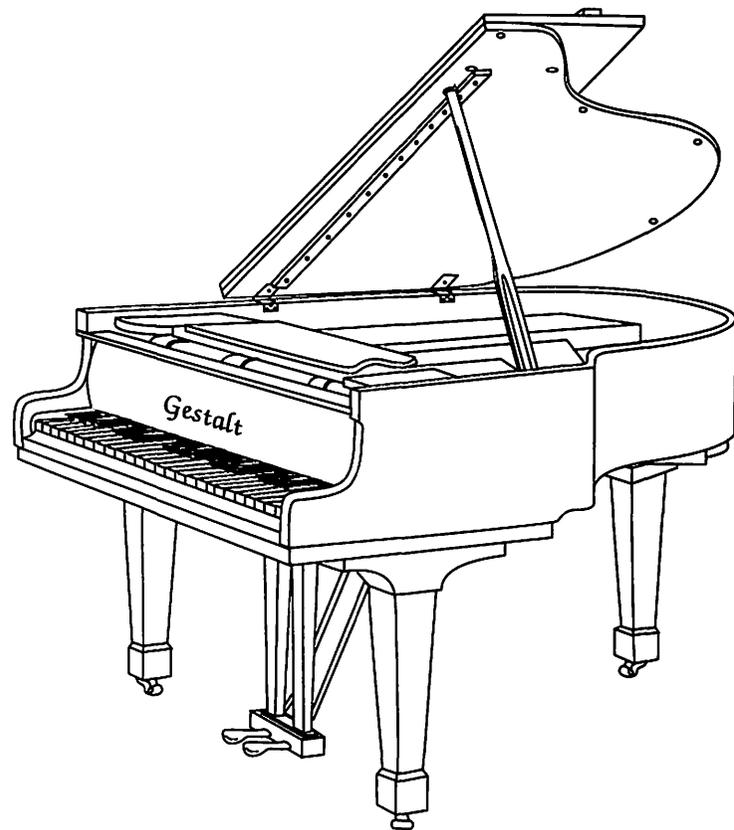
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All together now...

It's hard to tell, sitting in the ...we're not sure whether it is the catbird seat or the hot seat, but as far as we can tell, we are sitting *someplace*...anyway, wherever we are sitting, it looks like WAP has turned the corner and is getting its act together.

We had some rough months, and it wasn't much fun. Folks on the outside looked at this weird bunch of computer people running in circles and biting their own tails, and wondered what in the world was going on. Many of us, engaged in simultaneous biting and getting bit, were wondering the same thing. Perhaps it is a part of the growing process; if so, isn't it time for some bright person to invent a cure (Clearasil for group growing pains?).

The only cure that we have found is a renewed commitment to open and friendly relationships within the group, and where it has been carried out, this approach seems to work. We are not, we add hastily, saying that all is now sweetness and light. It's not, and pockets of resistance to this heightened sense of glasnost can still be found. But all in all, and in spite of reports in the press to the contrary, Washington Apple Pi is again becoming a place where people can work together and make useful things happen.

So—if you have been a member but have been thinking of becoming an ex-member, we would ask you to check out the Pi once again. And if you haven't joined, but you have an Apple computer and want to use it more productively, you might find that we can help you do just that.

Like it or not, we live in an era in which electronic devices play an increasingly important role. Ten years ago, presidents of major companies could joke together about the fact that they never touched a keyboard. But if you look carefully around you, you will see more and more key decisionmakers directly involved in processing information, as the global network begins to take on rough dimensions. Computers play a critical role in this process, and the concept of user-friendliness still commands attention. That was the edge that Apple seized when it introduced the Macintosh, and while it must be admitted that the Mac is not as simple as it once was, it is also the case that its learning curve is still far shallower than the competition, and the corresponding power and sophistication of its programs make it impossible for bullies to kick sand in our faces any more.

WAP has many , but it can always use more. Any number of efforts might be undertaken to help the communities in the area handle their problems better, and those of us who have the training and ability to help have something of a responsibility to do that. By

and large, WAP members have been treated fairly well by society—isn't it time to pay some of that back? This organization could become a powerful force in such a campaign, and your help could make that difference. We need ideas about ways we could help, and we need willing hands and minds to make it happen.

Editorial policy

One member has written to say that he was mightily offended by two articles in the last Journal: one on laser recharging and the other on Prodigy. The recharging article was offered by a person associated with a company in that line of business, and that was noted, but only at the end of the article. The Prodigy review was written by a beta tester, and was published about a week before the program was released.

We don't feel even mildly apologetic about either of these articles, but if you disagree with our position, we hope you will let us know. It is certainly not our intention to allow the Journal to be used as a launching pad for commercial fluff

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President's Corner - David Morganstein, WAP #001

Unfinished Business. Not quite a year ago, Bernie and Gena Urban resigned their positions as office staff and Editor of the WAP Journal. Although a statement was made by the then president that they were leaving to "find other opportunities," that statement was not correct, as anyone who has spoken with the Urbans will tell you.

It is long past time to express, yet once more, a vote of support and words of appreciation to Bernie and Gena for the years of dedicated service they gave to WAP. What happened between WAP volunteers during those days and subsequent months represents one of the less attractive sides of human nature and I hope we are putting it all behind us. We would not be the organization we are if it had not been for the Urbans' unswerving dedication to building the WAP into something we could all be proud of.

An Apple A Day. I recently had the pleasure of talking to Jim Burger, former General Counsel of the WAP, now representing Apple. I told Jim that the WAP was in need of a computer to help with tutorials at the office. A Mac equipped with a video port was among the items stolen from the WAP last August. Jim called me back a half hour later and told me to contact Terry Dougherty of Apple Federal Systems in Reston. When I reached Terry I was informed that we could pick up an SE20 at her office *the next day*. "Wow!" was all I could say to this incredibly generous response. Our

many thanks to Jim, Terry and Apple for their kindness and support.

It's Official. The Editor Search committee interviewed nine candidates for the position of Editor. Frank Potter, who has demonstrated clearly that he can do an outstanding job, was asked to continue as Editor. We thank all the applicants and hope that their interest in the WAP will continue. As we pull ourselves together again, every pair of hands will be needed.

As an aside, I indicated last June that I would avoid putting myself on committees and that I would especially not make myself chairman of any committee, feeling that there were more than enough talented folks to serve on any committee that was needed. Well, due to a cancelled US Air flight, I found myself 'trapped' in Clarksburg, W.V. for the July board meeting (something I can not recommend). Just to show what happens when you miss a meeting, the Executive Board put me on the Committee and made me the Chair! Hopefully, that is the first and last meeting I will miss. The moral of the story? If you aren't there, they're gonna volunteer you—every time!!!!

New Volunteers. Speaking of volunteers, many thanks to a number of people who have stepped forward to offer help to the WAP. Allen Beach, a new volunteer, and Peter Combes, an old hand (sorry about the "old" part, Peter), have offered to co-ordinate the Apple][tutorials. Eileen O'Grady and Rob Clark have offered to organize the Mac tutorials. We thank them and look forward to helping them in any way. Now if any of you can *teach*

tutorials, you can assist them immensely! Please give them a call. We have needed a Publicity committee and we have three members willing to do just that. Joe Chelena, Chuck Sicard and Curtis LaRett (!!! Frank sp???) have all offered their time to get out the word. If you know of publications or organizations that should be contacted by them with WAP notices, please let any of the committee members know.

Volunteers Needed. There are still a few outstanding needs for volunteers. Our Treasurer has asked repeatedly for an Audit Committee. Harvey Kaye has offered to continue serving on it, but a Chairman is needed. If you have accounting skills, please let us know. Call me, Harvey or the office to offer a few hours a month to assist.

A Taxing Problem. We are in need of paid accounting services to complete our annual taxes. If you have tax experience please contact Ed Myerson for a description of the problem and then submit your bid to perform this service.

Paying Our Dues. At the September main meeting the Board reviewed a proposed budget with the membership. The budget resulted from two public meetings held to discuss it and considerable work on the part of our Treasurer, Ed Myerson. The budget contained a dues increase and the introduction of a graduated fee schedule to minimize the effect of the increase on dedicated members. A one-year membership will rise to \$32. However, those joining for two years will only pay \$60 and those joining for three years only \$85. This increase is necessitated by several factors. First, there has not been any change to the dues for three years while inflation has added to our costs of operation. Most importantly, the lease entered into last year offered the first year for "half price," thus we will see a steep increase in the cost of rent next year, with a second increase the year after. While no dues increases are ever desirable, the graduated approach will minimize the burden to dedicated members while keeping the WAP on a sound

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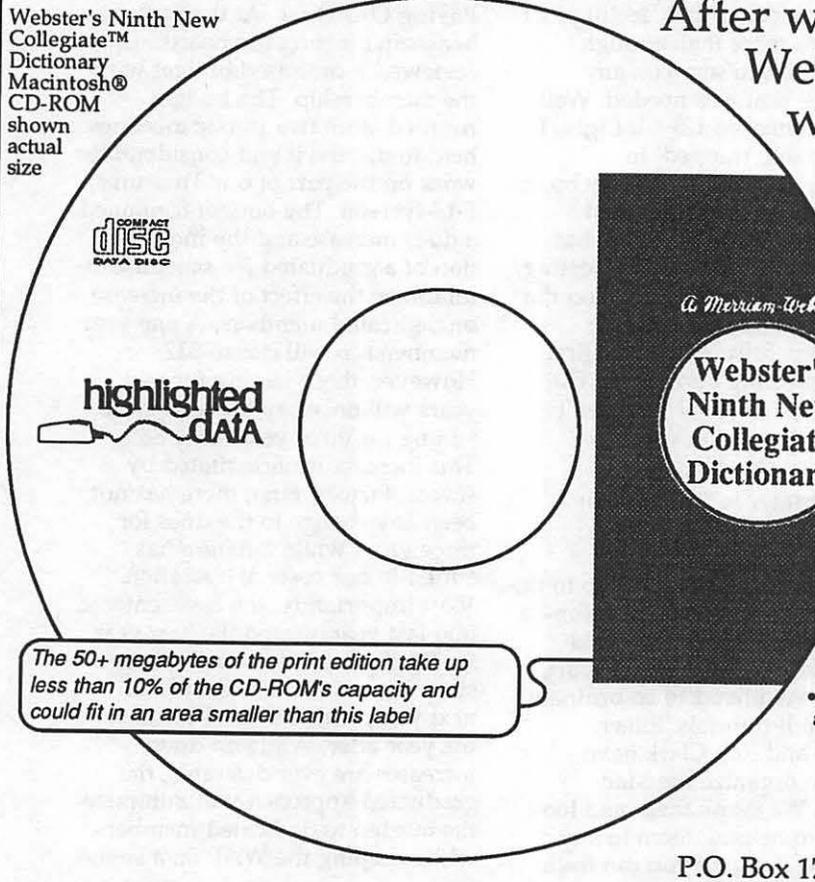
fiscal footing.

A separate budget for the TCS is under discussion by the Board and will be presented at a later time. A long term planning committee, chaired by David Gursky, is planning to survey a sample of the membership to aid in guiding the TCS in deciding whether it should expand and if so, in what direction. If you have specific comments on the subject, please contact him.

Warranties. There has been some very interesting talk about warranties lately. It appears that our "favorite" computer manufacturer has a "brilliant" idea for making money: buy hard disks from manufacturers like Quantum and Seagate who give two year warranties, put them into computers but only give a three-month warranty to the purchaser. Something goes wrong after ninety days and the computer manufacturer charges for replacing the drive but gets a replacement free from the hard disk manufacturer. Brilliant perhaps, but not very nice to the customers.

Have you had a hard disk failure from an Apple-supplied hard disk? The media has reported a number of such occurrences [and your kindly Editor has become so eloquent about the problem that total strangers run when they see him coming down the street] and we'd like to know if any of our members have had this problem. Since Gary Hayman has kindly offered to serve as Consumer Advocate, he might want to hear from you if you have had one of these problem drives. 🍏

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Minutes—September B/D

The Washington Apple Pi Board of Directors held a regular Board meeting on Wednesday, September 13, 1989.

1. The minutes of the August 16 Board meeting were reviewed and approved.
2. In light of evidence received which indicated that Ed Able had paid membership and TCS fees for the current year, the Board voted to reinstate all privileges for a full year plus three additional months, and to send him a letter of apology for his difficulties.
3. David Gursky presented a report on the activities of the TCS Long Range Planning Committee (LRPC). The Committee met during the Spring to discuss possible areas of improvement for the TCS system. A motion was passed to reaffirm the LRPC's status as an official Committee of the Board. The Committee will meet again in the fall.
4. The proposed 1990 TCS Budget was reviewed. The TCS Committee has proposed adding two additional phone lines to the system, and expanding system speed and disk storage capacity. Concern was expressed about the need for additional lines given current level of system use. Approval of the budget was tabled until the October Board meeting.
5. The Board directed the TCS Committee to appoint a representative to work with Nancy Pochevko to take an inventory of equipment, the inventory to be completed within 30 days.
6. Discussion was held on the scheduling of the November membership meeting, in light of difficulties encountered in securing USUHS on Nov. 18. The consensus of the Board was to give first priority to holding the November meeting at USUHS on December 2, with second and third priority given to Nov. 18 at Georgetown University, and Nov. 11 at USUHS,

respectively.

7. In light of the distribution by Gail West of survey forms purporting to be at the Board's request, a motion was passed to create a Committee consisting of Dick Byrd, Dana Schwartz, with Rich Wohltman and Nancy Pochevko as resources, to deal with all unauthorized mailings and other irregular contacts with WAP members.
8. Nancy Seferian reported that job guidelines for the new Journal Editor had been prepared, and that the Editor Search Committee would be interviewing applicants on Sept. 23.
9. Membership was reported to be at 5,850. It was suggested that members who had dropped out between January and July should be contacted to determine their reasons for not renewing.
10. Discussion was held on the relative levels of Apple II and Macintosh oriented material in the Journal. Frank Potter reported that all material submitted was being published, but that not enough Apple II material had been received to balance the Macintosh material. Suggestions made included limiting Macintosh material to equal space with the Apple II material printed, publishing articles from other user group publications, and encouraging Apple II members to prepare additional items for publication.
11. Bob Shaffer and Chris Bastian reported that Bob Platt was alleging that he was still chair of the HyperCard SIG, and had scheduled a meeting during the August membership meeting. The consensus of the Board was SIGs were a benefit of membership and could not be run by outsiders. A motion was passed confirming the policy that all SIG Chairpersons and Officers must be members of Washington Apple Pi, and shall be elected by a vote of only those

participants who are members of Washington Apple Pi.

12. The Board chose not to accept an offer to obtain booth space at the Federal Computer Conference in October, in exchange for a Journal ad and mailing to members. Bob Shaffer and Nancy Pochevko were empowered to review and act on future requests for use of the Pi database for mailings.
13. The Board voted to revert back to a "President's Corner" column in the Journal, from the current "Director's Corner" arrangement.
14. Discussion was held on the disposition of various unused equipment and supplies stored in the Office and the Kensington storage room. Back issues of the Journal will be recycled. Old equipment and hardware will be sold or donated to other organizations.
15. Based on a recommendation by the Pi's general counsel, Richard Wolhman, the Board directed the Treasurer to calculate the amount of overtime worked by Kym Knutson for which payment was required under the terms of the Fair Labor Standards Act.
16. Ed Myerson presented a draft version of the 1990 WAP budget. It was his opinion that a dues increase would be needed to offset increased operating costs, and given the estimated 60-70% renewal rate. The Board voted to submit the proposed budget to the membership with a recommended increase in dues to \$32 per year, with an optional discounted renewal rate of \$60 for two years and \$85 for three years.
17. A special sales price of \$2 each for 5.25" disks was approved for sales made at the Ken Gordon computer show on Sept. 16.
18. The Board voted to authorize the filing of a request for extension of time to file WAP's tax returns. An ad soliciting tax preparers will be placed in the next issue of the Journal.
19. An initial outlay of \$200 for charitable purposes was approved. The funds will be used to obtain computer materials for an organization providing computers to terminally ill children.

Frederick Apple Core

by Scott Galbraith

The August and September meetings were very informal with no real structured activity going on at all. I hope things will become a little more organized at the October meeting. Anyone who is wondering how their name got left off for the mailing of the August Newsletter have no fear, you did not miss it, as it never existed. Due to lack of news there was none printed. The October meeting is to be held at the usual location (Library) at the usual time (9:30 AM); please bear in mind that the November meeting will not be held at the Library as it is a holiday (Veterans Day) and they will be closed. The location of the November meeting is yet to be announced and will be given out as soon as possible. Enclosed is a short article About AppleWorks GS, and GSOS version 5.0 which makes it a very usable program. Also out this month is Classic AppleWorks Version 3.0. I have asked Harold Polk to put together a short report on this. From what I have seen it looks like a real nice improvement over version 2.0 but both Harold and myself are anxiously awaiting upgrades to our

TimeOut applications to realize the full potential of the new software.

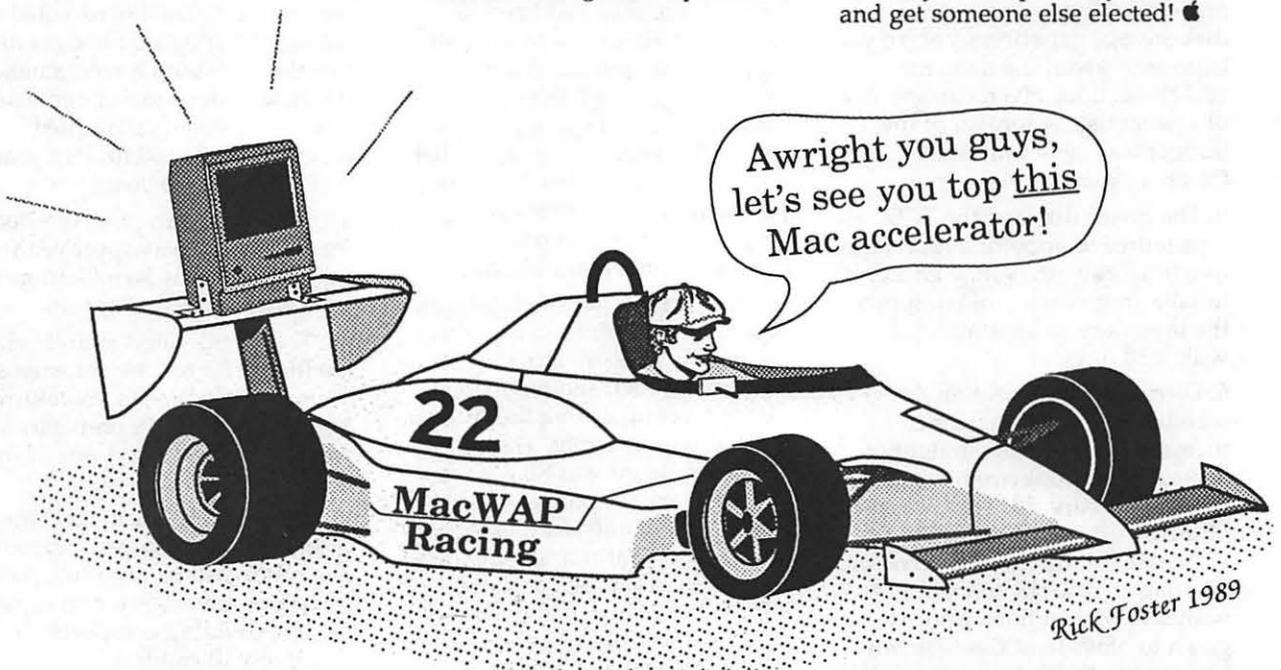
Greetings, fellow FAC members. It's been a long summer for me and it's good to be settling back to a routine again. Vacations are over, the kids are safely back in school, and we should all have time for our meetings once again!

I was fortunate that my work placed me in California for the Applefest '89 weekend. I was unfortunate in that my travel and work schedule only allowed me to spend three hours there. I saw and heard enough during that time to know that I missed a great deal (and DEALS). It was a very uplifting experience, especially for me as a long time user and believer in the Apple II line. Some very nice Apple II hardware and software products were unveiled at the show. Apple provided very impressive demonstrations of the Apple IIs (IIGS and IIe) abilities in multi-media employing Roger Wagner's HyperStudio (IIGS only) with Apple's video overlay card and standard video laser disk units. Edmark Corp.'s "TouchWindow" touch screen attachment for the Apple II line was also a big hit. There were not a lot of Mac oriented things at the show. I suspect that this was due to Apple's formal releases of the Mac IICI and Mac laptop the previous week and the big Mac expo show

scheduled in Europe for the following week. I'm looking forward to sharing more details and literature at the upcoming meeting.

The Apple II Disk-of-the-Month (DOM) will include some updates to popular public domain and shareware programs (Dogpaw and Columnist) as well as the new RAMSET utility to protect your standard slot RAM card from AppleWorks v3.0. We will be showing the dazzling program, Nucleus, for the GS and will include it on the DOM also. We may also be demo'ing the just released GS version of Battle Chess. For those of you with "no-slot" clocks, I've obtained a method for applying the required patch to the new ProDos 8 v1.8 to recognize that clock.

Lastly, the WAP has informed me that their by-laws require all SIGS (that means us) to elect new officers in October. That left us a little strapped for time to come up with a slate of candidates. We will, therefore, need to take care of that item with nominations from the floor. Therefore, if you would like to serve the FAC, you had best make it to this next meeting in order to be placed or place yourself into nomination. If you do NOT want to serve as a FAC officer, then you had better attend this meeting so that you can protect yourself and get someone else elected! 🍏



by Paul Tarantino

It was great fun for early arrivals at our 28 September meeting to watch the expressions of their compatriots as they entered our new Maryland meeting site for the first time. It was a close race between awe and confusion, but awe finally won out. Many IIGS types were convinced they were in the wrong room (Ted Meyer was heard to say that this room "looks too impressive"), but the sight of Gary's machine percolating away with the "Nucleus" demo (disketeria disk 2024) gradually convinced even the most skeptical that this, indeed, was the place. Special thanks go to Ms. Carol Vogel of NIH for sponsoring our use of a sumptuous "penthouse" conference room in Building 31 at NIH; it was certainly a far cry from the customary school cafeteria!

While we were waiting for our guest presenters to set up, we went around the room with comments, questions and announcements. Gary announced that Pi rules require annual elections of SIG officers each October, and that an election for the office of IIGS SIG Chairman would thus be held at our October meeting. Several members offered Good Deals on secondhand stuff for sale; it appears to be a buyer's market for Apple GS Memory Expansion Cards, as people turn to more capacious cards to support their software's ever-growing appetite for RAM, and as prices for chips (especially megabyte chips) keep on coming down.

Our Guest Stars for the evening were Will Troxell and Frank Krol, president and vice-president of Innovative Systems, a local (Severn, MD) producer of enhancements for the Apple II family, who demo'ed the Floating Point Engine, an exceptionally powerful math co-processor card for Apple II's. Innovative Systems started life as MicroMagic (that name got taken over by a manufacturer of microwaveable hamburgers!), whose first product was to be a 65816 board for Apple II's, a fine idea

which got swept aside when the IIGS was announced. Undaunted, Innovative Systems focused on finding niches wherein they could do a few things very well, not competing head-to-head with biggies in the II world like AE. The Floating Point Engine, first shown at the May 1988 Applefest, is their first major product, although Will said they would have at least two more products out before the next Applefest (May '90)

The Floating Point Engine is a small board with only four integrated circuits aboard, but one of them is the Motorola 68881, the 80-bit floating point math co-processor found in the more muscular Macintoshes, which has arithmetic, trigonometric, logarithmic and other functions all in hardware, enabling dramatic speed-up of any math-intensive operations in the computer. The FPE will plug into any slot of any Apple II, is automatically called by any IIGS software which accesses the standard SANE tools in GS ROM, comes with patches for Appleworks 2.0, 2.1 and 3.0, and is friendly to Zip Chips and Transwarp GS. (Caveat: a mod to your Transwarp GS card may be required for it to work properly with the FPE. If so, AE will properly modify the TWGS card free.)

Which of us needs something like this? The FPE is, admittedly, not a must-have for every IIGS user, but can be of great benefit to power users of spreadsheets and databases which crunch lots of numbers, business or research types who do statistical analyses, or anyone who plays seriously with math-intensive graphics like fractals. Other benchmark tests, some of which were demonstrated at the meeting, showed even greater improvements available from the FPE.

The Floating Point Engine is available for \$229 (plus \$10 shipping) direct from Innovative Systems. Additional information should be available in the December issues of InCider and Call Apple, which have promised writeups of this impressive enhancement tool.

Following the demo, and some

comments from Will and Frank about the last Applefest, Ted Meyer led a Q&A, focusing once more on System 5.0. One old Handy Hint was re-emphasized for those having trouble installing 5.0; use the Installer program on the System Tools disk rather than trying to configure a working disk by guess. Another potential pitfall involves moving custom icons from older system disks onto a 5.0 disk; for reasons which are unclear, they may cause crashes.

Other facts, rumors, and Handy Hints, in no particular order:

A Basic routine spotted in a recent issue of Nibble will enable the GS to boot up in either ProDos 8 or GSOS, depending on whether the Caps Lock key is up or down.

Activision (Mediagenic?) may be a bit tardy with their recent announcement of upgrades (for \$5) which will allow List Plus, Paintworks Gold, and Teleworks Plus to work with System 4.0. There is a public domain patch which will enable Paintworks Gold to run under 5.0, but the patched program will require 1.5 vs. 1.25 megabytes of memory.

fallen in regular price to \$3 for 3.5" and \$2.50 for 5.25" disks. A timely reduction for us, since so many GS disks are finally finding their way into the Disketeria.

Sam Knutson showed a demo of Interplay's "Battle Chess," a chess simulator with animated pieces, sounds of clanking armor during moves, and real combat when pieces are captured. Alas, the program remains vaporware in the Apple II world, although it is out there in the IBM world.

Our October meeting should be on Monday the 30th, back at the Dolley Madison Library meeting room in McLean. There is some confusion about November Pi meetings in general, since a meeting place for the general meeting (which may end up being on December 2) hadn't been established by the time this was written. Check the TCS, call the office, or call Gary or me if in doubt.

See you soon! 🍎

NeXTSig News

by Gary Letourneau

On August 10th and Sept 14th, the NeXTSig held its first two meetings at our new location on the NIH campus. At these meetings, attended by about 15 people each, we focused our attention upon application development for the NeXT cube.

Representatives from Businessland, Mark Jasen and Robin Freedman, echoed Businessland's commitment to the NeXT machine. Apparently Businessland feels that the in the

same way the Mac influenced the computer industry in the 1980s, the NeXT cube will influence the 1990s.

Industry observers Michael Jones of Booz Allen and Hamilton, and Karen Grossberg of GE Information Services, as well as government attendees Jerry Stuck of NSF, and Bohdan Kantor of the Library of Congress mentioned the "wait and see" attitude prevalent of big business and government. While all voiced personal interest in the NeXT machine, their organizations, like most others, are waiting to see what happens, and have purchased machines for evaluation purposes. Naturally, because of NeXT's initial

marketing plan, academic institutions have so far been the principal NeXT users. Our academic panel members, Ed Heath of George Mason University, Alan Zuckerman of Georgetown Univ., and John Carroll of the University of Maryland, summarized their experiences. In particular, they commented upon the stability of the 0.9 system software.

Several members of the NeXTSig reported that Bruce Webster's "The NeXT Book" as is a good introduction to the NeXT cube. Furthermore, it was noted that Bruce is currently working on a sequel covering programming aspects. For those of you who missed out on the first group purchase, we plan to organize a second group purchase, if there is enough interest.

All in all we had several interesting meetings. The consensus was that NeXT-related activity will significantly increase once version 1.0 of the system software arrives. In fact, as you read this, this important milestone should already have occurred.

We now have a regular meeting place. For the remainder of the year we will be meeting at the National Institutes of Health (NIH) in Bethesda, Md. We will meet on the 2nd Thursday of each month at 7:30 pm in building 31, conference room 4, A-wing.

For those of you taking Metrorail, get off at the Medical Center stop in Bethesda. This lets you off at the NIH campus. Go up the escalator. To your right will be the street South Drive. Walk along South Drive until you hit Center Drive. Turn right onto Center Drive and walk until you reach building 31. If you're driving, once on the NIH campus follow Center Drive.

We look forward to the upcoming demo of system version 1.0 by NeXT representatives at our October meeting. At the November meeting we will focus our attention upon the application of the NeXT cube to music.

If you have any questions call me at 946-1791, or Hugh O'Neil, the NeXTSig chairman, at 328-9510. We hope to see you there. ☛

WorksSIG

by David Harris

September's WorksSIG meeting was held jointly with Excel SIG. We heard two people who had written software for Heizer, Garrett Christoff and Linda Stern. The first is a working physicist who had expanded the functions available in Excel, using the macro language. To the normal mathematical, financial, statistical, etc. functions he added many of interest to working scientists, primarily physicists. He also has written a demo of his program (Heizer markets demos of their full programs for \$2) illustrating his functions in solving several physics problems. For instance, using his Bessel function of order n (or was it the Legendre polynomials?), he showed how to calculate what changes take place in the potential around a metal ball when you insert it in a previously uniform electric field. Excel is many times slower than a program which would ordinarily be written by a scientist to run on a mainframe, but for problems requiring a relatively small number of points to be calculated it has the advantages of flexibility and an already-available framework. Although our physicist estimated that his macros had a potential market of several hundred thousand scientists, it had actually sold only about 20 copies;

evidently scientists are inclined to "roll their own."

The second presenter was a freelance writer who wrote a Schedule C accounting system to help independent business people with their federal taxes, using either Works or Excel spreadsheets. Though much simpler than the Excel functions created for scientists, her item is a much bigger seller in the Heizer software stable, earning its creator several thousand dollars per year. (From what the authors said it seems that they split the profits around 50-50.)

Both presenters (and others who had contacted Heizer) said that Ray Heizer was a very easy person to talk to, and someone who knows his market. Unlike some companies, Heizer does not sell whatever software is submitted to him. He selects what he thinks is worthwhile and will sell. The best sellers tend to be in small business accounting, stock market analysis and financial planning, tax templates, tutorials—and biorhythms. Templates are available, however, for both Mac and PC Excel and Works, and for HyperCard, in subjects from Accounting to Calendars to Education to Real Estate to Sport to Utilities. Heizer has over 170 authors now; maybe you can become one of them. Telephone 1-415-943-7667; or 1-800-888-7667 to order. ☛

Columbia Apple Slice

by Timothy R. Childers,

The 7 September Meeting of the CAS celebrated our first Anniversary. To honor this event we had an especially full show put on by several Officers of the WAP. Even without any mailing to attract members to the special show 40 people showed up!

Apple II VP Sam Knutson demonstrated the capabilities of the Apple IIGS. He ran through a large number of programs showing the steady progress of the GS's capabilities to a point far beyond the earlier Apple IIs. Apologies in advance if I missed some of the programs names or authors but Sam really had the machine flying. One of the music programs he demonstrated was *Diversitune*. Sam discussed the MIDI capabilities of the IIGS and played several tunes to demonstrate the machine's sound capabilities. Even without stereo the addition of an amplified set of speakers made a big difference. It is inexpensive and adds a lot to any game you play.

Then he talked about the graphics capabilities of the IIGS. He explained that now, using sophisticated software, the machine can be made to display 32,000 different colors on-screen simultaneously. Then he demonstrated some animation capabilities. One of the programs he used to demonstrate all of these capabilities with was a program called *Zany Golf*. This was a simulation of a unique miniature golf course. He also demonstrated the new *Finder* for the GS. He explained that the Claris programmers had put many 'Easter Eggs' in it. These are unusual little surprises that pop up when you press unusual key combinations. For instance **control panel & shift & option** and **about the finder** gets a screen with names of who worked on the program. that

Jason Harper authored a game which lets you fly through a 3-D color maze even faster than the

Mac program *Maze Wars*. Sam mentioned that the author previously did a good shareware utility to convert GS-graphics to other formats. A commercial program called *Graphics Exchanger* reads not only Macpaint format files but also a Mac disk in a II GS drive!

He chose the game *Alien Mind* as an example of the most technically sophisticated example of the graphics and sound the GS was capable of. It is an action/exploration game set on a space station with over 600 different aliens you have to defeat to find the things needed to escape. He felt that software such as this would continue to keep the GS at the leading edge of what is possible with present computers for home use. Sam estimated that there are now 40 to 50 high-quality games available for the GS and lots of productivity software. He said there is also a wealth of highly sophisticated shareware out there. He did the demonstrations on a stock GS with 1.25 Meg of RAM. This will be the new required minimum for future GS programs. He talked a little about the Transwarp accelerator for those who wanted the machine to run even faster.

Ann MacKay welcomed new members and introduced the Columbia Apple Slice. Paul Retz then announced the that his company had donated a copy of Aldus *Persuasion* to be given away at the November meeting to someone who donated a dollar to the Slice. The WAP demonstrators set out free copies of the WAP Macintosh disk catalog and *Macintosh News Magazine*. Bob Shaffer donated several T-shirts from MacWorld Expo. Eric Rall donated a copy of *Gofer*, a text search and retrieval utility for the Mac.

Eric Raal and Bob Shaffer then announced all the upcoming special events and activities listed in the WAP calendar. Bring your Beagle Brothers software to the next Apple II main meeting for low cost upgrades. There is now a Developer Services Bulletin Board on Applelink Personal Edition. Appleworks 3.0 was released 20 June. Owners of the AppleFax modem can get a free upgrade of new ROM chips and v1.2 of the modem software from their dealer.

The best news was that the Apple office in Columbia has invited our little group over to see their Corporate Briefing Room during one of our regular meetings. Stay tuned for the exact date but we might be able to hold our December 7th meeting there.!

Business meeting completed, Eric Rall and Bob Shaffer then gave us two hours of nonstop razzle dazzle on the Mac. They had lots of information from MacWorld Expo Boston. They felt the new stuff at the show was mostly printers and drives with only a little new software.

They had a lot of hardware there including 3 top of the line Macs, the SE FDHD, SE 30 and IICx. All 3 feature the new SuperDrive. About the new SuperDrive: WARNING, you MUST NOT put the little yellow protectors or a floppy into a SuperDrive when you move it. The heads are parked securely when there is nothing in the drive but free to bounce if there is something in the drive. Unix will run on the IICx but is not supported on the SE 30. Eric says it works with only a minor little bobble on startup because Unix expects color on startup. Once the system boots everything works fine.

They then talked about disk drives. Eric and Bob both recommend Quantum drive mechanisms and said to avoid Rodime. Seagate drives are okay but loud and use older technology. Always ask what brand of drive mechanism is inside any drive you buy. They explained all about the super drives. These floppy drives give higher capacities but only when using the newer, more expensive High Density floppy media. You cannot use current media as a high density floppy. Their main advantage is that they can read and write and format disks as IBM and Apple II ProDos disk using the *Apple File Exchange* program. The *Finder* in system 6.0.3. cannot do it but a third party init that lets the Finder do this is supposed to be available.

☛

Artists on exhibit

by Nancy Seferian

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

Art: Cartoons (this page and opposite)

Artist: Robert W. McHenry, our featured artist this month is a Professor of Political Science at Montgomery College, Rockville Campus.

How They Were Done: "I use SuperPaint to create all my cartoons. I begin by opening a new page in SuperPaint. Then I scroll a little to leave space at top and start with the eyeballs. The whole drawing works out from the eyeballs.

"I tried initially to draw with the pencil tool but found I didn't have the control I wanted, so I went to the paint-brush. I use the next to the smallest size of the paint brush. The very small size is good for lines under the eyeballs. The big sized brush is good for the eyeballs. When you double click on the paint brush it shows the sizes available.

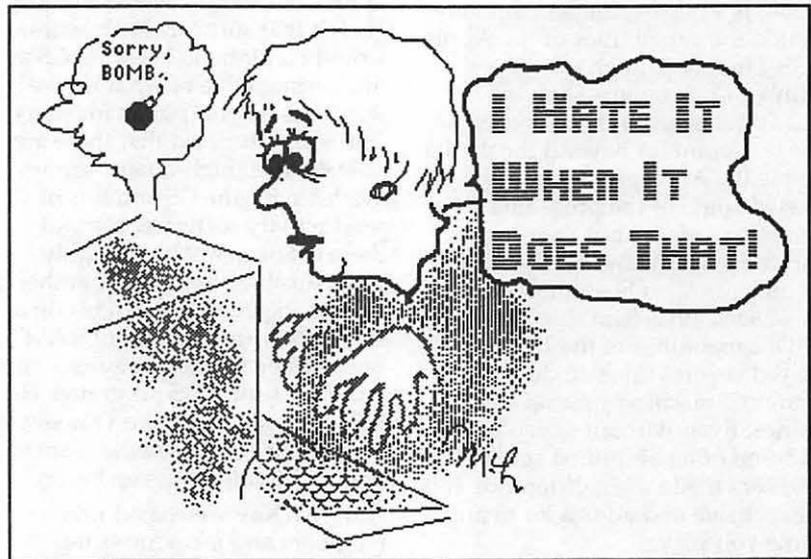
"I also use the paintbrush as an eraser for small spots. It's easier to do this than to use the draw layer, since the latter has no eraser. I also use the Magnum-a device that helps the mouse move more smoothly. The mouse fits on top, and this puts four ball bearing "skates" on your mouse.

"I used lines to suggest the computer, and for the shadows I use the spray can. Artists use single tone and double tone for backgrounds which has a diagonal

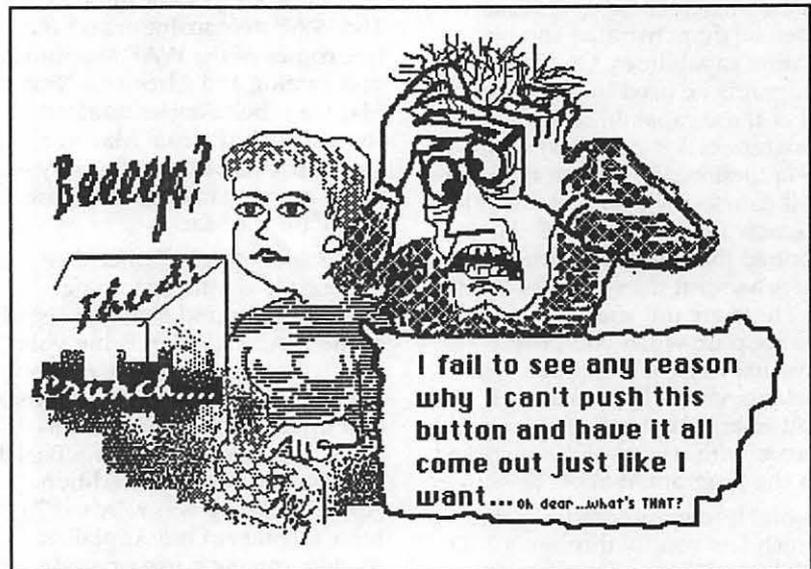
stripe. You have that available with SuperPaint in the patterns.

"The eyes on my wife come from a

typeface called Cairo. When I'm using the fonts, I type the text, pull down Transform from the menu, and stretch, grab and pull until it's



"Did any of you guys or gals ever try to teach your spouse to fiddle and diddle on your computer? Mine is real cool now, but things were less than perfect in the beginning. Hearing that scream of agony from the next room was hard on my harried psyche."

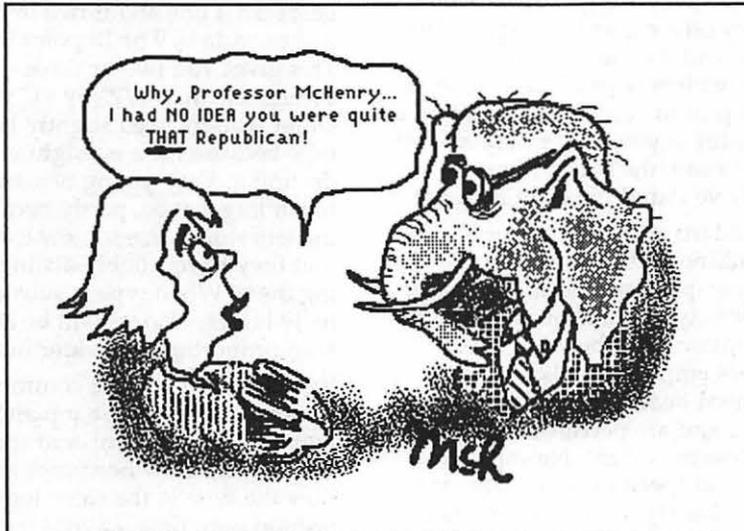


"But it was even worse to be in the same room with her."

the way I like it. I use Perspective or Distort when I want to exaggerate something about the font until I get weird results. The

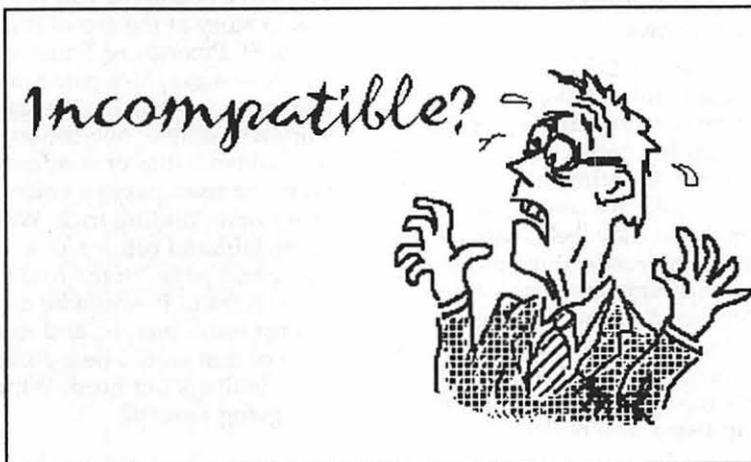
font with the horizontal lines is the Matrix font in bold face. That font isn't very interesting in plain. Matrix is a Casady or Fluent Fonts

font. The font I used for "Incompatible" is called Tokyo and it's one of my favorites.



"This MESSterpiece is a gag which doesn't ENTIRELY reflect my political inclinations - but, as a political scientist who knows something about the outside world and who teaches government and foreign policy and political ideologies with an academic specialization in Marxism-Leninism), I naturally seem farther right than some of my far-out faculty colleagues who teach sociology, for example. I'm not REALLY to the right of Attila the Hun, I'm just more sane than many sociologists."

"Enough, already. Let's finish this by uttering an expletive:"



"I use SuperScrap to keep all of drawings or parts of drawings that I'm going to use again. This is a DA much like the Scrapbook. The new version allows you to name the graphic you save so you can find it easily. I save pairs of eyeballs. And any time I draw a pretty female, she goes to SuperScrap.

"Now I couldn't make exams or syllabi or anything else without my Mac. It lets me produce and print on paper some of the squiggly political science diagrams and weird teaching cartoons I've been drawing on the blackboard for almost a quarter of a century."

Tools: Mac Plus, Jasmine BackPac40, Mac 'N Frost cooling fan-and-surge protector, RAM upgrade to 2.5 megs, SuperPaint 2.01, SuperScrap and Magnum.

Thanks to Mike Swartzbek for designing the header for these pages.

To submit art by mail, send it to

Nancy Seferian
1425 Foxhall Road, NW
Washington, DC 20007.

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

How to begin a design

by Carol Cason

You've assembled this pile of text, you've got a blank page in front of you. Where do you begin to design a page?

It will help you to understand how readers perceive the page. Their eyes begin near the top on the left, slide across to the right, drift down toward the middle. In large (newspaper broadsheet) formats, the eyes sort of go around the edges and spiral toward the middle from there. In newsletters the eyes tend to explore across the bottom edge. A graphic or fold in the paper will stop or briefly interrupt the path.

Part of the reason that the eyes move that way is that we read from left to right. I suspect things change when you're reading Hebrew. You will notice that the righthand column of Page One is where U.S. newspapers put their lede story. (We once used lead (led) to mold type, so "lede" is spelled that way to make the distinction.) And every advertiser screams for righthand page position, top ad. They figure first seen, first bought.

When you have two pages side-by-side, the righthand page gets the first look and the lefthand page gets what's...uh...left. Material near the fold may get ignored. All this can be exploited to your advantage or altered to direct the eye elsewhere.

Certain layout principles are based on this. Ads are placed on the bottom and outside of the page (lefthand pages have ads on the left, righthand on the right edge). The biggest ads go in the bottom outside corners. It is desirable for all ads to "touch type"—be adjacent to at least some editorial material. Don't pile all the ads in bunches.

Editorial type is just opposite. The biggest goes at the top. If there are several elements sharing the top,

the lede is on the outside and is the most eye-catching, usually carrying the biggest head. Try to keep your graphics away from ads, as they are visually similar. Start your story on a righthand page if you can, and use clear jump lines to tell the readers where it is continued. Jump heads on the continuation are helpful; if you keep it similar to the first head, the readers know they've found the right material.

Standard story placement is a headline at the top with some white space around it. The larger bolder type is a deliberate bid for attention, and the white space lends emphasis. Italic and condensed headlines are harder to read and are perceived by readers as less important. Newspapers used to specify italics frequently to give variety to heads, but this is less popular today.

Remember our priority of conveying information to the reader. The most important information should be the first noticed and should look important. The information that follows should be formatted and written and edited that way. For this reason, your first paragraph should be a grabber. Along with the head, it's your best chance to seduce the reader to read the story, and it should convey the gist of what follows.

Now that we DTP Don Juans and Donna Juanitas have the readers in our power, how do we keep them? We steadily parcel out our charms to keep them stimulated, and we make sure if we come to a crossroads, that they feel compelled to follow. All readership studies show that each time material jumps (continues) to another page, some readers are lost. This gets worse if the material doesn't jump to the very next page. If they have to hunt it up twice, you're dead.

You can also bore readers to death by having a totally gray page under the head. This is why we insert graphics, or use quote boxes, initial caps or subheads. They help "break up" type. If you overdo—twisted heads AND lots of pictures AND type ragged (conformed) to odd shapes AND quote boxes—you drag the readers' eyes all over everywhere and confuse them. They'll abandon the story every time.

When you format text, you need to consider the readers' eyes. People best scan a line about two or three inches wide in 9 or 10 point text. This gives you two or three columns to an 8 1/2" by 11" page. Older readers need slightly larger type because their eyesight is declining. Very young readers need much larger type, partly because the letterforms are so new to them that they have trouble distinguishing them. When type is substantially larger, readers will be able to scan proportionally wider lines.

It's important to have columns squared up across the top and the bottom, to have consistent spaces above and below headlines and to flow the type in the same logical fashion each time. Layout irregularities shouldn't distract from the content.

If you have graphics, they should be placed on the same page as their mention in the text. If they are similar, give them figure numbers and titles. You want the readers' eyes to make the move to the graphics as quickly as possible and to return to the text without getting lost or confused.

You were nobody if you couldn't bury a story at the top of the page at the St. Petersburg Times—then and now a graphics paradise. Here's how we did it. We gave the story a multiline, one-column head in smallish italics or condensed type. We used passive voice and every other dulling trick. We put it in the lefthand column of a righthand page "in the fold". Just to the right of it would be a striking multicolumn picture, and to the right of that would be a gozanga story with a killer head. Which are you going to read?

New Issues
Are Discussed
By WAP Board

Sex Scandal in Washington Apple Pi

Two ways to play the same story (not true, alas), but only one guaranteed to get readers. In fact, you probably read the second head before anything else on this page, because it is the most striking element in both content and design.

Now we have two principles to remember:

1. First priority is to convey information to the reader.

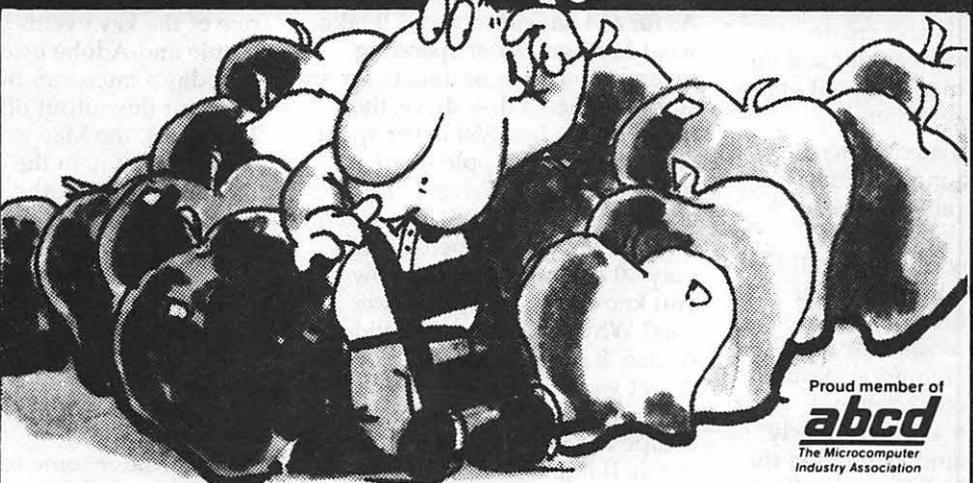
2. We must help them follow the information and keep them interested.

You have homework this month. Buy the Friday Washington Times and look at their TV book. It's worth the money. You will find all the programs in a time slot shown together, all the movies described right there on the schedule, and the prime time highlights next to their

listings. Now look at the Washington Post TV book. Which best follows our principles, and which one do you prefer to use? Study the presentation, right down to type legibility, and you will have taught yourself a great deal about graphics.

NEXT: Placing Graphics in Text

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What Type are you???

by Phil Noguchi

Introduction

Hold the presses. Apple shuns Adobe, embraces Microsoft! ...what in the world is going on? Recently, Apple sold its holdings in Adobe stocks—not too unreasonable since they received something like 93 million for an initial investment of 3 million dollars. This followed Apple's previous announcement of System 7.0 and extensions to QuickDraw™ (QD) with outline fonts; for compatibility reasons, Apple also announced it would develop a Postscript™ clone. At about the same time Adobe announced Adobe Type Manager which would purportedly intercept QD calls and create smooth screen fonts at any size on the screen, and also print out at any size on the ImageWriter.

Then things escalated. Microsoft and Apple announced a joint agreement whereby Microsoft would adopt Apple's outline technology (now called Royal) for its OS-2 Presentation Manager platform; in return, Apple would use Microsoft's Postscript clone for its projects. In a remarkable public display at the recent Seybold conference, John Warner bitterly attacked Apple and astounded the audience by revealing that Adobe would at last reveal the complete specifications of its type 1 font technology. Later, Warner would continue the strident tone and accuse Apple of promoting vaporware. The desktop community is up in arms at this point, with one camp in despair because of a new standard being introduced, to the other smaller camp rejoicing because now there WILL be two standards. I have been monitoring the Adobe Forum on Compuserve, and the amount of discussion on these recent events is overwhelming. Whew!

Background

So what's going on? Why are people concerned? Who cares? My own perspective is that the current situation has evolved from the perceived need for complete WYSIWYG, that is, what you see is what you get. Compose a letter, newspaper, flyer, what-have-you on the screen and that's what will come out of the printer. In that respect, the Apple-Adobe alliance has been a pretty good success, but one based on inherent differences of opinion.

Applewriter

As far as I am concerned, I'll take what I can get. After spending several thousands of dollars for an Apple II, then a disk drive, then memory, the best \$50 I ever spent was for the first Apple word processor, AppleWriter 1. Talk about non-WYSIWYG! The video display was ALL uppercase and only 40 columns wide. So how did you know what a capital letter was? Why, it was inverted video of course. But the keyboard shift key didn't work because it was upper case input anyway? Hey, use the escape key followed by a letter. My Apple II hooked to an Epson MX-80 printer put out many a decent manuscript, and I can guarantee that I never knew what the print would look like until it was printed. Now, that's not to say that I didn't want better. Later an 80 column card followed with upper and lower case on screen, and hardware patches to enable the shift key.

Macintosh

Thus, you can imagine my delight when I first got a Macintosh; proportional type on screen, with pretty accurate dumping at higher

resolution on the Apple Imagewriter...here was something that finally started to impact on productivity. I had spent several years living with an Osborne 1 hooked to a Diablo Daisywheel printer. That combo gave fine results, but was noisy as h...well, it was noisy... and usually required several drafts to get things just right. Especially if I wanted to use proportional spacing (those of you that remember patching Wordstar will groan in sympathy). Although the resolution of the original Imagewriter left something to be desired, not having to guess at what the final output was like saved a huge amount of time.

Impact of LaserWriter/ Postscript

And then a year or so later, the fabulous LaserWriter™ (LW). Now here was a real eye-opener; almost typeset quality, fast and quiet. I think that it is fair to say that the marriage of the Macintosh to the Postscript-based LaserWriter was one of the key events that led to Apple and Adobe being the giants in today's microcomputer field. Without the output offered by Postscript, the Mac would have remained a toy in the eyes of business; without the visual clarity of the Macintosh display as a screening device, Adobe and its Postscript would never have become leading standard in page description languages. Not that this has been an easy alliance...

Technical Difficulties

Let's consider some further background on the companies involved in this show. I suggest that rather than complaining about shortcomings in the system, it is rather more like the bumblebee—according to "scientific" calculations, the bumblebee should not be able to fly at all.

The driving force of Adobe is the page description language (PDL) called Postscript. There are a number of competing PDLs but as stated, Postscript now has a commanding lead. PDLs are languages that can be used to describe in some abstract fashion exactly how a piece of paper



should look. Not just for type, but for graphics, color and anything else. This abstraction can then be converted into a real page by an output device, which in theory could be anything between a pencil and a phototypesetting machine. At its best, a PDL would be unified from input to output, with the abstraction serving as the base from which say, the display would create its screen.

The development of the laser printer has several players, but one key company has to be Canon. Its introduction of the low cost laser-based engine for printing with a disposable cartridge was the basis for the Hewlett-Packard LaserJet, by far the most popular laser printer around. The resolution of the Canon engine is (generally) 300 dots per inch.

Apple's Macintosh revolutionized the accepted way of thinking about microcomputers. Up to that time, micros basically had a alphanumeric terminal input device, and printed out letters. If you wanted graphic output, you used something like a plotter. The Mac's paradigm was that everything could be considered a graphic; i.e., text was nothing less and nothing more than a specific collection of shapes that any self-respecting computer should be able to create. At the base of this is the QuickDraw kernel: it lies at the heart of all the screen display, text and graphic features of the Mac, and is based on the typographic point (about 1/72 of an inch).

Now consider how these technologies interact to produce what we take for granted. QuickDraw and Postscript are both PDLs but with incompatible syntax and nomenclature. In order to work properly, a set of translation tools called LaserWriter and LaserPrep have been developed that will take QuickDraw commands from the Mac, do the necessary legerdemain and translate it not into raw Postscript but into a series of macro commands that are interpreted by the Postscript interpreter within the LaserWriter. Up to now QuickDraw has been optimized for screen display, Postscript for output. That is to say, while both QD and PS are good at their

respective jobs, the converse is not true. For example, Adobe has proposed Display PS as a reasonable standard for screen displays based on Postscript. From all accounts, it is abysmally slow on the Macintosh. QuickDraw printing on the ImageWriter is not bad, but using current QuickDraw on a laserbased printer is pretty darn slow. It is something of a miracle that the PS-QD connection works so well.

So if it works, why fix it? Well, even though I have lived through times where you never knew the printed page would look like, as one grows it becomes necessary to make each minute as productive as possible. Although I can usually get what I want on the first crack, anything more complicated than a standard letter with no graphics

becomes a several proof venture in time. Yup, I want to do all my fiddling on the screen, and then shoot it out once and get a perfect print. Barring that, I want the output to be as good as what I get now, but much faster.

In my not so humble opinion, this need cannot be met by the QD-PS connection. What it needs is optimal technology at both the screen and output level. It may well be that it is now the time for Adobe and Apple to leave the nest and to grow each of their technologies to greater heights. In following columns, I will be exploring font technology in general, and where I think this will be leading us. 🍏



"CHRISTINE! This thing is trying to tell me I've made an ERROR!"

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Where in the World is Carmen Sandiego?	32

Mac Hardware

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SuperPaint 2.0	135
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More on scoreboards...

by Larry Feldman

Last month I offered an exquisitely complex (and commensurately soul-satisfying) solution to an Excel problem. It consisted of a macro which invoked database powers to accomplish work in a roundabout way that could just as easily be done by a simple set of worksheet formulas. Unfortunately, I hadn't seen the easier, more elegant solution until after I had finished creating the macro and that's how tutorial articles are born.

In any event, the contrast between the two approaches is sufficiently instructive, I hope, to warrant coming back to the problem this month and sharing what most people would agree, I think, is a superior solution.

To recap the facts as swiftly as I can: A high school math class of 16 students has been divided by the teacher into 4 teams to compete in solving a series of math problems. Whichever student first submitted the correct answer to the current problem won one point for his team. This is all graphically shown in Figures below.

The cells in the range B1:B4 each contain a text string which consists of the last names of the members of one team. The display of these strings slops over into columns C, D, and E because the cells to the right of Column A are empty. Each of the cells in Column D under the label "Team" contains a formula: (`"=MATCH(""&7&"", B1:B4)`) The formula 'computes,' i.e. returns a one, a two, a three or a four (referring, of course, to Team 1 thru Team 4) in response to the whichever student's last name is entered in Column A. (To understand that you have to understand how the MATCH function works, which I'm not going to undertake to explain here. Douglas Cobb's Excel In Business does yeoman duty in this

	A	B	C	D
1	Team 1	Amar Barnes	Caddle Lane	
2	Team 2	Cain Moody	Said Thomas	
3	Team 3	Gilbert Larson	Price Nelson	
4	Team 4	Madison Neal	Powell Stone	
5				
	Name	Problem #	Date	Team
7	Nelson	1	1/5/89	3
8	Moody	2	1/9/89	2
9	Caddle	3	1/11/89	1
10	Stone	4	1/13/89	4
11	Amar	5	1/17/89	1
12	Said	6	1/19/89	2
13	Said	7	1/23/89	2
14	Moody	8	1/25/89	2
15	Cain	9	1/27/89	2
16	Madison	10	1/31/89	4
17	Stone	11	2/2/89	4
18	Price	12	2/6/89	3
19	Amar	13	2/8/89	1
20	Barnes	14	2/10/89	1

Figure 1

regard as always.)

In any event, what we are left with is a graphical display of the whole contest situation—or almost the whole situation. We can see everything but which team has how many points. Who's ahead? Who's not? Where's the Scoreboard?

The object of this exercise, therefore, is to create a mechanism for counting—a counter such as the one displayed in Screen Pic 2. Here's the recipe for such an electronic Scoreboard in Excel. First, create a grid of cells four wide and as many down as there are math problems. This grid can be placed anywhere on the worksheet but will most likely be best off somewhere far to the right of the main activity. Then, enter four almost identical formulas in the top row of the grid as follows:

In cell AF2:
`=IF(D2="","",IF(A2=1,1,""))`

In cell AG2:
`=IF(D2="","",IF(A2=2,1,""))`

In cell AH2:
`=IF(D2="","",IF(A2=3,1,""))`

In cell AI2:
`=IF(D2="","",IF(A2=4,1,""))`

Rendered in the colloquial the formula(s) says: if cell D2 is empty, leave it empty (i.e. enter a null string). If, however, it contains a 1

(or a 2 or 3 or 4 respectively) return a 1. That is, register a 1 for each point scored by any one of the teams.

Next, Select the entire top row and Fill Down in all four columns to the bottom. (You get to say where the bottom is.) As a finishing touch, enter a SUM formula in each of the cells along the row below the last row of the grid. The outcome of each of these four SUMS will be the number of points scored by each team to that point.

Finally, create your Scoreboard anywhere you please on the worksheet (F1:G4 in Screen Pic 2). All that remains is to transport these results to the Scoreboard itself. That's accomplished easily enough either by a simple referencing formula in each of the four Scoreboard cells or by creating the columnar SUM formulas in the Scoreboard rather than below the grid.



File Edit Formula Format Data Options Macro Window											
G1		=SUM(AF2:AF51)									
Team Count											
	A	B	C	D	E	F	G	AF	AG	AH	AI
1				TEAM		Team 1	9	Team Count:			
2				1		Team 2	17	1			
3				2		Team 3	12		1		
4				3		Team 4	12			1	
5				2							
6				3							
7				2							
8				4							
9				1				1			
10				2					1		
11				4							1
12				3							
13				2						1	
14				1							
48				1							
49				2						1	
50				2						1	
51				3							1
52				50				9	17	12	12

Figure 2

Yes, I know that the rows skip from 14 to 48. The intervening rows are still there but just not visible because of the way Version 1.5 handles the display when you have created panes and then 'Frozen' them. Note further that in this particular try at the Screen Pic, there are no entries in columns A, B and C. Use Figure 1 and your imagination.)

*** **

What follows is a short commentary on how to get the most out of the macro function, STEP() — a small but useful macro editing and debugging tool.

One of the very best ways for getting a handle on what's wrong with a macro under development, in my opinion, is by running it one line of code at a time. You can actually witness what does or does not happen as a result of each formula. That is, Excel runs a line of code, takes whatever action the formula requires, and then displays another dialog box inquiring whether you wish to continue in slow motion. (You do have to remember to set the ECHO() function, if you've got one, to "TRUE" or all will be for naught.)

So far, this is pretty straightforward. The fun starts when you try to figure out, under various circumstances, what's the most efficient and easiest way to get into step mode. That is to say, how do you actually use the thing.

One way to get into step mode is to have an error—i.e. to encounter a macro instruction that cannot be performed. That halts the execution

of the macro code at that point and summons a standard macro error dialogue box which has Halt, Continue and Step buttons. Push the right one and you are in business, step mode wise. To take advantage of this mechanism all you have to do is to arrange for a random error to occur right where you want a STEP() function.

If you choose to run in STEP() mode from the very beginning, you can just insert the STEP() function at the start of the code. This is not very satisfactory, however, if your code is lengthy and the portion of it you want to see a step at a time is any distance down stream.

Douglas Cobb, the renowned Excel commentator (who is thus forgiven an occasional genuinely idiotic suggestion) recommends running your macro and then trying to halt it at approximately the right spot by typing Command—. This requires feverishly lunging your fingers at the keyboard but it does stop the program in its tracks and generates the desired dialog box. As for whether you are then where you want to be or before it or after it, is more problematical. It's a lot like hurling a dart at an electron.

As an alternative, Cobb conjured up a two line macro that doesn't seem to me to be massively more inspired than his first offering, but I'll pass it on.

		B
110	=STEP()	
111	=GOTO(Macro)	

What this little gem does is call whatever macro is named as an argument to GOTO() (which is presumably the one you are troubleshooting) and run it. From the beginning. Which has all the disadvantages that it had two paragraphs ago plus some additional ones accrued by virtue of the time and trouble that went into creating the macro.

Or, finally, you can insert a STEP() function at any fixed location in the code. Then you can move it around as desired. You are still faced, however, with either going thru a bunch of mechanics which are at best distracting or rewatching a series of events on screen of which you've already seen enough.

What I craved was some way of moving the STEP() function from place to place within the macro's code without having to return to the macro sheet. I contrived a very simple macro to accomplish this, which may be seen on the next page.

Named "Step" and summoned by the indicated key combination (Option-Command-s) this macro allows you to reposition the place where single stepping starts from either the worksheet or the macro sheet during any stoppage in play of the (main) macro.

The first line throws Excel into step mode. The next formula simply nests an INPUT() function inside a GOTO() function. Physically, what this first produces on your screen is an INPUT function dialog box that contains the reminder to the user about syntax that appears on line E74. This dialog box will accept a cell address as the 'input,' or at least it will if you have remembered to use the number "8" as the 'Type' argument for the INPUT() function.

Next, "Step," which is now actually a utility macro within a macro, moves the program performance to the cell address inputted into the INPUT dialog box. Really. Now

	E
72	Step (Option-Com-s)
73	=STEP()
74	=GOTO(INPUT("Remember to double check the syntax of your reference input!",8))
75	=RETURN()

you can move the step mode around at will to any location in the main program. This saves you a lot of tedious viewing of portions of the program that you have seen already. A lot.

You need to keep one additional thing in mind about the use of this macro if you are "in" the worksheet (i.e. the main macro is running with the worksheet as the active document). It has to do with the reminder that we put in the INPUT dialog box about proper syntax. When you enter the cell reference to the address on the

macro sheet to which you want to go, it (the reference) must include the name of the macro sheet followed by an exclamation point. This marks it as an 'external' reference.

Also, the whole ball of wax must be enclosed in single quotation marks if the name of the macro sheet is not a legal range name—i.e. has a character or some other deformity that is not allowed in an Excel name. ('Legal as a name' rules are different than 'legal as a name of a document' rules. Look it up.)

Author's Note: If you have made it this far and anything remains unclear, I'd be glad to discuss it with you. The same applies to anyone else who would like to talk about any aspect of this article. I can be reached, days or evens 546-9566. Note that I have adopted the prevailing style for articles of this type in one particular on which I would like some feedback. It is assumed that the reader is unlikely to be able to follow all of it without recourse to the manual or some other reference material.

MacNovice

1989 Annual Gift-Givers' Guide

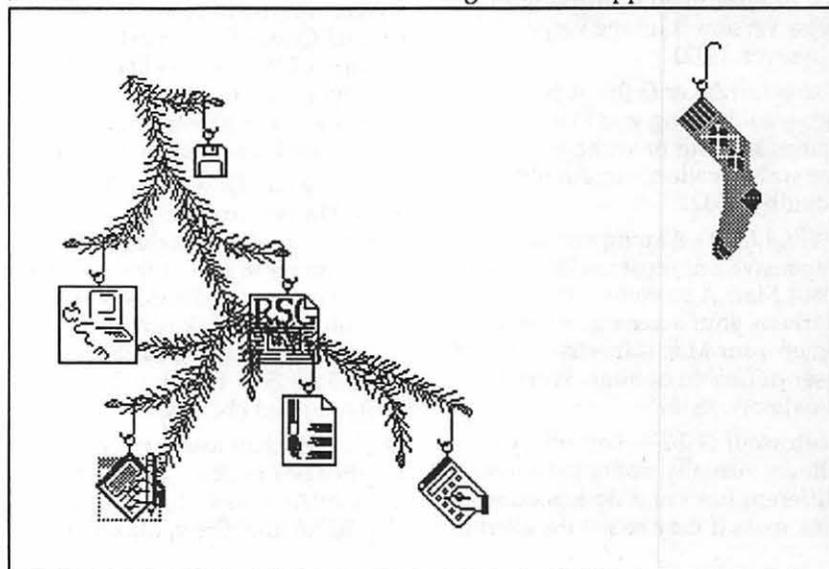
by Ralph J. Begleiter

This fifth annual MacNovice Gift-Givers' Guide presents an extraordinary opportunity to admire the growth and development of the Macintosh community including its programmers, its hardware suppliers and, of course, its users. Where there was once a single word-processing program available for the Mac, there are now dozens. Where there was once a single spreadsheet program, there are now enough powerhouse programs to break your budget. And where there was once a figurative handful of Macintosh users, there are now 300,000 subscribers to MacUser, one of many Macintosh magazines.

All this, of course, means there are more of you out there longing for that very special gift for the holidays, that certain something which will make your Macintosh

complete. (Is that ever possible?) And there are more of you wondering what to give the MacNovice in your life.

So here are some answers, in every price range, just in time for your holiday shopping. The MacNovice annual review of Macintosh related gifts in every price range. As usual, product recommendations are strictly personal. You accept them for what they're worth. But in many cases, these are items I've worked with and can vouch for, or those which five years of Macintosh experience has proven worthwhile, delightful or both. Price estimates are based on recent mail-order catalogues. They'll generally be higher in local retail stores; highest from Apple retailers.





(Numbers in parentheses are version numbers.)

Stocking Stuffers (\$50 and Under)

Quicken (1.5) - An easy-to-use but powerful personal and small business accounting program which has won rave reviews in the trade press. (\$32)

World Class Fonts/Wet Paint Clip Art - This series of ImageWriter fonts and paint-format clip art offers tremendous variety, versatility and value. Clip art in this collection is truly useful. (\$42 each collection)

Cassidy & Greene Fonts - This collection of Laser printer fonts is for someone who (or regularly uses) a LaserWriter or compatible printer. They get good reviews. (\$46 each)

101 Scripts & Buttons - This collection of add-on software tools by Individual Software is intended for users of Apple's HyperCard program, which comes with all new Macintoshes. (\$36)

QuickDEX (1.4a) - An outstanding Rolodex-style database program which makes keeping telephone numbers, addresses and brief info clips handy on anyone's Mac. A highly recommended desk accessory! (\$31)

DiskTop (3.0.4) - A terrific utility for managing your Macintosh desktop. Duplicates most of the features of the Macintosh Finder, without requiring you to quit from the program you're working in. New version is on the verge, however. (\$32)

CalendarMaker (3.0) - A handy program helping you make calendars with or without artwork for walls, wallets, etc. An old standby. (\$32)

PYRO! (3.0) - Among the least expensive but most useful tools for your Mac. A screen-saver which darkens your screen automatically when your Mac is inactive. Lots of user-definable options. Works flawlessly. (\$15)

Suitcase II (1.2.2) - This utility allows virtually unlimited access to different fonts and desk accessories, even if they're not installed in

your system file. Other features make working with fonts easier. Very highly rated. (\$45)

On Cue (1.3) - Another simple-but-indispensable utility. Helps avoid trips to the Finder to switch to a different program. Users establish their own sets of frequently-used documents and programs. Especially useful for someone with a large hard disk drive. (\$35)

PictureBook - A recent revision of the Mac's "scrapbook" function which offers a lot more flexibility. Graphic table of contents, notes for each "scrap," search capability. (\$40)

SmartScrap & The Clipper (2.1) - Another version of the "scrapbook" with similar features to PictureBook. The Clipper expands the utility of the Mac "clipboard." (\$45)

Typing Tutor IV (1.2) - One of the best available programs to help a novice learn to type. Highly rated. (\$34)

Personal Ancestral File (2.1) - This outstanding program can help you organize and keep up with your family ancestry. Developed by the Church of Jesus Christ of Later Day Saints (the Mormons), this program is available and useful to anyone. A great value, well-documented and implemented. (\$35)

Games - It's impossible to cite all the fun available for the Mac. But there's got to be some fun in every MacNovice's life. Elsewhere in the WAP Journal, you can find extensive reviews of the latest entertainment software. My personal suggestions include Fool's Errand, Crystal Quest, Chessmaster 2000, Balance of Power, and Dark Castle (& Beyond...). But there are lots more excellent games. Browse or ask a friend for a recommendation.

CompuServe/Dow Jones Tools - For a MacNovice getting into telecomputing with a modem, a gift subscription to one of the nation's largest computer databases (\$24) or the software to make getting around CompuServe easier (Navigator 3.0; \$45 or Desktop Express; \$95) are good choices.

Disks - MacNovices can always use another box of disks. But be careful buying! Any major brand name should be fine (Sony, Maxell, etc.).

But don't bother with the old 400K single-sided disks, even if they are inexpensive. Buy 800K double-sided disks (\$15) at least. (The box will say "3-1/2-inch, DS/DD.") For the owner of a Macintosh IIcx or one of the newest Mac SE's which come equipped with a new-type disk drive, 800K disks are fine, but "1.44 MB DS/HD" (high-density) disks (\$32) are the wave of the future and will be a real "gift." Great stocking-stuffers.

Disk Labels - Avery now makes labels in the correct size for Macintosh disks. Other companies do, too. Buy a variety of colors for color-coding and quick retrieval from the pile. (\$13)

Disk Case - Depending on your purse, you can find everything from plastic to teak, oak and walnut in disk cases, some with locks. A nice touch. (\$15 - \$50)

Ribbons - Another stocking-stuffer might be a ribbon or two for the ImageWriter (\$4). Make it a four-color ribbon if it's an ImageWriter II.

\$150 and Under

HFS Backup (3.0) - This might be the best program to automate making crucial backups of important computer data. This program's been around a long time and has a good record of reliable performance. (\$54)

Managing Your Money (2.0) - An acclaimed personal finance software package, this one designed with financial consultant Andrew Tobias. (\$125)

MacMoney (3.02) - Yet another personal finance program. Doesn't have the big "name" of Tobias attached, but is well-regarded in its field. (\$60)

MacCalc (1.2D) - One of the Mac's earliest spreadsheet programs. A lot cheaper than the big "powerhouse" programs, this one doesn't do charts and graphs. But it handles calculations and varied fonts well. Unfortunately, MacCalc hasn't been upgraded in years, and some incompatibilities have developed with newer Macs. Still, an inexpensive spreadsheet for basic use. (\$83)

FullPaint - This was among the first



major improvements to the original MacPaint program. Still a good basic painting program, but in sore need of an upgrade to catch up with the latest features. For the price, still a good value. (\$67)

SuperPaint (2.0) - A much better program than FullPaint (but at twice the price). This one combines painting and drawing capabilities. A good bet for those who don't need every bell and whistle, but want more than a "basic" graphics package. (\$128)

The Curator (1.05) - An oddball utility program, useful for someone who frequently exchanges artwork created in several different programs. The Curator stores, organizes (sorts) and converts graphics from a variety of formats, making them quickly available for incorporation into other documents. (\$72)

Adobe Fonts - A wide variety of "PostScript" fonts available for the user of a LaserWriter. (\$63 - \$240)

SuperCard (1.0) - A highly-acclaimed improvement on Apple's basic HyperCard program. This one is for the HyperCard addict who wants the freedom to create new HyperCard programs ("stacks"), complete with color, sound and other glitz. (\$129)

CanOpener (1.0) - Another one of those oddball utilities which can come in very handy on rare occasions. CanOpener (a new program) allows Mac users to "open," view and extract information from almost any kind of Macintosh file, no matter what program created it... even if the user doesn't have the creating program. Useful for exchanging documents with others. Works with graphics, too. (\$65)

SuperGlue II (2.0) - Similar to CanOpener, this one also allows users to extract information and graphics from various formats, even without the original program available. Acclaimed and well-established. (\$62)

QuicKeys (1.2) - One of the most useful "macro" programs available for making a single keystroke do the work of dozens of mouse movements and menu choices. Five stars. (\$65)

Tempo II (1.02) - This program, like

QuicKeys, helps users automate tedious mouse-and-keyboard sequences. Highly-regarded, though a bit pricier than QuicKeys. (\$79)

Virex (1.41) - If you don't trust the many free or shareware anti-virus programs, this one professes to cure what might afflict your Mac. (\$59)

SuperSpool (5.0) & SuperLaser-Spool (2.0) - These programs quicken the pace of printing from the Mac, by collecting print information from the Mac quickly and feeding it to the printer at the printer's (usually slower) pace. Frees up the Mac for continued work even while printing is going on. Very useful. Choose programs depending on which type of printer's being used. (\$59/\$89)

S.U.M. (1.1; but new version 2.0 now available) - "Symantec Utilities for the Macintosh" is a kind of "toolbox" for making Macintosh disk drive repairs when something goes wrong. A real lifesaver when disk drives refuse to yield up their stored data, especially if no backups have been made. Many users consider S.U.M. a "must." (\$63)

S.A.M. (1.0) - The latest (and reputedly greatest) anti-virus protection program for your Mac. (\$63)

Acta Advantage (1.0) - The latest version of this venerable note-maker/outliner program has been substantially improved over its ancestors. A great desk accessory outliner, which imports and exports to a variety of other formats. Handy. (\$65)

WriteNow (2.0) - Among the least expensive word processing programs, yet very highly regarded by many users. Does everything basic, including some work with multiple columns. Don't expect the full features of the more expensive word processors, but WriteNow is very capable and relatively easy to use. (\$109)

MicroPhone (1.5) - This original version of a great telecomputing program is still available and very capable. For the price (\$109), a good value. But if your Mac user wants to automate his modem work, it might be worth choosing

MicroPhone's most recent version: MicroPhone II (3.0). (\$219)

MAC-101 Keyboard - If your keyboard works fine, don't bother to switch. If you need a new keyboard (either because your old one's broken or because you're buying a new Mac which doesn't include a keyboard), then bypass Apple's keyboard and buy this one. It's a gem. Great "feel" and layout, and truly useful extra keys. Comes with MasterStrokes software for automating keyboard and mouse movements. (\$139)

External Disk Drive - If your Mac user is still working with a single floppy disk drive, she'll really appreciate an extra drive. 800K drives are now available for less than \$150. But wait! External versions of Apple's newest disk drive, capable of handling even IBM-format disks (!) are now available, too. Peripheral Land Incorporated (PLI) makes one. Might make sense to spend more to stay ahead of the compatibility curve.

\$300 and Under

4th Dimension (1.0.6) - Among the best full-featured "relational" database programs available for the Mac. Complex but complete. (\$349)

FileMaker II (1.0) - Perhaps the most widely used Macintosh database program. Non-"relational," but employs a "lookup" technique which accomplishes many of the database users most common tasks. Excellent design of forms. Extraordinary flexibility, even after entering data. Highly recommended (\$229)

Full Impact (1.0) - One of the "big-three" powerhouse spreadsheet programs. Charts and graphs, color, varied fonts. Mix text, spreadsheet and charts all on the same page. Nice presentations. Simple "macro" language and user-created icon commands for automating tedious spreadsheet tasks. (\$249)

Excel (2.2) - The latest version of the Mac world's most widely-used spreadsheet brings this program nearly up to the capabilities of the other two. Still doesn't do 3-D charts. Still keeps charts on a



separate page/document. Still uses an arcane "macro" language. But, Excel's big "plus" is the fact that it's already in use in hundreds of thousands of Macs. The Mac community "standard." A "safe" choice. (\$249)

Wingz (1.0) - The third in the spreadsheet trilogy is the only one capable of 3-D charts. Also mixes fonts and typestyles in a single spreadsheet. Powerful "macro" language, but a bit arcane. (\$259)

Works (2.0) - An excellent package of software components for the beginning Macintosh user. This single program includes a word processor (with minimal page-layout abilities), telecommunications program, spreadsheet and limited database. A good "starter" package, but none of the individual modules is very capable, so it's easily outgrown. (\$185)

MacDraw II (1.1) - The industry "standard" drawing program, for better or worse. Not a bad program. But others have it beat in both features and price. A "safe" choice. (\$299)

Canvas (2.0) - A highly-rated combination drawing and painting program which outpaces MacDraw II in a variety of ways, including price. Able to read MacDraw format documents. (\$169)

PageMaker (3.01) - The industry standard page layout program. Highly acclaimed (and priced) and widely used. Still a bit complex, but PageMaker does it all. (\$389)

Ready, Set, Go! (4.5) - The number-two page layout program. Very capable. Matches PageMaker in virtually every way, but uses a different style of page layout techniques. Precise measurements. Highly-rated. (\$275)

MacWrite II - A completely new rewrite of the Macintosh standard word processor. Vast new capabilities bring this Mac classic into competition with some of the best word processors. Does columns and page layout. A good buy. Sure to remain a standard. Easy to learn and use. (\$185)

FullWrite (1.1) - Probably the most full-featured word processor available for the Macintosh today. Does everything except make

breakfast. Turns out outstanding final products. (Footnotes, bibliography, endnotes, posted notes, sidebars, auto-indexing, auto-table of contents and much more.)

Drawback: FullWrite takes time to learn. And it's a memory hog. Not worth running on a Mac with less than 2MB of RAM memory. (\$259)

Word (4.0) - The newest version of another Macintosh community standard. Word is used on more Macs than any other word processor (except, perhaps, MacWrite). Quite full-featured. Difficult to master. Arcane commands. (\$249)

QuickMail - For someone setting up a small network of Macintoshes, QuickMail is one of the best programs for exchanging electronic messages. (\$175)

Microsoft Mail (1.37) - The alternative electronic mail program. Full-featured, but due for an enhancement. (\$195)

Modems - This is the hardware item your Mac user needs to get started communicating over the phone with other computer users (of whatever brand) and with computer data services (such as CompuServe and Dow Jones). The least expensive (\$77) available are usually "1200 baud" (which means the slowest communicators). Faster "2400 baud" modems are probably a better buy, even if they're more expensive (\$179). They save time on the data services, which charge by the minute.

"Visions of Sugar Plums"

Laser Printers - For near-publishing quality printing, consider a laser or inkjet printer. Hewlett-Packard now offers an inkjet printer for around \$1,000. Apple's LaserWriter is about twice as costly. Other firms offer laser models in between. Be advised that the LaserWriter's "postscript" format will probably become obsolescent in 1990, as Apple revises its System software. Non-postscript printers should become suddenly more popular, cheaper, and should produce printouts equal to the earlier "postscript" models.

Memory Enhancement - Adding one or two "megabytes" of RAM memory to a Macintosh can

produce a vast improvement in speed, efficiency and fun. Prices per megabyte are now around \$150 or even less, not including installation. Your MacNovice will love it!

Hard Disk Drive - A worthwhile, but expensive, addition to any Mac still operating with only floppy disk drives. A "hard disk" is capable of storing many times more information than a floppy, and can retrieve that data much faster, too. Prices range from around \$500 (for a 30 megabyte drive) to around \$1,000 (for an 80 MB version). Read some reviews before you buy. Speed, noise, reliability and accompanying software are important factors to consider along with price.

A New Macintosh - If you're in the market for a new Macintosh, now's a good time to invest. For the latest in technology (and enough flexibility built in to accommodate future changes), the new Macintosh IIcx is a wise purchase. For a "basic" machine which still contains most of the up to date technology, the Mac SE/30 is the way to go. For a high-school or college student, the Mac SE is fine. If you buy an SE, be sure to demand that it be one of the most recent produced by Apple, because the most recent versions are about \$300 cheaper and include the latest, IBM-compatible floppy disk drive.

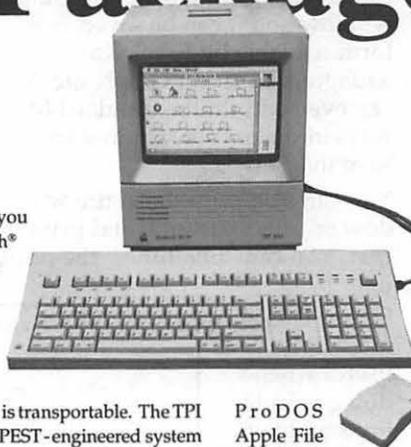
If you're looking for bargains in new Macintoshes, go for either the venerable Mac Plus (with its older technology and limited memory), selling now for around \$1100. Or, pick up a Macintosh II. The II was once an expensive machine, but its technology is already overshadowed by the IIcx, and prices on the II are dropping quickly as Apple phases them out.

That's a long "wish list." But you can see that Macintosh gifts in every price range, from stocking stuffers to sugar plums, are available to make someone happy.



TEMPEST MACINTOSH SE/30

TEMPEST Power In A Small Package



TPI is the first to bring you the TEMPEST Macintosh® SE/30. The power of the Macintosh II combined with the portability of the Macintosh SE. Like the Macintosh SE, the SE/30 features a small footprint, easy setup, and is transportable. The TPI Macintosh SE/30 is a TEMPEST-engineered system with optional 40 MB or 80 MB removable hard disk storage.

The CPU, powered by a Motorola MC68030 chip running at 16 MHz, is four times faster than the SE, while still utilizing the intuitive operating system that makes Macintosh easy to use and learn. The floppy drive uses the new Apple Floppy Drive High Density (FDHD) drive, a high capacity 3.5-

inch drive reading 400K, 800K, and 1.4 megabyte Macintosh disks.

The Apple FDHD drive lets the user read and write to MS-DOS, OS/2, and formatted disks with the Exchange. In addition, Macintosh SE/30 runs all current versions of Macintosh software.

ProDOS
Apple File
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Optional SCSI peripherals include our TEMPEST Hard Disk and TEMPEST Apple® Scanner. The SCSI provides data transfer rates up to 1 megabyte per second.

The TEMPEST Macintosh SE/30, power to go!

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Language Systems' FORTRAN

by Lou Pecora

Runtime Features

Another nice feature of this FORTRAN is the runtime environment. By that I mean what is presented on the Mac screen when you actually run a Language Systems FORTRAN program and what you can do. Here I am addressing the situation when the user runs a straightforward number-crunching application. No messing with the Mac toolbox.

While the program runs you have a standard FORTRAN output window which acts like any good FORTRAN "screen" (e.g. VAX). However, you can customize it to some extent with some simple intrinsic subroutine calls provided by Language Systems. You can enlarge the window to full screen size (I suspect most people will want to do this), you can preset the scrolling defaults (useful) and you can quickly generate your own alert boxes with one subroutine call. Language Systems really does seem to try hard to make it easy for us novices to get some Mac-like features with minimum fuss.

What you see when you write or read to standard input and output (units 5, 6, or *, respectively, in FORTRAN) and the program is finished is the following:

The menus (including the Apple-DA menu) are available only after you stop the program (a true FORTRAN "END" or "STOP"). However, then they become full

featured. All DA's are available. The File menu has several very useful items:

```
Input number of rows and columns:
32,5
Input origin index 1
dt= 0.1953495
```

You can save the whole output window (as a text file) or select part of it and save it. For example, you can create a data table in the output window and it can be saved in a form readable by Excel, Kaleidagraph, Cricket Graph, etc. You can even edit (in the standard Mac way) in the output window and save that.

You can also print the entire window or select part of it and print that. You can "fine-tune" the print

with Page Setup. This is incredibly useful when doing calculations and you need a copy of the results.

The Fonts menu allows you to change the font and font size of the output window.

These features, so Mac-like, are very nice to

have automatically. They are not present on either of the two other FORTRANs for the Mac.

Benchmarks

FORTRAN programmers like benchmarks. The main reason is that they are number crunchers. They need to calculate FAST. If you have a Mac II, IIcx, or IIx, you won't be disappointed with Language Systems FORTRAN. If you have a Plus or SE, you might be. Read on.

First let me compare some simple benchmarks. One (ARRAY) multiplies two 100x100 matrices; the other (FLOAT) does a lot of floating point calculations. If you don't know what matrices are, just think of this as a lot of calculations to determine how to rotate a simple geometric object. That requires lots of index and floating point operations. Both are simple programs of only 15-20 lines, but they are typical number crunching operations and easy to use to compare compilers and interpreters.

Here are the comparisons of several computing languages and environments:

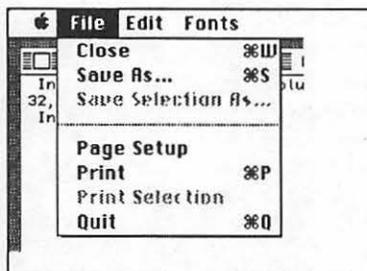
(All times are in seconds.)

PROGRAM	ARRAY (100X100)	FLOAT (10^4 loops)	
ZBasic 4.0 (Mac Plus)		3431	834
TrueBasic 1.2 (Mac Plus)		1100	246*
MS Basic 2.1 (Mac Plus)		3394	480*
Mac Basic 1.0 (Mac Plus)		6410**	773*
MacTran77 (Mac Plus)	420	240	
MacTran77 (MacII)	56	5.5	
Absoft Fortran 2.3 (Mac Plus)	357	42*	
Absoft Fortran 2.3 (MacII)	37	2.0*	
Lang. Sys. Fortran (Mac Plus)	3140	236*	
Lang. Sys. Fortran (MacII)	34	1.9*	
VAX 11/780 Fortran	32 (27)***	6.0 (0.13)***	
CRAY X-MP/24 Fortran****		0.16	(not done)
Lightspeed C 2.01	2400*****	1500	

Notes on benchmarks:

* Correctly detected overflow error
** Mac Basic would not allow dimensions greater than 89.

*** All VAX times are CPU times and are therefore the best possible. They will degrade as the system is loaded with other users. The VAX



The file menu at run-time in Language Systems Fortran.

The output window is also completely editable, like any Macintosh text window.



correctly detected overflow. The times in parenthesis are for optimized Fortran compilation.

**** The CRAY uses 64-bit words so this is equivalent to a double precision version of ARRAY.FOR
***** Scaled from runs with dimensions 10x10, 20x20, 30x30. Would not run above around 35x35 - got "stack segment too large" error. All float variables in Lightspeed C programs were typed double.

Note that the results for the Mac II (and therefore the IIX) are very good. Language Systems is at the tops of the benchmarks for these Macs. But for the Mac Plus Language Systems FORTRAN is quite slow, even compared to True Basic, for example. Part of the reason for this is that in Macintoshes without floating point accelerators (like the Mac Plus and Mac SE), Language Systems FORTRAN uses the SANE routines in the Mac system.

SANE stands for Standard Apple Numeric Environment. It is a set of routines built into the Macintosh system that does floating point calculations in 80 bit precision. Now, 80 bits is very high precision, but you pay a price for carrying all those numbers: arithmetic in SANE is much slower than some other compilers and interpreters that have their own floating point routines built in. I suspect that those built-in routines are 32 bit routines (64 for double precision in Absoft Fortran). This accounts for some of the speed differences, although the factor of 10 between the Absoft Fortran and Language Systems FORTRAN must include other features of Language Systems FORTRAN and/or SANE.

So, if you have an SE/30, II, IIX, or IICX, or an SE or Plus with an accelerator board with a floating point co-processor, Language Systems FORTRAN will fly for you (it beats out everything I've ever tried on the Mac). But if you have a Plus, you may be disappointed in the speed.

Now for a more realistic benchmark. I timed the compile, link, and execute phases for a FORTRAN program that solves a differential equation. If you don't know about differential equations,

just think of this program as calculating the trajectory of a particle as it is moved about in three dimensions by various forces. For those who do know, the system solved is the famous Lorenz system which displays chaos and a strange attractor. This is a problem I'm researching in my work and it is a good representative of a typical moderate-sized scientific calculation on a computer. It involves lots of floating point operations and a moderate amount of I/O to a hard disk. Here are the times on a Mac Plus, Mac II, and VAX (in seconds),

	Mac Plus	Mac II	VAX (11/780)	
Compile		60	15	12
Link		45	12	5
run		375	21	30

Not bad, huh? With a Mac II you can often have VAX speed (although see my comments in the Appendix). With Language Systems FORTRAN you can port your VAX code right over and have a good possibility of running it immediately!

I should mention that I wouldn't even attempt this last benchmark in Absoft FORTRAN. I tried for a year (and three upgrades of that product) to write a differential equation solver. I gave up each time in complete frustration, stymied either by the compiler's bugs or poor diagnostic messages. It might be possible in MacTran Plus, but I would have to change some of the code since MacTran Plus doesn't support all the VAX features I use in the above program. With Language Systems FORTRAN I had the code changed over from the VAX and up and running in a few minutes. Developing new code is even easier than on the VAX. This is something that pure benchmarks never show, and I want to reiterate it here.

Toolbox Access

Language Systems FORTRAN also allows complete access to the Mac toolbox. This is done in a natural way, just like in Inside Macintosh (the Mac programmer's Bible). The names of the toolbox calls are the same as their Pascal counterparts. For example GetNextEvent is just that, GetNextEvent. The only differences are (1) you need to say

CALL "routine name", and (2) you need to make sure that the subroutine arguments are being passed the right way, either by value (standard Pascal for many variables, but not standard FORTRAN) or by reference (standard FORTRAN and used in Pascal when indirect referencing is needed). To do the latter Language Systems FORTRAN supplies the intrinsic argument functions %val() and %ref() which do exactly as their names suggest. VAX users will feel at home with these since they exist in VAX FORTRAN, too.

Variables can be declared much as in Pascal. There are pointers, too. They are implemented as in Pascal with a "^" character signifying a pointer. For example, the variable QDG^.screenBits.bounds.top returns the top corner coordinate of the screen from the QuickDraw Global variable QDG. This is defined in the SystemSubs.f include file (provided by Language Systems) in a form that will look familiar to Mac Pascal programmers:

!Structure definition for accessing QuickDraw Globals

```

structure /QDGlobals/
  INTEGER*4
  RandSeed
  record /BitMap/          screenBits
  record /Cursor/Arrow
  record /Pattern/         dkGray
  record /Pattern/         ltGray
  record /Pattern/         Gray
  record /Pattern/         black
  record /Pattern/         white
  record /GrafPtr/         thePort
end structure
pointer /QDGlobals/ QDG
INTEGER*4 JQDGlobals      ! QDG =
JQDGlobals()
EXTERNAL JQDGlobals
Use to access QuickDraw globals

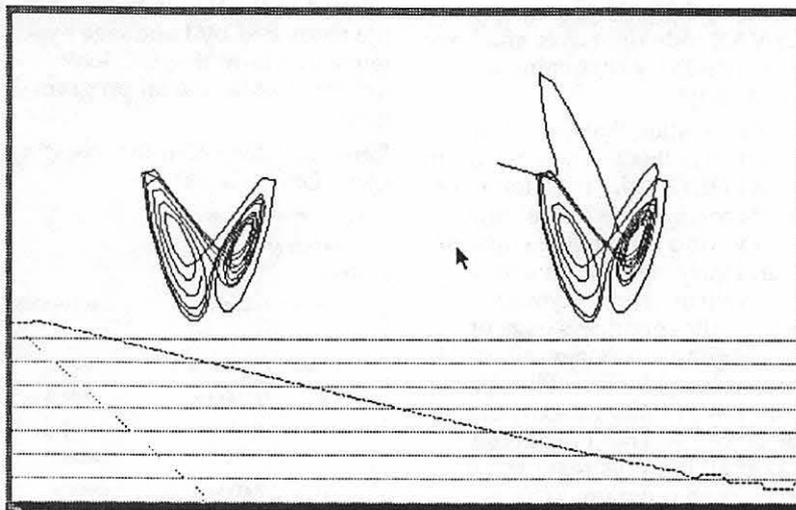
```

So, if you want to get into the nitty-gritty of the toolbox, Language Systems FORTRAN lets you do it just as you would read about it in most books explaining how to program the Mac.

Many number crunchers don't want to mess much with the Mac system. It's intricate and they have no time or inclination to learn it. For simple plotting (which is very useful when running calculational



programs) relief is here in the form of **GraphPack** from Lipa software. For \$70 you can get the GraphPack source code that allows you to make simple subroutine calls to open a plotting window and plot your data and calculation results in Language Systems FORTRAN programs. It's quite easy to add an interface of your own to these calls to get somewhat more sophisticated plot calls. For example, I've modified my differential equation benchmark program to output the results of the calculation of the trajectories (and their differences, shown at the bottom of the screen) as it goes along. Here's what I see (don't worry if you don't understand this; I show it to display what can easily be done during a calculation in Language Systems FORTRAN with GraphPack):



This was done without much knowledge of the Mac toolbox. You can also plot to a printer or to the clipboard (to get the results to your favorite graphics program). You may need to make the Mac pause when the plot is done. Use the routine in the program `DemoQD.f` in the folder `FExamples` provided by the Language Systems people, which pauses until the mouse is clicked. See the Appendix for more information on GraphPack.

Language Systems also provides some nice examples of using the toolbox with their latest upgrade. They even provide FORTRAN

users with some simple subroutines that, with a single call, will allow you to open new and old files using the standard Mac file dialog box. For that last one, I'm grateful. The Language Systems people have continually added to the examples and utility routines they provide. I expect even more in the future.

In Summary: Language Systems FORTRAN

There is no doubt that Language Systems FORTRAN is the best FORTRAN for the Mac. This package will satisfy even hard-core number crunchers. The development environment of MPW is superb. The compiler's features, options and diagnostics give almost everything any FORTRAN

programmer would want, including natural access to the Mac toolbox. The new MPW source-level debugger fills one of the only gaps this package had. The runtime environment has useful features and generates stand-alone (double-clickable) applications automatically. Even Mac-ignorant FORTRAN programmers can be producing simple Mac applications right from the start.

Add to this the fact that Language Systems FORTRAN is the lowest priced of the three available FORTRANs. It costs \$325 with MPW. MacTranPlus costs about

\$100 more and Absoft Fortran about \$200 more. This certainly qualifies it for a best buy.

Language Systems Corporation also supports its product well. They answer all calls, for example, and give very helpful advice. They update their product religiously. In fact when I was beta testing this product, they were so intent on getting this FORTRAN compiler right and doing it on time that I often received a beta update fixing a bug, before I had a chance to file a bug report with them. Since it's been released (June 1988) the compiler has seen two substantial updates.

My manual has also gotten fatter, thanks to Language Systems' constant release of user technical notes. These are useful to all users, not just Mac toolbox types. The manual has also been updated with each new version. The Language Systems people have also been building a nice collection of FORTRAN examples, both toolbox and otherwise. Along with the technical notes they make useful pedagogical devices for learning FORTRAN on the Mac.

In the future the Language Systems people are looking into upgrading to the new FORTRAN 8x, when it's released. This will be a substantial (but important) upgrade which will shock most FORTRAN programmers. But it contains new features that will be terrific for number crunching. I can't wait for them. Language Systems is also considering writing their compiler for the Motorola 88000 series of chips. They're RISC chips. They should be superfast and I would wager they'll show up in a Mac before too long. So, apparently, Language Systems wagers, too. This is a company not content to sit on its rear. They are moving with this product and moving in the right direction.

Now, all this is not to say that there couldn't be some improvements. Here is my list:

Lower precision floating point routines: This is a tall order, since it requires the generation of a separate set of arithmetic routines, but it is at the top of my list. For a FORTRAN program to be beaten by a BASIC program is disgraceful.



Beyond that, 80 bits of precision very often are not needed. Much number crunching is done in 32 bit precision. I implore Language Systems Corp. to look into this. It may be a moot point on the SE/30, II, IIX, and IICX, but lots of us still use the Plus and SE. One can still do plenty of number crunching on those 68000 machines, if the programs are fast enough. The compiler could, for instance, have an option to use SANE or a lower-precision, faster set of floating point routines.

More VAX compatible features: These aren't just for VAX compatibility (although that is important for scientific computing), but also because these are nice features. The first is the implementation of initialization with data typing. That is, you can specify a variable's data type and its initial value in the same FORTRAN statement. For example, on a VAX, you can specify x to be real *8 and have the initial value 1.0 by the code line:
real *8 x /1.0/

This could eliminate the need for data statements.

A more detailed introduction to MPW for the novice. Most people who buy Language Systems FORTRAN will not be familiar with MPW. They will need a gentler introduction to it (see, for example, Appendix to this article).

More tutorials on Mac toolbox. These are being supplied in ever greater number by Language Systems Corp. I add this only to encourage them to do more. They're very useful and instructive.

A clear way to handle the standard output window. When you open other windows, updating the standard window and the new windows is not straightforward. This is sort of mixing and matching with windows. I would like a clearer and easier explanation of this from Language Systems.

This is a modest list. And it is a tribute to Language Systems that I can't think of too many things that are lacking in this FORTRAN without "gilding the lily." If you want to number crunch on your Mac, especially if you have one with a floating point co-processor, this is the package to get. I recom-

mend it with no reservations.

Appendix: Hints and notes on Language Systems FORTRAN

MPW pathnames: In general it is quite easy to get started in MPW with Language Systems FORTRAN, but I've noticed that most people have trouble with pathnames for MPW. A pathname specifies where a file that you want to use is located. It tells MPW, the compiler, the linker, or whatever, what drive (disk), folder, subfolder, sub-subfolder, etc. your file is in. Here's an example that should make it clear how pathnames are used.

You have a file on the disk named "Hard Disk". It is in the subfolder "Black Hole Physics", which is in the folder "Cosmology". The file is named "Hawking.f". You have Language Systems FORTRAN in the folder "MPW folder" on the same disk. To compile the file "Hawking.f" with optimization level 2 (opt=2) you would type in the MPW worksheet (or in the script file invoked for this compile):

```
"Hard Disk:MPW
folder:FORTRAN " -opt=2 @
"Hard
```

```
Disk:Cosmology:Black Hole
Physics:Hawking.f "
```

and hit the "Enter" key.

This example explicitly shows all pathnames. The quotes are necessary since disk and some folder names have spaces in them. The "@" means "continue on next line."

You can also set a default directory (as is often done in the startup file for MPW) by typing, say, directory "Hard Disk:MPW folder:". This tells MPW to look in the MPW folder when no pathname is specified. Other defaults are also available. If a pathname is specified as beginning with a colon (e.g. :FIncludes:Events.f), then MPW assumes this is a pathname of a sub-folder in the present default folder (as specified by the last directory command).

Just remember that, unless it's in a default definition, you must tell MPW where files are.

Include files for Mac toolbox calls: Language Systems FORTRAN provides for "include files," that is, you can tell it at almost any point

in your code to include the contents of a file. This will be inserted in the place of the "include" command. Include files are set up by Language Systems to work automatically with the Mac toolbox includes. This means that if the Mac toolbox file you've included needs another Mac toolbox file, it will be automatically included. The Language Systems FORTRAN method is to use a special file (zeroinc.f) to keep track of this automatic procedure. To use this setup properly you must employ the compiler directive:

```
!!SETC
USINGINCLUDES=.FALSE.
```

This has changed several times with each update of Language Systems FORTRAN. If you have trouble with include files in the next update, call them directly; they'll set you straight.

VAX Incompatibilities: The only incompatibilities I know of are for FUNCTION declarations in which the function data size is declared and for data initialization (mentioned above). For FUNCTION declarations the VAX syntax is:

```
TYPE FUNCTION NAME SIZE
(ARGUMENT LIST)
```

and for Language System's FORTRAN is

```
TYPE SIZE FUNCTION NAME
(ARGUMENT LIST).
```

Note that the size specifier is moved in the Language Systems version.

For example, for the VAX:

```
REAL FUNCTION XCALC *8 (A,B)
```

and for Language System's FORTRAN:

```
REAL *8 FUNCTION XCALC (A,B)
```

To me the Language Systems syntax makes more sense since it follows the data typing standard, but, if you need to port to a VAX, you should be aware of this.

Extra Help in Fortran on your Mac: You may be all excited about getting a FORTRAN for your very own Mac. If you have a Mac II, IIX, IICX, or SE/30, you may be anticipating VAX-like performance. But you forget about the niceties offered by minicomputers and high-end workstations: Multi-tasking, Virtual Memory, Graphics,



lots of Libraries, and, usually, someone else doing the system manager jobs. On a Mac II you will be your own system manager and you will quickly run into deficiencies of these things on the Mac. None of them are the fault of Language Systems FORTRAN, but you may miss them enough to make you begrudge trying to number crunch on the Mac. I hope to do a future article on this, but for now you can help yourself by being aware of the following.

You can't do much about virtual memory or multitasking. Virtual memory is now being provided by a hardware-software product called VIRTUAL. It is new and has plenty of bugs, judging from a recent MacWeek review. It may be a good answer some day (if Apple doesn't provide one), but consider it to be a diamond in the rough now, at best.

In multitasking we are at the mercy of Apple (assuming you don't have AU/X; and most people don't). Hope for enlightenment and good

programming from Apple in producing the newer versions of MultiFinder.

You can, however, do something about graphics and FORTRAN libraries. GraphPack from Lipa Software is available for Language Systems FORTRAN. It enables you to open a simple blank window and draw things in it using the usual plot point, plot line type of commands without knowing anything about the Mac toolbox. It also has some higher level plot calls (axes, contour plotting, hidden-line plotting, for example) that are very useful. In addition to GraphPack I have written my own set of plotting subroutines built on GraphPack routines that allow you to break up the screen into independent "window panes" and plot to each, either as 2D or 3D point or line plots. If anyone is interested in this please send me a formatted Mac disk and an addressed, stamped return envelope. I will gladly give you a copy of these routines. They are quite easy to use

and extend GraphPack in a nice way so you can easily generate plots while you are calculating something. Note: you still must buy GraphPack to use these.

Fortran libraries are now obtainable for PCs. One of the best is Numerical Recipes by Vetterling, et al. You can also purchase IMSL libraries on Mac disks. This is a nice set of numerical routines, especially good for statistical problems. You can get the source code to it, too. I have also just heard that the Nag numerical routines are now available on the Macintosh. This is a large set of object libraries for handling many different numerical algorithms. It is very popular (we have it on our VAXes and our CRAY). It became available only recently because Language Systems Fortran was the first Macintosh Fortran that was capable of compiling all the routines. And that is a fitting comment to end this review.

Lou Pecora is a physicist with the U.S. Naval Research Laboratory in Washington, D.C.

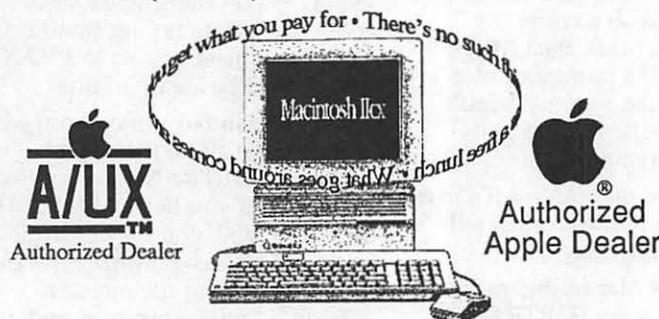
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Bits & Bytes

by Lynn R. Trusal

1. As reported earlier, Mac Wiz Andy Hertzfeld is writing the first operating system (OS) for television. The OS will be able to track the entire cable TV spectrum and record some programs, such as all-news or certain types of sports programs, on a VCR. The OS might even enable user control over deletion of commercials, perhaps by monitoring the sound level (my idea!). Will commercial sponsors get up in arms about this technology the way the music industry did about digital audio tape (DAT) recorders? See accompanying story. (Source - *InfoWorld*, July 3, 1989)
2. Virtual memory is now available

- for the Macintosh, provided you have a PPMU in a Mac II or own a Mac IIx or cx. Connectix of Menlo Park, CA, (415) 324-0727, offers a \$295 software application called Virtual which is a virtual memory "INIT." If you need the PPMU, the damages are \$695. Virtual permits you to allocate 8 MB of hard disk space as pseudo-RAM. According to Barrie Sosinsky, there are trade-offs. (Source - *Thanks for the Memory: Virtual Memory for the Macintosh (Now)*, by Barrie Sosinsky, BCS Active Window, July 1989, p. 27)
3. Now that the "Presentation Manager" for OS/2 is almost a reality, its memory requirements are becoming evident. It will

require a minimum of 6 to 8 MB of RAM and use a 386 machine. Trying to be a Macintosh may cost a lot more than actually being one! (Source - *PC Publishing*, July 1989).

4. Apple has paid Adobe Systems \$63.5 million in PostScript royalties since 1986. No wonder Apple decided to develop its own Post-Script clone. (Source - *Business Week*, August 7, 1989).

More Lawsuits

1. Quantum Corp., suppliers of many Macintosh internal hard disks, has sued Sony Corporation for hard disk technology patent infringements. The suit is based on patents that Quantum obtained for 3.5" technology ten years ago. Quantum has increased its sales to Apple (and others), and its stock has nearly doubled since the beginning of the year.
2. Xerox Corporation is finally questioning non-Xerox use of its patents. Xerox patents involve scroll-bar use, window design and



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placement, menu design, and placement and use of alert boxes. Did Apple ever sign licensing agreements with Xerox to incorporate Xerox ideas into the Macintosh? Does anyone know?

3. Tandy is also beginning to enforce its laptop design patents and has filed suit against Toshiba for starters. The patents deal with

how the lap top hinges and closes. Other suits may follow. Sounds like an "open and shut" case to me....

5. Apple and Adobe are being sued by Information International, Inc. for patent infringement of font generation technology. The suit is based on a 1977 patent (reissued in 1981) called "Character Generating

Method and System." Information International, Inc. has already won \$5 million from Compugraphic Corp. in a suit involving the same technology. Adobe denies patent infringement, and Apple has made no comment. It is not known if the Apple portion of the suit is based on the LaserWriter's incorporation of Adobe Postscript, or if Apple itself is accused of violating the patents. (Source - *MacWeek*, June 6, 1989).

FoxBase 2.0 Ships

FoxBase, one of the many databases available for the Macintosh, appeals to users because of its speed and its ability to read dBase III Plus files directly from MS-DOS applications. But, to print reports out in FoxBase, it was necessary to generate dBase type code. Such a thought is abhorrent to most Mac users and it may have hurt sales of the product. Now that

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has changed.

FoxBase+/Mac 2.0 incorporates the expected graphical database report capabilities other Mac databases have. The new report writer lets users create custom database reports almost effortlessly and preview them on screen.

If you need dBase compatibility in a Macintosh database, check FoxBase+/Mac 2.0. The single user version is \$495 and multiuser \$695, though the street price is considerably less. Registered users of the original version can upgrade for \$75 (single user) or \$95 (multiuser).

Macintosh SIMM Updates

There are rumors that the new Mac IICI, running at 33 MHz, will use the IBM style 9 chip SIMMs. IBM started using SIMMs when it introduced its PS/2 line of micro-computers. The 9th chip is a parity/error checking chip deemed necessary for serious workstations. These same 9 chip IBM type SIMMs will also work in Macintoshes.

Evidently "subatomic particles," such as alpha particles, can zap RAM chips and cause errors in memory management. And we used to think not having enough RAM was the only problem to worry about. Because these SIMMs are more plentiful than the 8 chip Mac SIMMs, you might expect them to be cheaper but, in fact, they cost about 12 to 15% more. (Source - *MacWeek* June 20, 1989).

At the time this article was written, the cost of a 1 MB SIMM was under \$100. Many SIMM merchants don't even sell the slower 120 ns DRAMs any longer—the market is for 100 to 80 ns. Only the Mac IIX, CX and rumored CI will make use of the faster chips.

One mail order house, called "Technology Works," (800) 662-2210, sells 1 MB 80 ns SIMMs for \$129. [Ed.—*The Chip Merchant is selling them for less than \$100. They also have an 800 number: 426-6375.*] They also buy back 256 bit SIMMs for \$20 per 1/4 megabyte or \$80 for 1 MB (four 256 K bit SIMMs). I don't know how many other companies will also do so.

Prices of 1MB SIMMs may continue to drop, but as 1MB Macs become

obsolete and the new System 7.0 demands more memory, prices may increase again due to supply and demand. The growth of "Presentation Manager" for PS/2 machines will also dramatically increase the need for 1 MB chips and may drive up prices.

Does anyone know of any good uses for 256K bit SIMMs?

Microsoft Word to Word Perfect (MS-DOS)

I recently needed to transfer Microsoft Word 4.0 files on the Macintosh to Word Perfect 4.2 for use on a Zenith and want to give readers some insights into the mechanics of such an exchange.

To accomplish this, I used an Apple 5.25" drive and a PC drive card in a Mac II. At first we used the AST 286 MS-DOS card, which can do double duty as a PC drive card, but that procedure is more involved and unless you need to use MS-DOS programs on the Mac, don't bother with this more expensive method.

I placed the MS-DOS disk into the PC drive and opened the Apple File Exchange (AFE) application. The Apple 5.25" drive will only read low-density MS-DOS formatted disks, but the drive itself can do the formatting. We use MacLink Plus translators to increase the number of binary Mac to MS-DOS type of transfers we can make. These translators add more utility to the rather limited AFE translators available from Apple.

When AFE boots up, it displays the MS-DOS disk on the right and the Macintosh files on the left side of the window, much like the DA/Font Mover. When you select the Word file to be transferred and click the transfer button, the AFE asks which translator is to be used, e.g., Word to MultiMate, Word Perfect or Wordstar. In this case simply choose "Word to Word Perfect" and a sliding bar scale keeps you apprised of the transfer process. The bigger the file the longer the transfer, but one minute for a 20K file was typical. Keep in mind that Microsoft Word 4.0 documents have to be saved in the 3.0 format to transfer properly. I don't know if there is an upgrade

to MacLink Plus translators that supports Word 4.0.

Even though this is a so called "binary" transfer, not all Word features translate properly. Smart "quotes" are replaced by underlines while regular straight quotes transfer ok. Center, bold and underline also translate fine but "all CAPS bold" and "italics" do not. All CAPS bold became lower case bold. Super- and sub-script translated as did bullets but a degree symbol for temperatures did not. Other than centering, justification was spasmodic. It is unrealistic to expect non-supported formatting to transfer properly. Sometimes, it is best to save the heavy formatting for Word Perfect and not take the time to do it in Word if you know you will ultimately have to do such a transfer.

Overall, the process couldn't be simpler and is relatively inexpensive since the 5.25" Apple PC drive and drive card can be bought for about \$350 wholesale. AFE is free and MacLink Plus translators are about \$120. If you are in need of a lot of binary Mac to MS-DOS or vice-versa check it out.

Remember the new FDHD drives included in the Mac IIX and CX read and write OS-2 disks using AFE, but if you still use 5.25" MS-DOS disks the Apple PC drive is a good alternative.

Mac SE Problems?

The original fan in the SE, in addition to being noisy, caused screen jitter on many machines. Apple has admitted there can be a problem. If you complain loudly enough to an authorized Apple dealer and tell them you want Apple Authorization code OMY617, you will get a new motherboard free. It replaces the fan with a newer and quieter one.

One owner did just that, then found that he had new problems: "blooming," which causes the shape of the active lit-up area of the screen to change with increasing brightness levels; fuzzy focus; increased barrel distortion; and inaccurate horizontal adjustment. Apparently, changing the motherboard with a new one, one not finely tuned at the factory, can





cause balance problems that an authorized Apple dealer can find difficult to fix. The only solution was to try a new replacement motherboard.

The moral? It may be better to get a new third-party fan installed than to take advantage of a new Apple motherboard. After all, it's not called a "motherboard" for nothing! (Source - "What You See Isn't What You Want: Apple Fails Mac SE Owners Yet Again," by Lawrence San, BCS Active Window, July 1989, p. 32)

Digital Audio Tape (DAT) Standards

There have been a number of recent and not-so-recent stories about digital audio tape (DAT) and how it promises to offer CD quality on tape. Resisted for sometime by domestic music producers, it seems positioned to be the next major technological invasion from Japan.

Its major stumbling block has been ability to copy music with CD

quality. The compromise, in case you're interested, will permit a CD to be copied to a tape, but not a tape to a tape. CD's can be encoded to permit only one DAT copy to be made. Because it offers gigabyte storage capacity, DAT is being heralded as a potential source for tape backup of large capacity hard disks.

At present, two major standards are competing for acceptance in the market place: DDS and DAT. DDS supporters are pushing DAT for unattended tape backup, software distribution, and data interchange. The Data/DAT group wants to use the technology for disk-based applications. Even though Data/DAT requires long formatting times, it can store and retrieve data in a random fashion, much like a disk drive. The DAT format requires no prior formatting, but can only store files sequentially without the ability to replace previous versions.

Since DAT is a subset of Data/DAT

many DAT drives may support both modes as a form of compromise. It will be some time before this technology reaches the personal computer market in a form that is affordable to the average user, but DAT may yet prove that tape backups are not dead. (Source - *USA Today*, July 5, 1989 and *PC Week* July 3, 1989)

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 solely his.

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Trapped in the loop

by Jeff Alpher

Warning: Do not ever use the Apple Macintosh System Installer program w/ only a single floppy drive! this could be hazardous to your health.

I have just spent the better part of 2 hours creating a Mac Plus minimum system using the Apple supplied "Installer" application that comes with the latest system software disks. I was using a Mac II with a hard disk, but unfortunately, since I removed the useless "Scrapbook" and "Alarm Clock" desk accessories from my system file on the hard disk, "Installer" would not work. When starting up "Installer", it displayed a dialog box telling me what I already knew, that there was no "Scrapbook" or "Alarm Clock". Contrary to Macintosh user interface guidelines, after clicking "OK", I was returned to the "Finder". So I retreated to shutting down the Mac and rebooting from the single internal floppy drive using a copy of the original system disk with "Installer".

Well, 2 hours and a couple of hundred disk swaps later I had my Mac Plus minimum system. Over the Mac's two year life, the floppy drive may have been used 500 times. I was afraid that I might be fatiguing the drive mechanism, remembering my experiments with bending coat hangers and paper clips repeatedly.

The play by play went something like this (using 2 disks):

- (a) Insert disk
- (b) Wait 4 to 5 seconds, remove ejected disk, insert other disk
- (c) Go to (b)

At one point, one disk was accepted for almost 10 seconds. But alas, my hopes were dashed when the disk was ejected and the other

disk was requested.

Doing one handed swaps about 80% of the time (two handed swaps were slightly faster), I could insert about 6 disks per minute. Over 2 hours, minus 30 minutes for boredom breaks, using the bathroom, and general cursing - that comes to 90 minutes X 6 swaps per minute or 540 swaps. I would guess the true total is actually less because everyone knows that 500 disk swaps is fatal to any user. At any rate, I swapped enough disks to require blood pressure medication (a couple of beers.)

I noticed a couple of other clever "features" in the "Installer"

application:

1) "Installer" ignored that my Mac II had 5 megabytes of available RAM, apparently trying to be clever and run in the minimum amount of RAM, like Microsoft Excel before version 2.2.

2) There is no progress bar telling how close I might be to finishing the installation process. Why is this clever? Because you always think the next disk swap will be the last. If I knew I had 500 swaps ahead of me, I would never have started the darn process. Maybe I would have written my own installer, or done the whole thing manually with ResEdit.

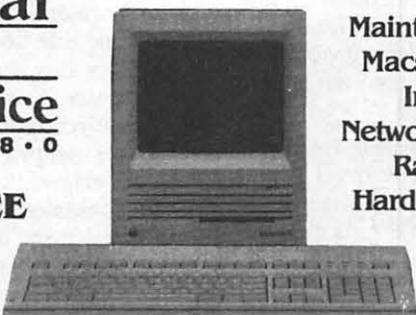
I'm thinking of starting a support group for "Disk Swap Wrist". Anybody who uses "Installer" with a single disk drive is automatically a member. 🍏

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The H-P DeskWriter Printer for the Mac

by Nick Questell

They've finally made an affordable, 300 dot-per-inch Macintosh printer for the rest of us, but it doesn't have the familiar Apple logo on it. The new Hewlett-Packard DeskWriter is the Macintosh version of its popular DOS-based DeskJet Plus printer. It was designed to work on the Mac Plus, SE, Mac II and IIX computers. One megabyte of system memory and a hard disk is required. It is not a PostScript device, but its output is certainly comparable.

The H-P DeskWriter printer uses the Macintosh computer's QuickDraw imaging system to describe pages for printing. The DeskWriter printer resource enhances the capabilities of QuickDraw providing exceptional print quality and output capabilities, while avoiding the expense of a PostScript printer.

Although my Apple ImageWriter II at home has performed flawlessly for me for the past few years, I just wasn't happy with its output after working with an Apple LaserWriter at work. I really wanted a LaserWriter for home use, but just couldn't justify the price. As soon as I looked at the output from the new H-P DeskWriter, and saw its affordable price, I knew it was the printer I had been waiting for.

Setup was a breeze. H-P does not include a cable with the purchase, but the standard Apple Peripheral/System 8 cable (Apple Part No. MO197) that came with my ImageWriter II was all I needed. Software installation was also an easy task—simply drag the DeskWriter printer driver and printer font files into your System folder. The DeskWriter comes with Times, Helvetica, Courier and Symbol screen fonts that you install with the Font/DA Mover. An optional font collection containing seven

additional fonts (CS Palacio, CS ITC Century Schoolbook, CS ITC Bookman, CS ITC Avante Garde, CS Triumvirate Condensed, and CS ITC Zapf Chancery/Dingbats) is available.

The ink-jet cartridge snaps into place, and after using the Chooser desk accessory to select the DeskWriter, you're ready to start printing. The first thing I noticed on my printout was how much blacker the blacks printed than on my Apple LaserWriter Plus at work. Both graphics and text printed out sharp and clear. I was more than pleased with my new printer. It truly does give laser-quality output.

There are drawbacks of course, but none that bother me that much. Since this is not a PostScript printer, you can't utilize files created by Illustrator or FreeHand. You can print an Illustrator or FreeHand file by placing it in PageMaker, but the printout will contain the dreaded "jaggies." Most of my graphics are images in the TIFF format, and they print out at a crisp 300 dpi on the H-P DeskWriter. It seems compatible with most of my Macintosh software. Notable exceptions are FullPaint, the early versions of MacPaint (later versions print fine), and for some reason, HyperCard stacks print out at only 72 dpi resolution. I hope H-P develops a fix for this handicap.

It is a pleasure to be able to use plain paper in a printer without having to tear off those pin-feed strips. [Ed.—there is an apocryphal story that those strips are sometimes called "chit," so named by an early Hispanic programmer. You work it out.] The H-P DeskWriter uses US Letter, US Legal, A4 (European) and it even has a slot to print out the address on a #10 envelope.

Although my LaserWriter at work tends to jam on envelopes, the H-P DeskWriter has performed flawlessly at this task for me so far. Printed documents can also be reduced or enlarged from 25% to 400%. All user interface dialog boxes are very Mac-like, and the DeskWriter will also print transparencies.

Another big plus is that the H-P DeskWriter comes with an honest one year limited warranty. I also appreciate the ability to print quietly. There is practically no noise at all in its operation. The clackety-clack of an ImageWriter can raise the dead.

The H-P DeskWriter lists for \$1,195. I was about to buy one from a mail order firm for \$875, but when my favorite Mac dealer had them on sale for only \$799, I was off and running. The convenient ink-jet cartridges list for \$18.95 each, and are good for around 500 copies each. If you've yearned for laser-quality output from your Mac, but weren't willing to pay the high price, the H-P DeskWriter may be worth checking out.

(Nick Questell does desktop publishing on the Macintosh for the U. S. Postal Service).

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May you live in interesting times...

by Robb Wolov

So goes the old Chinese curse. Things have gotten plenty interesting in just a few weeks.

On September 19, Microsoft Corporation (MS) and Apple Corporation (Apple) jointly announced a "cross license" agreement (exchange) for outline font technology. MS will get to use "Royal," in future versions of OS/2, MS's multitasking operating system for IBM and IBM clone computers. Royal is the page description language that Apple has been developing in-house for use with its System 7. In exchange, Apple will get to use printer software that mimics Postscript in future versions of the LaserWriter printer. Through the exchange, both companies have deftly sidestepped the issue of licensing screen and printer font technology from Adobe.

In conjunction with this announcement, IBM declared its intent to support Royal use in OS/2 in its IBM PCs. This establishes instant credibility for what is still a beta stage (possibly still alpha stage) language.

All this has transpired despite the ongoing lawsuit over the "look-and-feel" conflicts between MS's Windows Presentation Manager (the interface for OS/2) and Apple's Macintosh operating system. Obviously, look-and-feel is look-and-feel, but business-is-business!!

How the Technology Works

We recently discussed System 7 and the advantages of outline font technology for printing to the screen. Briefly, text will be able to be scaled without the dreaded "jaggies," greatly enhancing the visual appearance and sheer

readability. Because all this will be generated through QuickDraw, Apple's page description language, non-Postscript printers (ImageWriter, LaserWriter SC and General Computer PLP) will gain enhanced output with only software driver changes.

For years, Apple has been drawing its screen images, both graphics and text (which is nothing more than a special class of graphic), via the QuickDraw language present in every Mac. That image was sent to a LaserWriter where an onboard computer, using the Postscript language supplied by Adobe, made the necessary translations to control the printer. The page was redrawn, not on a cathode ray tube as in the Mac, but with a laser diode on a photo-sensitized drum. This second computer in every laser printer accounts for some of the high prices these devices command. But the licensing fees demanded by Adobe, through its virtual monopoly of the Postscript interpreters, only further pushed these printers out of financial reach for the average user.

Changing Partners

Things began to come to a head when Adobe announced a version of Postscript called "Display" intended to control the display screen and not just the printer. It reasoned that since you would use the same language to describe both the screen and printed page, instead of splitting these operations between QuickDraw and Postscript, the degree of agreement between the two would be greater. The result would be true "WYSIWYG"—what you see is what you get. Digital Equipment Corporation (DEC), Sun Micro and NeXT Computer, Inc. all quickly

jumped on the Display Postscript bandwagon.

Apple officially declined to relinquish control of its system to Adobe. After all, it was looking to end what some must have considered ransom paid to Adobe for its interpreter ROM chips. Obviously, MS felt the same way. In July 1989, Bill Gates purchased Bauer Enterprises of San Jose, California. Essentially, this company makes one product—a Postscript clone printer interpreter. The pieces were now in place.

Debriefings

Now we have all the elephants dancing—Apple, Microsoft, IBM and Adobe. And the forest is shaking! Interesting indeed! What does all of this means depends on where your loyalties lie.

For all of Adobe's heavy-handed marketing, Postscript is the *de facto* industry standard. It is powerful and flexible. A tremendous amount of software, typefaces and professional type setting hardware are based on this standard.

Royal, on the other hand, is new and incomplete (as of this writing). Because of Apple's coy sidestepping of the question, it may not be as powerful as Postscript in its finished form. It does promise to bring high quality screen displays to the installed base of Macintoshes, as well as improved output to the installed base of QuickDraw printers. It will permit one set of typefaces to be shared between Macintosh and MS-DOS systems.

Steve Jobs has hung his hopes on Display Postscript to control the screen of the NeXT computer, as well as control his 400 dot per inch printer. Having seen and used (briefly) the NeXT, I can say this approach to screen control looks like a winner. When Apple insisted on going it alone with QuickDraw, Jobs had security in what appeared to be a *de facto* standard. In just one week, Apple acquired some very powerful allies, and we now have a true font war.

For all his "much ado about nothing" protests, John Warnock of Adobe is feeling the pressure. He has announced that Adobe will





Professional Manager

by Cindy Carter

Accounting software for the Mac, especially specific applications, have been slow in coming. It is exciting to see this situation starting to change. This review is of a package that even though specialized in nature fills the needs of many businesses. Professional Manager is an integrated financial system for architects, engineers, design firms, and other consulting professionals. It has been developed in an architectural/engineering firm and perfected over the last six years in the MS DOS environment. Ported to the Mac, but without any of the interface features, work is still being done. The completed Mac interface is scheduled to be finished January 1990. It has been developed in dBaseIII, which offers flexibility for changes and growth.

There are six functions, all in one

module. These are General Ledger, Accounts Payable, Accounts Receivable, Job Cost/Billing, Payroll, and Project Management. It is not so much the modules offered but how data are processed that makes this package different. Time/Billing data is handled in a way businesses need but seldom find available.

General ledger

The system supports either the AIA or ACEC Chart of Accounts. Existing accounts cannot be changed but you can add new ones. Multi-department and multi-company versions support up to 99 departments/companies. Income statements may be generated for each department. Balance sheets will be reported for the company as a whole.

Data from Payroll, Accounts Payable, Accounts Receivable, and Job Cost/Billing is sent to the General Ledger module into a journal in the General Ledger and is then posted. The field size accommodates up to 9,999,999.00. As with most good accounting packages, journal entries can be edited and changed before posting. After this reversing entries are needed to make any changes. The financial statements are printed in three formats: Year To Date, Budget vs Actual, and Year to Any Month for Income Statement and Current Month for Balance Sheet.

Accounts payable

Professional Manger supports up to 25,974 vendors. Data from vendor's invoices is enter into Accounts Payable and are then interfaced with Projects and General Ledger. Basic information is entered for each vendor including discount and Federal ID numbers. Each invoice can be distributed across up to ten expense accounts and ten projects. One or all invoices can be paid. Invoices can be selectively put on hold and then later released. Up to ten invoices for the same vendor are automatically printed on a single check. The system supports both computer and manual checks.

I have not seen one of its features in any other package; you can charge the expense against a project and then choose whether it should be billed or held as an unbilled expense for that project. Normally, applications require you to enter the expense for the vendor in Accounts Payable and then reenter this same information again in a Time/Billing application for billing to the client.

Accounts receivable

Client files contain the basic information as well as a credit amount for up to 25,974 clients. All client's invoices are kept as open items until they are paid in full. Adjustments, partial payments, and write offs may be made to the invoices. Statements and mailing labels are also supported. Manual invoice information can also be entered into this module.

Macinations (cont'd from previous page)

release the full font code so that other companies can manufacture true Postscript-compatible typefaces. Adobe had included "hinting routines" in its own type so that printing in small sizes would look better. These routines have, until now, been Adobe's proprietary secret.

Adobe announced, too, the imminent release of "Adobe Type Manager", an init that allows your Mac to use Postscript-compatible fonts to draw the screen, well in advance of System 7. [Ed.—beta copies of this have begun to show up, here and there. The reports are cautiously optimistic, but it should be noted that it works only on Adobe (Type 1) fonts.]

All these moves indicate further further and faster market penetration of Postscript as a means of discouraging old users from switching to Royal and encourag-

ing new users to choose Postscript over Royal For Adobe at least, these are interesting times. Perhaps a bit more so then it would prefer. But, hold on, the fun's just starting!

Table Turning

The table creation feature of Word 4.0 is one of its most appreciated new features. However, its formatting is peculiar to Word. You can't just cut and paste a table you've created into other applications like a display graphic or page layout program. Here's a tip from Eric Taub in the October *Personal Publishing*. A table can be saved as a graphic in PICT format.

Highlight your table, after turning off the "show hidden text" command from the Edit menu. Then hit Command-Option-D. This saves a copy of the table in the clip board as a Pict graphic that you can now save to the Scrapbook for future use or paste into another application.



The general types of reports include, Aged, Open Billing, Cash Receipt, as well as reports listing basic information on each client.

Job cost and billing

The Professional Manager supports up to 9,999 projects and 99,999 in a multiuser version. 99 phases and 99 tasks are allowed for each project. Budgeting can be done by phase including direct labor, direct and reimbursable, and overhead expense. Actual costs can be tracked by phase and project. Data from Time Sheets, and Accounts Payable go into this module and may then be posted to Projects, Accounts Receivable, and General Ledger.

The most unusual part of this application is in its billing methods and invoicing formats. There are eight billing methods and twenty invoicing formats. Methods and rates are defined by project but may be changed as required.

Billing Methods

- Cost Plus Fee
- Percentage of Completion Billing

- Stipulated Sum Billing
- Hourly Rate Billing
- Multiplier Billing
- EPA Cost Plus Fee Billing
- Square Foot Billing
- Task Rate Billing

Invoicing Formats

- Cost Plus Fee - Three different formats
- Hourly Rate Billing - Two different formats
- Fixed Fee or Lump Sum Billing
- Percentage of Completion
- Percentage of Completion by Phase
- Salary Cost Multiplier - Two different formats
- Variable Cost Plus Fee - Three different formats
- Hourly Rate Billing - Three different formats
- Task Rate Billing - Three different formats
- Square Foot Billing

Projects can be kept on an active or non-active status. A three-digit Experience Profile Code can be entered for each project. Before invoices are produced, a prebilling report can be edited and changed. In house printing charges and

CADD charges can be added to the billings. Multiple reports are available for projects and phases, active or not.

Project Management

Project Management gathers information from Time Sheets and Accounts Payable interfaces to Projects and then prints reports important to management. These reports may be obtained for a single project, all projects for a project manager, and for all projects. Reports include:

- Project Completion Date Status
- Project Budget Variance
- Project Summary
- Project Progress
- Percentage of Contract Completion
- Experience Profile Code

Payroll

Time sheets are entered into payroll interfaces with employee files and General Ledger, and paychecks can be printed through the system. Multi-state payrolls are supported for up to 999 employees. There are 30 user defined employee

classifications in the single version and 100 in the multiuser version. Payroll frequencies can be weekly, biweekly, semimonthly, or monthly. Employee reimbursables can be automatically added to the pay checks. Time entries are entered verified and posted to projects and billing thus making this module function as a time/billing application.

Summary

The Professional Manager offers a good basic accounting package plus the special requirements needed by Architects, Engineers and Design Firms. Actually, many types of consulting professionals will find this software ideal in its Time/Billing function. Optional features include report writing capabilities and spreadsheet analysis. With a price tag of \$2,500, this package has definite promise. If you want to be on the edge of technology and participate in the review of this interface project, contact the author.

Cindy Carter is President of Automated Accounting Solutions, Inc. She can be reached for questions at (301) 924-3502.

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A typeface primer

by Jim Donnelly

This space may from time to time be devoted to some thoughts about type. Not specifically about desktop publishing typography (I don't see myself using terms like FOND and NFNT very often), but about type itself. And the type considered is likely to be that which has proved itself over many decades (or many centuries) rather than that which is currently in vogue—unless, of course, they happen to coincide, as they often do.

I admit to strong prejudices about type, and one of them will be made abundantly clear below. Some of my other prejudices can be summarized as:

1. Readability—NOT Legibility—is paramount. By that I mean that some type may be extremely legible in the sense that it's totally obvious which letter is which, even at a great distance—yet sitting down and reading the stuff in book-length dosages will give you a swift headache or a major case of the willies. Type of this kind should be restricted to eye charts. My principal criteria are that a great book face must be good for the long haul and must quickly retire to the background and become, so to speak, invisible; and a great display face must at least not be a constant irritant.
2. Simple is pretty.
3. Older is prettier.
4. Downright crude can sometimes be downright beautiful. In support of this last contention, I'll probably be providing some examples from books designed by Bruce Rogers of Indiana, using such types as those presented to the Oxford University Press by Dr. John Fell in 1667–1672, and perhaps some pages produced by the likes of Aldus Manutius and Giambattista Bodoni.

I. Closer to Home

When the LaserWriter was originally introduced it carried four "fonts" on board: *Times*, *Helvetica*, *Courier* and *Symbol*. Assuming that *Symbol* was included for the benefit of those who think of the Macintosh as a real computer—mathematicians, engineers, etc.—and assuming that *Courier* was included for the benefit of the timid (who didn't want anyone to know that their correspondence wasn't produced on a genuine IBM Selectric)—there was room for only two additional faces. In a situation like that, choosing *Times* and *Helvetica* represented the only sensible course of action for Apple and Adobe to follow. Discussing these two faces is a chore that has to be faced sometime, so it may be a good idea to get it over with as quickly as possible.

II. Helvetica

Although sans serif letterforms have an extremely long history, going back, in fact, to the earliest alphabetic writing in Phoenicia and ancient Greece, and although some sans serif faces have long been available for the printer's use, they haven't always been very popular with the masses. American printers traditionally refer to sans serifs as "Gothics," thereby confusing many of their customers who tend to apply this term (with more reason) to the Germanic "text" or "black-letter" faces, including the various forms of "Old English." Printers in England and on the continent, however, call sans serifs "Grotesques." It's tempting to think that this term was either the cause or the effect of the disfavor in which sans serif type was held. But, of course, there may be no connection at all, though for long periods during the course of printing history, the disfavor appears to have

been quite real.

But the situation began to change—and apparently for good—in the 1920s, when the Bauhaus in Germany theorized that type, as well as all other aspects of design and architecture, should reflect the modern ideals of practicality and efficiency. As a means to this end, one objective was to produce type of perfectly uniform line weight and to strip away unnecessary embellishments such as the serifs and sometimes even the capital letters. Among the designers who spurred this new movement were Jakob Erbar and Rudolf Koch. Eric Gill in England made a notable contribution to the sans serif revolution with the face known as Gill Sans (1928). But the face that probably came closest to meeting the standards of the movement was Paul Renner's Futura (1927). Futura and its clones, such as Airport, Spartan and Twentieth Century, and similar faces like Tempo became widely used, for example, in newspaper headlines during the next few decades and helped to break down such resistance to sans serif type as there undoubtedly was.

In 1954 Max Miedinger designed a new kind of sans serif for the Haas foundry of Basle, Switzerland. It was originally called Haas Grotesque, and it distinguished itself by basing its proportions on those of the classical Roman letters rather than on the principles of pure mathematical beauty that were constantly eluding the Bauhaus designers (who always seemed to have to compromise their ideal of perfectly uniform lines for the sake of aesthetics). The response to the introduction of this type, later called Helvetica, was electric—or what passes for electric in the world of printing. After a delay of only a couple of years it had crossed the Atlantic, and had begun to be seen in almost every conceivable context. Entire books were set in it, an extremely unusual thing to do with a sans serif type and one for which Helvetica seems very badly suited (if you *must* do it, Hermann Zapf's Optima seems a vastly better choice); it became almost unthinkable to use anything other than Helvetica for airport signage; corporate logos by the

hundreds converted to Helvetica virtually overnight.

C&P Telephone Polaroid 3M

Was it truly a classic design, or was it a manifestation of that trendiness that tends to make me queasy? At a certain point during the mid 1970s, I was trying to decide whether I had become sick of Helvetica or not. It turned the corner for me and became a great type in my estimation when I compared it to another face that was enormously popular at the time: Ed Benguiat's 1973 reworking of Souvenir, a face designed in 1914 by Morris Benton. The Compugraphic Corporation was calling Souvenir an indispensable addition to a type library, along with Times, Helvetica, Garamond, Baskerville and a few others. What struck me was that of these eight or ten faces only Souvenir stood out—it didn't seem to belong in such heavyweight company, and the reason was that it obviously stood no chance of ever becoming invisible to the reader. It would be forever intrusive—its name and its design proclaim it to be allusive and old-fashioned, and it seemed to me clearly destined for short-term popularity. Helvetica, on the other hand, was perfectly at home and it became more and more apparent that it's a face for the ages, fit to launch a thousand ships.

The C & P Telephone Company had recently abandoned its olive green trucks with their lettering in Adrian Frutiger's Univers, and had turned to the current multicolored

truck design with Helvetica signage. I had been giving this change the jaundiced eye, thinking of it as just one more surrender to the onslaught of Helvetica, but it suddenly seemed to become a welcome change. It could have been so much worse; it could have been Souvenir.

And the more invisible Helvetica becomes, the greater it seems to be.

III. Times

The Times font—Times New Roman—is purely and simply a wonder of the world. For any number of reasons.

First, it's suitable for any purpose whatever. I've seen it used effectively on billboards and business cards, and it's easily the face that I've seen most often in books, rivaled only by Garamond with Caldonia a distant third. At the turn of the century, the printers' rallying cry was "When in doubt, use Caslon!" I'm not sure I've seen *anything* in Caslon since the death of the Washington *Evening Star* (where it was used, I think, only for editorial page headlines), and Times Roman is obviously the default typeface of our day.

Second, it's greatly economical of space (as befits a newspaper type) while remaining quite wonderfully legible.

Third, in addition to its high degree of legibility it has a correspondingly high degree of readability. Souvenir (see above) is probably equally legible but has—for me—a readability quotient near zero.

Fourth, it can serve to evoke virtually any atmosphere except squalor. It's at its best when called upon to lend an air of dignity; for example, Times Roman is, above all else, ROMAN. There's hardly a better way to impart the majesty of

Imperial Rome to a text than to set it, generously letterspaced, in all-caps Times.

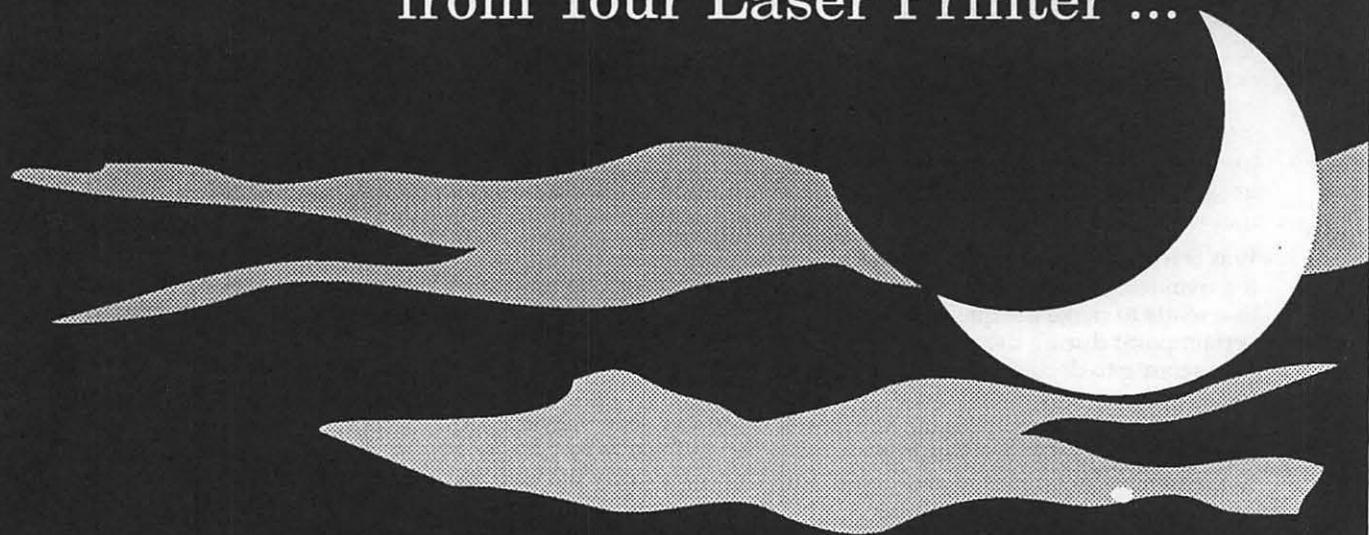
Fifth, it SEEMS to have been, wonder of wonders, designed by a committee! Books on typography that don't hesitate to identify Fred Goudy as the designer of Copperplate Gothic will unanimously hedge on the design of Times Roman. They all say that it was designed for the *Times* of London in 1931 "under the supervision of" Stanley Morison. I've so far been unable to determine just what that means. Morison and Beatrice Warde were the two greatest English typographic scholars and historians, but I don't know whether either of them ever personally drew a letter. Still, whatever Morison's personal contribution to the project may have been, it must be admitted that he was a tip-top supervisor. If his contribution to Times Roman was no more than that of Walt Disney to the later movies, that certainly takes nothing away from him, and may in fact elevate him to a level of genius equal to Disney's. I just wish I knew the name(s) of the artist(s) who actually drew the type.

IV. Whom to Consult

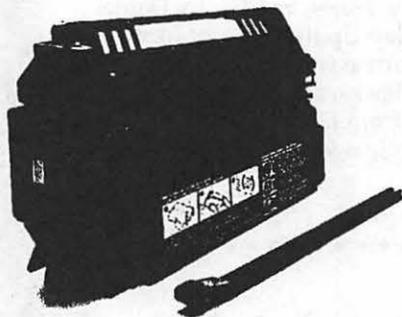
The major sources that I keep on hand for information about these matters are: *Art Directors' Book of Type Faces* by J. I. Biegeleisen, *Type and Typefaces* by J. Ben Lieberman, *The Alphabet and Elements of Lettering* by Frederic W. Goudy (all bow), *Paragraphs on Printing* by Bruce Rogers, *The Book: The Story of Printing and Bookmaking* by Douglas C. McMurtrie, and (the final authority) *Printing Types: Their History, Forms, and Use* by Daniel Berkeley Updike. Except for the McMurtrie work all my copies are paperbacks, and most of them came from Dover Publications, a bottomless well of such material. ♣

.....
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.....

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 John Wiegley after 2:15 (703) 437-1808
Accounting Packages
BPI Programs
 Jaxon Brown (301) 350-3283
BPI & Howardsoft (Tax)
 Otis Greever (615) 638-1525
Dollars & Sense
 Barry Fox (717) 566-6709
Home Accountant
 Leon Raesly (301) 220-0717
APPLE SSC
 Bernie Benson (301) 951-5294
AppleWorks
 Ken DeVito (703) 960-0787
 Bob Martz (301) 795-5689
 Ray Settle (301) 647-9192
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ProTerm
 Alan Levy (703) 578-4621
Talk is Cheap/Pt. to Pt.
 Barry Fox (717) 566-6709
DataBases
dBase II
 John Staples (703) 255-6955
dBase II&III, Data Perfect
 Leon Raesly (301) 220-0717
Profiler 3.0
 Barry Fox (717) 566-6709
Dvorak Keyboard
 Ginny Spevak (202) 362-3887
Hard Disk
CMC (not CMS)
 Barry Fox (717) 566-6709
Corvus Omninat
 Tom Vier (BBS) (301) 986-8085
Corvus
 Leon Raesly (301) 220-0717
Sider
 Jaxon Brown (301) 350-3283
 Otis Greever (615) 638-1525
Languages
Applesoft
 Louis Biggie (301) 967-3977
 Peter Combes (301) 251-6369
 Leon Raesly (301) 220-0717
 John Love (703) 569-2294

Integer Basic
 John Wiegley after 2:15 (703) 437-1808
 John Love (703) 569-2294
Machine
 Ray Hobbs (BBS) (301) 490-7484
 John Love (703) 569-2294
Pascal
 Michael Hartman (301) 445-1583
C and TML Pascal
 Harry Erwin (703) 758-9660
Operating Systems
Apple DOS
 John Wiegley after 2:15 (703) 437-1808
CP/M
 Art Wilson (301) 774-8043
ProDOS
 John Love (703) 569-2294
 John Wiegley after 2:15 (703) 437-1808
ProDOS 8 and 16
 Barry Fox (717) 566-6709
RWTS, Disk structure
 John Wiegley after 2:15 (703) 437-1808
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 Leon Raesly (301) 220-0717
 Terry Prudden (301) 933-3065
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 Morgan Jopling (301) 261-3886
Utilities: ProSel
 Barry Fox (717) 566-6709
Word Processors
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 Walt Francis (202) 966-5742
Apple Writer 11
 Dianne Lorenz (301) 530-7881
 Leon Raesly (301) 220-0717
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 Leon Raesly (301) 220-0717
Mouse Write
 Barry Fox (717) 652-2899
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 Peter Combes (301) 251-6269
 Gene Carter (202) 363-2342
Word Handler
 Jon Vaupel (301) 593-3316
Word Perfect
 Henry Donahoe (202) 298-9107
Word Star
 Art Wilson (301) 774-8043
 Michael Osborne (301) 894-8903
General
 Barry Fox (717) 566-6709
General/PaintWorks+

Paul Tarantino (703) 455-7670
//e Upgrade
 Morgan Jopling (301) 261-3886
APW
 Andy Gavin (703) 734-3049
 Jim Frison (703) 525-9395
Deluxe Paint II
 Rich Sanders (703) 450-4371
GS BA SIC
 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/Multiba
 Jim Frison (703) 525-9395
816 Paint/Writ'rs Ch.El
 Andy Gavin (703) 734-3049

- 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
 Kevin Condon (Columbia) (301) 652-0303
 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
 Lou Pastura (Annandale) (703) 560-1477

NOVEMBER

- 1 Wednesday**
7:30 PM dPub SIGPEPCO
7:30 PM Mac Programmersoffice
- 2 Thursday**
7:00 PM Columbia SliceColumbia
7:30 PM GameSIGoffice
- 6 Monday**
7:30 PM PI-SIGoffice
- 8 Wednesday**
Ad Space Reservations deadline—December Issue
7:30 PM Board of Directors Meeting.....office
7:30 PM Database SIG/4D.....Computer Factory
- 9 Thursday**
8:00 PM StockSIGoffice
- 11 Saturday**
9:30 AM Annapolis Slice Anne Arundel Co.
9:30 AM Frederick SliceFrederick
Music SIG Call
- 13 Monday**
 Editorial Deadline—December Issue
- 15 Wednesday**
Ad Copy Deadline—December Issue
7:00 PM WorksSIGoffice
7:30 PM AV SIG.....Bethesda-Chevy Chase HS
7:30 PM Excel SIGoffice
7:30 PM Fed SIG.....Call
7:30 PM HyperTalk SubSIG.....Arlington
- 18 Saturday**
8:00 AM AppleWorks SIGCall
- 22 Wednesday**
7:30 PM Apple III SIGoffice
- 27 Monday**
7:00 PM Apple IIgs SIGBethesda
- 30 Thursday**
7:30 PM Business SIGoffice

Note the meeting date changes!
No meeting at all in November (December 2 serves for both months) and the semiannual garage sale happens on the 16th—just in time to load up for Christmas.

WAP General Meetings

Monthly General Meetings are generally held on the 4th Saturday of the month at the Uniformed Services University for the Health Sciences Building B, affectionately known as USUHS. It is located at 4301 Jones Bridge Road on the campus of the National Naval Medical Center in Bethesda.

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 the Monday after the regular WAP meeting; alternates between Dolley Madison Library in McLean and Thomas Pyle Intermediate School in Bethesda, 7:00 PM. (October meeting at Dolley Madison Library, October 30.)

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; sometimes an additional meeting just after the regular WAP meeting, at noon.

AV SIG (arts and video) October 25, 7:30 PM, Auras Design, 1746 Kalorama Road, NW. Call Rob Sugar (202) 745-0088 or Nancy Seferian (202) 333-0126 for further information.

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

November

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

Meeting Notices

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.

MusicSIG 2nd Saturday; call Bill Bittle, 236-9898 for location and times.

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).

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.

DECEMBER

2 Saturday

8:00 AM AppleWorks SIG USUHS

9:00 AM WAP General Meeting (Nov.) USUHS

noon AppleWorks SIG USUHS

noon Telecomm SIG USUHS

4 Monday

🕒 Editorial Deadline—January Issue

5 Tuesday

7:30 PM PI-SIG office

6 Wednesday

Ad Space Reservations deadline—January Issue

7:30 PM dPub SIG PEPCO

7:30 PM Mac Programmers office

7 Thursday

7:00 PM Columbia Slice Columbia

7:30 PM GameSIG office

9 Saturday

9:30 AM Annapolis Slice Anne Arundel Co.

9:30 AM Frederick Slice Frederick

Music SIG Call

13 Wednesday

Ad Copy deadline—January Issue

7:30 PM Board of Directors Meeting office

7:30 PM Database SIG/4D Computer Factory

14 Thursday

8:00 PM StockSIG office

16 Saturday

9:00 AM Garage Sale Call

18 Monday

7:00 PM Apple IIgs SIG Call

20 Wednesday

7:00 PM WorksSIG office

7:30 PM Excel SIG office

7:30 PM Fed SIG Call

27 Wednesday

7:30 PM Apple III SIG Call

7:30 PM AV SIG Party Call

28 Thursday

7:30 PM Business SIG office

December

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

Note the meeting date changes!

No meeting at all in November (December 2 serves for both months) and the semiannual garage sale happens on the 16th—just in time to load up for Christmas.

Macintosh

General	
Jeff Alpher to midnight	(301) 630-2036
Bob Wilbur	(703) 379-2960
Donald Schmitt	(717) 334-3265
David Gursky	(703) 522-8345
Art & Video	
Nancy Seferian	(202) 333-5817
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
David Gursky	(703) 522-8345
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
David Gursky	(703) 522-8345
Adobe Illustrator	
Ling Wong	(703) 378-5102
Canvas	
David Gursky	(703) 522-8345
Bill Baldrige	(301) 779-8271
Tom Parrish	(301) 654-8784
MacDraft	
Bob Wilbur	(703) 379-2960
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	
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
Telecommunications	
General	
Allan Levy	(301) 340-7839
David Gursky	(703) 522-8345
MacTerminal	
David Gursky	(703) 522-8345
Versaterm	
David Gursky	(703) 522-8345
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) 750-944
WriteNow	
Bill Baldrige	(301) 779-8271
WordPerfect—Mac	
Curt Harpold	(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 Applns	
Mark Pankin	(703) 524-0937
Modems-General	
Allan Levy	(301) 340-7839
Hayes Smartmodem	
Bernie Benson	(301) 951-5294
Practical Peripherals	
Allan Levy	(301) 340-7839
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

**Volunteer
on the Hotline**

**Call us
(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 //
Dick Grosbier	(Frederick) 898-5461	Apple //, GS, & Mac
Harold Polk	(Frederick) 662-6399	Apple //
Tony Svajlenka	(Frederick) 694-6209	Apple //
Doug Tallman	(Frederick) 663-3268	Mac
Scott Galbraith	(Monrovia) 865-3035	Apple // & GS
Stephen Hadley	(Mt. Airy) 831-5353	Mac
R. Carl Myers	(Smithsburg) 824-7122	Mac & GS

Tom's Math Drill

by Phil Shapiro

When the Apple II was introduced in 1977, the only software available was software you wrote yourself. One of the first applications written for the Apple II was a simple math drill, written by an Apple employee for his daughter.

Well, times have changed, and these days there are hundreds of different math drill programs available. You can buy programs with cartoon-like animation, fireworks-like sound effects, and all kinds of other "bells and whistles." But there's something to be said for a program that is comparatively simple in operation. Tom's Math Drill is a public domain program that is elegantly simple and fun to play too. No fancy animation here; just good old-fashioned learning.

For starters it should be said that Tom's Math Drill is not an all-purpose arithmetic drill (A good all-purpose arithmetic drill is the shareware disk titled, "Math Invaders," reviewed here in a previous column). Rather, Tom's Math Drill is best used by junior and senior high school students to sharpen their mental-arithmetic skills.

The program is a timed math drill, where players are asked to type in the answer to two-digit and three-digit addition and subtraction questions. As soon as the question is presented on the screen, a large on-screen timer begins counting down from 15, representing about 15 seconds. If you answer the question correctly, you earn the number of points remaining on the timer. After you solve (or don't solve!) your math question, it's the next player's turn. Players keep taking turns until the round is over.

Here's how Tom's Math Drill works. First, the program asks you how many players would like to play. A maximum of five can play. Secondly, the program asks you

how many problems you want in the competition. You can type in the number 5 or 10. If you want to be silly, you can type in a number over 1000. The number of questions in the competition is really not that important, because when you're done with one game it's easy enough to start another.

Thirdly, the program asks each player to type in their name. There's no law against typing in an assumed name here (as long as you stay within the bounds of decency). It adds a certain element of fun to have kids type in a pseudonym or nickname.

Once everyone has typed in their name, the game starts. The first player better be ready to step up to bat. If you're playing with two or more players, it's suggested you move the chair away from the front of the computer. Musical chairs and timed-math drills don't mix very well.

The problems are randomly created addition and subtraction questions. A good math student should be able to do every question in their head. Teachers and parents would do well to go over some tips and techniques for agility in mental arithmetic.

For example, if the program were to ask you the sum of $42 + 29$, the fastest way to get at an answer is by grouping the tens-digits, and then grouping the ones-digits, and then adding the sum of the groupings. Hence: $42 + 29 = (40 + 20) + (2 + 9) = (60) + (11) = 71$. Easy enough if you know the trick.

Get the kids to look for "lucky happenstance" in a question. The sum of $24 + 25$ should take less than one second, after you realize this sum must be one less than $25 + 25$. Likewise, $178 - 79$ is a simple enough question, after you realize the answer must be one less than $178 - 78$.

To give you a better picture of the look of the screen, the math question is presented in the middle of the screen. A large clock ticks away the seconds (and points) in the lower third of the screen. The player's names and scores are recorded in the top third of the screen.

Since the game takes the form of a competition, it should be stressed that kids should only play this game with others of roughly equal mathematical ability. Nobody likes to lose, so you have to be careful just how you use the program.

Of course, the program can always be played as a simple drill, by a single player. You can challenge yourself by recording your best score for five questions, and your best score for 10 questions. Over a few weeks of practice, students should see an improvement in their scores.

Other possible uses for this program include intra- and inter-scholastic math competitions. Everyone enjoys a good competition between the best representatives of different classes in the same grade, or different classes from different schools. Enlightened teachers might even want to showcase their own mathematical prowess (or lack thereof) in an inter-faculty competition.

Mental arithmetic can be fun, especially when you hone your skills to the point where it is no longer a big chore. The thrill of happening upon a "lucky happenstance" question can be as exciting as in any other game of chance. The Apple's random number generator serves eminently as well as a pair of unpredictable dice.

Tom's Math Drill is an undeniable gem, and its author deserves our sincere thanks. However, the program has one small down-side. The game is punctuated with too many annoying beeps.

Apple IIc and IIc+ users can easily remedy this situation by turning the sound down (or off) with their hardware controls. Apple IIGS users can likewise turn down the sound from the Control-Panel, (accessed by pressing the <Control> <Apple> <Escape> keys.



Omnis 5—more than a database face-lift

by Fred Haislmaier

Let's be honest about it: Omnis 3 was an ugly duck of a database on the Mac. It was strong on power and speed but reminded too many people of what they didn't like in MS-DOS machines. Consequently, a lot of people were turned off and forgot all about the good points of Omnis.

Blyth Software introduced the newest version of its database, Omnis 5, in April and started shipping in June. I felt the need to take up pen (keyboard) after reading Bob Pulgino's excellent review of ACIUS 4D 2.0 in the August issue of the Journal. What follows are my comments on the evolution of a database for the Mac that I have used for the past five years. If there are any questions, I can be reached at (301) 464-6910 or on Paul Heller's Twilight Clone BBS.

In the Beginning

The Omnis line was introduced to the Mac community in July of 1984 by the British firm Blyth Software. The original program came in 2 levels for the Mac: Omnis 2, a multi-user flat file program and Omnis 3, a multi-user relational database programming environment.

From the start, there was competition. Odesta introduced Helix at the same time and pushed the visual aspect of the Mac that Omnis didn't have. No, Omnis was not a direct port from the DOS world. It used menus, windows and buttons just like all other Mac programs. The problem was that you couldn't include pictures on the screen or change the font of different fields as you could in MacWrite. Many people said "gack" and forgot about it. They missed the novel

features of Omnis 3 like the ability to treat 10 separate files as 1 data file. This was needed at the time because the largest hard disk you could buy for the Mac was 45 Meg and sometimes you had more files than 1 hard disk could hold.

The Upgrades

The next 5 years produced little change to the program interface. Omnis 3.25 was an enhanced multi-user version supporting MacServe and several of the first network programs. The way that screens and reports were made and programs were written stayed the same, but the amount of information that could be shown at one time increased. The enhancement of some editing features, such as cut, copy and paste for program lines (sequences as they were called) meant that programming was much easier. Even running on the old 512 Mac, Omnis was impressively fast in record recovery.

With the introduction of Apple File Protocol (AFP) Omnis 3.3 was introduced. The new version again increased the number of available file formats and layouts. It also supported network programs like TOPS, 3COM and AppleShare.

Nothing much changed after that. Blyth introduced Quartz in the IBM arena and upset many Omnis owners because now the IBM version was better than the Mac version. Omnis developers still had to create ingenious ways to use check boxes and radio buttons (replace the system Monaco font with a doctored one). Help prompts had to be special text fields that could be made to appear and disappear. Still, no pictures or fonts.

The Next Step

Omnis 5 is a database come of age. The addition of the graphical interface that was missing before complements all the other features of this database. Omnis's strengths fall into 3 areas: Track Record, Power and Connectivity.

Track Record—Omnis has been with the Mac from almost the beginning. The people at Blyth have consistently listened to the needs of developers and have demonstrated a continuing development program. When people complained that all the developers were in Britain, Blyth consolidated and set up a programming shop in California. This company is not noted for big promotions or development by leaps and bounds. Improvements to Omnis have trickled into the marketplace. It should be noted that Omnis has always handled multiple users.

Power—With the ability to handle 2560 Meg of data in 10 separate files, Omnis 5 rivals a mainframe. Large amounts of information can be held and accessed with little loss of speed. Do you want to put a library card catalog system on disk? No problem. What about that large direct mail list? That can be handled also. What about speed over LANs? You don't need expensive networks to run Omnis efficiently. Any 1 Meg Mac will work nicely. True, the faster the network the faster the program runs.

Connectivity—Omnis 5 supports connections to many machines and software packages both on and off the Mac. Eight different data export and import formats allow you to send information to your favorite spreadsheet, charting program, or custom application. You can tie into a mainframe with the CL/1 language built into Omnis 5 or connect via modem using the standard serial port drivers. Mac and IBM versions of Omnis 5 are available; however, the IBM version must run under MS Windows. Unlike other database programs, Omnis 5 not only allows data to be shared by different machines on the same network, but the same application written on a Mac can run on an IBM without

change. No more fine tuning to change to a different computer.

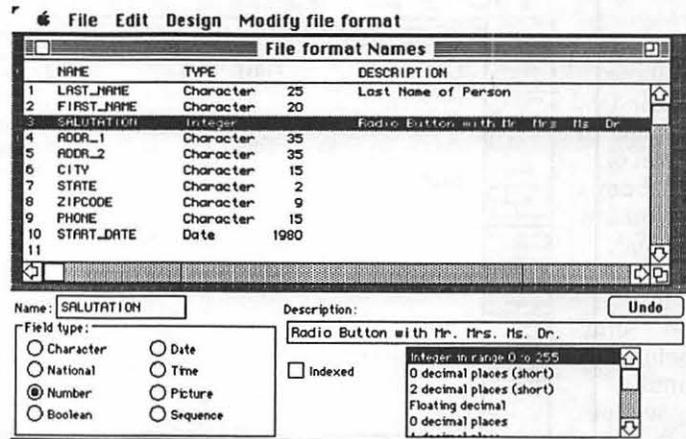
The Structure

For those who are tired of having umpteen files hanging around to run a database (FoxBase, dBase and 4D 1.0 are like this) the 1 data file approach of Omnis has mixed blessings. On the good side, you don't have to worry about whether you have all the needed files. Record updates are directed to only 1 Mac file. On the down side, files can become quite large making backups take forever (we *do* back up, don't we?). The program designer should take this into consideration and allow for exporting data that is no longer needed so that this information can be archived.

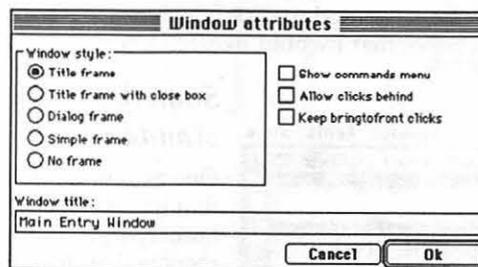
Application development is fairly straightforward. An application has 5 major templates: File Formats, Windows, Reports, Search Formats and Menus.

File formats are what hold the structure of the data. Figure 1 is an example of the file format editor and a simple name & address layout. The following range of data types can be stored:

- Character—up to 32,000
 - National—up to 32,000
 - Number: Integer from 0 to 255
 - Number: 0 decimal (short)
 - Number: 2 decimal (short)
 - Number: Floating dec
 - Number: 0 decimal
 - Number: 1 decimal
 - Number: 2 decimal
 - Number: 3 decimal
 - Number: 4 decimal
 - Number: 5 decimal
 - Number: 6 decimal
 - Number: 8 decimal
 - Number: 10 decimal
 - Number: 12 decimal
 - Number: 14 decimal
 - Boolean
 - Date: 1900-1999
 - Date: 1980-2079
 - Date: 2000-2099
 - Time
 - Picture
 - Sequence
- These various options allow information to be stored as efficiently as possible.



Windows allow all information to be entered or edited. There are five choices for window types (see figure 2). The "keep bringtofront clicks" option allows for windows that act like pallets. When you click on the window, not only will that window become the top window, but the click is passed to any button that is on the window under the mouse click. The "No frame" window can be used to quickly replace large pieces of information on the screen. No frames are true windows without a border. The method of laying out fields in a window is graphically based. The open box on the lower right of the



tool pallet is used to place fields (see figure 3). Any text object can be assigned a distinct font. One nice feature is a menu item under the "Edit" menu called "Paste from file...". If you are currently entering information in a picture field, this item will present a standard 'getfile' dialog listing all available PICT files. If you are entering information into a long text field, the 'getfile' dialog will show all available text files. This menu completely bypasses the clipboard or scrapbook that other programs use and makes updating picture fields a snap.

Reports are like windows but are used to send information to the screen, printer or other devices. Figure 4 is an example of the report editor. Color or black and white pictures can be placed on the report as either static objects or database records. Omnis 5 supports up to 9 levels of subsorting for information in each report.

Search Formats are used to make selections from a large field of information. If you had a series of name & address records, you could select all names that start with 'H' and have a zip code of 20769. You can chain 50 separate items to make one search. These formats are called from procedures and act as filters for selecting information.

The biggest change in Omnis 5 from previous versions is how the menus and instruction sets are handled. Omnis 5 is now truly menu driven. Sequences (as they used to be called) are not connected with layouts. Procedures (the new name) can be written for each item in a menu list. Not all menus or menu items have to be shown. Some are never seen by the user; they are only there for other sections to call them. The procedures are used to open and close windows, select reports, searches and outputs, handle calculations and call other procedures. A special section in the window editor allows the programmer to write a special procedure for each field in a window. This is useful to screen data as it is entered.



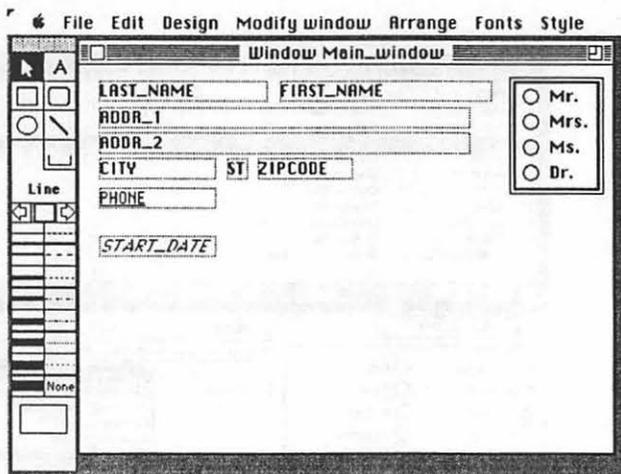


data as it is entered.

Many nice features have been added to Omnis 5. You can replace the standard File and Edit menus with your own or call for a DA from a procedure. You can control the baud, parity, databits and handshake for either of the 2 serial ports. Sometimes you want multi-user ability without paying for it. A complete set of XCMD's is included to allow HyperCard (or Supercard) programs to read and write records to the database. Omnis 5 lets a single-user version start as a multi-user for this kind of access. Using the HyperCard interface carries a penalty: speed of record recovery is slower than running under Omnis and you must have at least a 2 Meg Mac. Eight list structures can be held in memory for scrolling access to information.

What's Missing?

Omnis 5 supports most of the standard graphics of the Mac. Standard object primitives can be used to enhance the appearance of windows and reports. Eight bit color is also supported. Some items



however, can create something that looks very close to and functions the same as a popup. Charting and graphics manipulation are also missing. Omnis has always concentrated on the database and not the extras. Blyth felt that there were too many good charting packages for the Mac and didn't want to compete with what was already on the market. This is why they support fast export formats for DIF, SYLK, dBase, Lotus, comma delimited, tab delimited and one line per field. Your database information can be sent to any program that understands formatted text files. Unfortunately, picture fields cannot be printed to disk which is a feature that I would like.

Something non-standard

One area of Omnis that has always bothered programmers is that there is no free-form programming. Omnis is not like Basic or Pascal. You can't just start typing in code. Omnis has always used a pick and place method of programming. You select an operation for a line and a special dialog box gives you the

options available for your selection, then you select the next line.... This approach can frustrate some people because it seems slow, but the

benefits are realized in decreased debugging time, smaller application code and faster execution of code.

Help for the Inexperienced

Omnis 5's abilities really shine when used by an experienced programmer, but Blyth hasn't ruled out the average Joe either. A program called Omnis Express lets the inexperienced user quickly generate a program for his or her needs. Express automatically creates entry windows and reports which can be edited later. In a matter of minutes, the novice can create a working database.

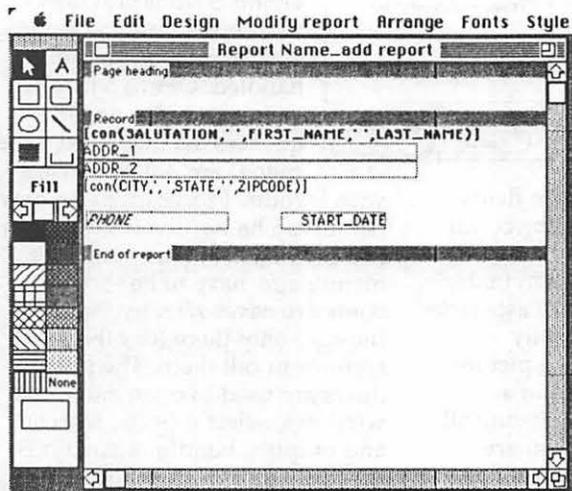
Summary

Omnis 5 is a very powerful database programming environment on the same level as 4D 2.0 and Foxbase 2.0. Anyone experienced with Omnis 3 should have little trouble learning the basics of Omnis 5. Documentation is greatly improved from previous versions. Indexes in the manuals are fairly complete. If you are looking for a database that is well proven and has the power to handle large amounts of information, Omnis 5 is a good choice. As with all high end databases, Omnis 5 is not a simple program. If you need a database that will run on both Macs and IBMs, Omnis is the cleanest solution to date. Anyone looking for a powerful database manager owes it to themselves to look at Omnis 5 a little closer. As a closing thought, could Omnis' connectivity with the DOS world be an indication of things to come? 🍏

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Blyth Software
2929 Campus Drive
Suite 425
San Mateo, CA 94403

Tel: (415) 571-0222
Copy Protection: None
Compatible: all 1 Meg Macs
Support: 60 day phone no 800 \$95/year afterward
Price: \$695 list / ??? street



are missing. Popup menus are not supported because duplicating these under Windows is next to impossible. A clever programmer,



Connectivity

Networking computers in Surrattsville

by Michael R. Cady

I. Overview

During the fall of 1989, Surrattsville High School began an administrative networking project funded by a grant from Apple Computer of Maryland and supported by Computerland Mid-Atlantic, formerly Clinton Computer. Because of the success of the multi-curricular instructional computing endeavors begun in 1985, administrators at Surrattsville were interested in applying computer technology to solving some of the problems associated with running a modern high school. The Macintosh was chosen because of its shallow learning curve and the relatively inexpensive cost of networking, especially in a multivendor environment.

Phase I of this project involved placing a Macintosh Plus on the desk of each vice-principal and guidance counselor. These were connected with PhoneNet connectors and twisted-pair cabling to a 20 Megabyte Mac SE file server running Appleshare software. Two Apple IIs, an IBM PC/AT, and an Apple IIgs previously used in the administrative suite were also connected to the network. In addition, a second 20 Megabyte hard drive was installed to serve the three Macintosh computers in the Technology Demonstration Center. Two primary software packages are used: Microsoft Works (an integrated word processor, data-base, spreadsheet, drawing, graphics, and telecommunications package), and HyperCard.

Phase II will extend the network to the remaining secretarial staff, the principal, the Media Center, and the Special Education Department. Phase III will involve placing Macintosh computers on the desks of teachers, beginning with the teacher coordinators. (Phase IV will

include the rest of the staff.) Besides administrative tasks such as attendance and grade reporting, the Macintoshes will be useful in classroom presentations, demonstrations, and simulations. Phase IV will involve an overlap between administrative computing and teacher productivity.

II. Background:

The County

Prince George's County enrolls approximately 103,000 students in 171 elementary and secondary schools. An IBM 4381 serves as a host mainframe for central office administrative computing and three Hewlett Packard 3000 mainframes are used by 20 high schools and 24 middle schools for attendance, scheduling, and other administrative functions. In addition, students have access to the HP 3000 for programming classes. During the course of a regular day, an administrator might have to access both mainframes to obtain various types of student or parent information. Student histories, including test scores, are stored on the IBM while current schedule and attendance information resides on the HP 3000.

County Mainframes

Both mainframes have advantages and disadvantages. The HP 3000 uses a command-driven interface, requiring the user to know something about what commands to enter at the prompt. While it may take longer to learn to use the system, it is quite powerful with respect to information accessed and reports generated. A query language is available for knowledgeable users. The IBM, on the other hand, is menu-driven and supported by the data-processing office. While the menus are easier

for a novice to negotiate, the "printscreen" keyboard option is currently the only report option available. This can be a disadvantage when long lists of names must be downloaded. Both mainframes are supported by staffs willing to program them for specific user needs. Some information is duplicated on the systems, such as Maryland Functional Test data, and one can choose which system to retrieve this information from.

Mainframe - LAN Consideration

An important administrative consideration about mainframe data must be addressed early: how much and what types of data should be downloaded to the schools and what should remain on the mainframes? This question can be answered in different ways, depending on the size of the schools and the school systems. A school system with relatively few schools and lower enrollments could easily do scheduling on a local PC, but larger schools with thousands of students need mainframe power. For our school, daily attendance and scheduling were two functions best left on the mainframe. It would seem a needless duplication to update a local attendance database and then have to re-enter that data on the mainframe. Likewise, given the power of the schedule program running on the HP, it would not be productive to use a micro-based scheduling program with much less power. On the other hand, address, phone number, and similar data need be stored at both the school and mainframe sites, since this is the type of information that administrators need most frequently and it is much quicker to search a local database for it than to log on to the mainframe.

Printing of reports is also a consideration. A line printer attached to a mainframe can print four-across labels for the entire school much faster than could be accomplished at a local site, even considering time to transport the labels from the mainframe to the local school site. Planning is required to use the facilities of a mainframe most effectively, and the same is true for



a schedule conflict matrix. However, single page reports or some updated class lists and such could be printed at the local site.

The School

Surrattsville High School is a comprehensive high school of 1,100 students in Prince George's County, Maryland. Surrattsville High School has been involved in educational uses of computers for many years. Prior to 1985, students taking computer-related math or business courses accessed the HP 3000 mainframe using HP terminals. A lab of 15 networked Tandy TRS80 Model IIIs was installed in 1981 and replaced with stand-alone Tandy 1000 computers in 1986. Sixty-five Apple IIe computers were added during a school renovation in 1985 and have since been networked with a 70 Megabyte Digicard File Server. These Apples are distributed in two labs and at stand-alone stations in the Media Center and selected classrooms. During 1988, a 30 station IBM PS/2 Model 25 lab was installed with a Model 80 file server using Novel Netware software. An Educational Delivery Systems Coordinator oversees the use of these computers. Most of the school's resources had been directed toward the use of computers in instruction, teacher productivity, and media center applications. No significant resources had been allocated for administrative computing before the grant from Apple was received.

In response to a growing need to address computer-related issues, a Technology Demonstration Center was created at the school and a full-time research person assigned. In effect the school has become a laboratory for designing and implementing technology-related instructional models.

Prior Administrative Computer Use

Prior to the installation of the network, access to the HP 3000 was through an HP 2392A "dumb" terminal with a Thinkjet printer. The IBM mainframe was accessed through an IBM PC/AT with a 19,000 bps modem using software

emulating an IBM 3101 terminal. This PC/AT is connected to a Century 3000 scanner from NCS and is used for grading local Criterion Referenced Tests. The head secretary used a stand-alone Apple IIe with an extended memory card, and one vice principal, one guidance counselor, and the registrar/guidance secretary each had Apple IIe with printers. One Macintosh had been purchased and was used by the Educational Delivery Systems Coordinator for a variety of activities, including desktop publishing, terminal emulation, and other administrative functions.

III. The Project:

Choosing a Network

Several factors were considered before the administrative network was established. First we wanted to integrate as much of the hardware already on hand as possible. We wanted to provide desktop access to student record information from both mainframe computers and to increase the productivity of the secretarial, administrative and guidance staffs. We also wanted to do forms processing, especially for those forms that are filled out most frequently, and we wanted to do all these things with a small amount of training time and with the least amount of disruption to those who were already using computers productively. Finally, we were concerned about sharing data and internal security. Using AppleShare networking software, we were able to accomplish all of these goals and provide relatively transparent data sharing between Apple, Macintosh and MS/DOS computers.

Why AppleShare?

AppleShare networking software allowed us to do all the things we wanted. The secretaries who were using Apple IIes were able to continue doing so and were freed from having to use floppy disks—both Apple IIes and Apple IIgses can be "diskless" workstations when attached to an AppleShare network. Apple IIgses have built in Appletalk capability, but the IIes require an additional Appletalk card and a memory expansion card

if Aristotle menu software is to be used. Menu software allows users to access programs without having to learn any DOS commands and is probably a prudent purchase. With the addition of an Apple PC local talk card to one of the PC/AT slots and appropriate software, the MS/DOS machine can access files on the network as well as share printers and modems. Cost constraints required the use of single-drive Macintosh Plus machines for the administrative and guidance personnel. Since only one drive was available, software had to be loaded over the network. While this takes longer than having the software loaded at the workstation, it is preferable to the disk swapping which single drives usually require. Finally, AppleShare allowed the sharing of mass storage devices, modems, printers, print spooling, CD ROMs and other peripheral devices.

Some consideration must be given to the organization of the network before it is installed. At Surrattsville, administrators and guidance counselors work in teams and are assigned students alphabetically. On the network, these teams are grouped and allowed "read-only" access to each others' documents. Thus, each user has his own password and "folders" which only he or she can alter. Each group can read each other's files but cannot alter them. Secretaries have their own group and folders, as does the Technology Demonstration Center. Only the network administrator has access to everyone's folders. Establishing the groups and assigning access should be worked out in advance to ensure smooth network operation. One nice feature of AppleShare is that users and groups can be created while the network is operating. Our network is on twenty-four hours a day every day and has only been shut down to add new hard drives.

Software Considerations: To keep training time to a minimum, only two primary software packages were considered for adoption—HyperCard and Microsoft Works. HyperCard, supplied with each Macintosh, allowed us to make customized applications specific to



our needs. HyperCard is user-programmable and can be adapted to several uses. Specifically, we use HyperCard's database capabilities to create individual student "stacks" for each administrative-guidance team. (All data are fictitious.)

network. Less than one hour was necessary for training to use this application.

Microsoft Works is an integrated package with shared commands between the modules. This means, for instance, that saving files in the database module is the same as

order. The finished database was used to export the data to HyperCard.

After the database was built, word processor and drawing modules were used to duplicate the suspension form. The database can be searched for a particular student, and his data "mail-merged" into the suspension form. (Figure 2.) The administrator includes the date, reason for suspension, and time of the re-admittance conference, and prints out a form ready for the principal's signature. In the past, a note had been sent to the secretary who then pulled a schedule card and typed the form. A process that required a minimum of two people and took as long as 20 minutes now involves only one person and takes less than five minutes. It took only two 1.5 hour in-service sessions to train the users to search the database and do the mail-merge into the form. Users have extended their word processing capabilities to create a school letterhead, teacher observation forms, memos, conference and discipline reports and other types of applications.

Another 1.5 hour in-service and a "user's guide" allowed the users enough knowledge to dial and sign on to the HP mainframe and download attendance, schedule, and grade data. A telecommunications file called "Dial HP" stores all the terminal information needed to call the mainframe. Passwords and other commands are in the step-by-step user's guide. Since mainframe access is required less frequently, a user's (NOTE to FP: to conform to previous usage.)guide is necessary for most users. The guidance counselors use the telecommunications module to download their weekly bulletins from the central office as well as to access the Guidance Information System on the HP. Since the IBM mainframe requires terminal emulation, in-service accessing of it has not been done yet. But with the exception of the guidance secretary and the test coordinator, the information stored on the IBM is not needed as often. The PC/AT is still used for this process. After everyone has been trained this summer, desktop access to the IBM will be available to all.

Surrattsville High School

Last Name			First Name		Middle Name	
BORKOWSKI			DARYL		JERMAINE	
Grade	Sex	Student ID#	Home Phone		YY/MM/DD	
09	M	000025789	555-6852		740323	
Head Of Household Name		Work Phone		Birth date		
ALLEN		289-2390 0000				
Address		Apt				
9624 HOMESTREET				CLINTON MD 20735		

Monday, September 3, 1988
Daryl was apprehended smoking behind the gym. Parent contacted detention for tuesday 9/4/88

Friday, September 8, 1988
Daryl was sent out of his English class for being disruptive. Conference with student. Two days detention assigned 9/11 and 9/12.

Wednesday, September 13, 1988

Figure 1. The HyperCard Administrative Stack

Each card in a stack, containing student information downloaded from the mainframe, is equivalent to 5X8 cards used for recording student contacts. One primary advantage is that with the computer, one never need run out of space. One scrollable field for student contacts holds practically an infinite amount of data. By clicking two on-screen buttons, a report of all listed contacts can be printed for conferences. We have also been able to update mainframe information more frequently because of these stacks. Whenever a student is seen by an administrator or guidance counselor, the phone numbers and addresses are checked. If these have changed, they are updated on the spot, and a note is sent to the data processing operator who corrects the mainframe database. We plan to extend our HyperCard application so that it will dial the mainframe and download frequently-needed information. The HyperCard student stack is the most frequently-used application on the

saving them in the word processor module. In addition, the pull-down menus and point-and-click interface is intuitive and fairly easy to learn. Microsoft Works has six modules: word processor, database, spreadsheet, drawing, graphing, and telecommunications. Besides being able to "cut and paste" between modules, Microsoft Works has a built-in mail-merge capability.

The first application we built with Microsoft Works was a student database with student addresses, phone numbers, and fourteen other data fields. The sixteen fields we chose reflected the information needed to fill out a suspension form. After a year of experience, we have decided to include more than those sixteen fields in next year's database. The information for this database was downloaded from the HP 3000 computer using an application designed for this purpose. In essence, the file was built on the mainframe using several data sets and downloaded using XModem protocol and opened in the Microsoft Works database. After that, the fields were named and arranged in a suitable



These two software packages are the workhorses of the network. However, some specialty software works in the background to make the network easier for users.

Suitcase II, by Fifth Generation, allows fonts and DAs which would not fit on the startup disk to be loaded over the network. Since these load automatically at startup, most users are unaware of their existence unless a font is not available. An add-on to HyperCard, Activision's Reports, allows the printing of more elaborate reports than are available from HyperCard. Again, once implemented on the network, this program is transparent to the users. Timbuktu by Farallon allows the network administrator to take over another user's computer from his own to either demonstrate a procedure or fix an error. Symmetry's HyperDA allows users to "look at" another user's data without being able to change it. A control panel device called Broadcast is used to send messages across the network until such time as an electronic mail package has been installed.

The desktop communications of the network makes it particularly attractive for us, giving an administrator practically instant access to any data. Of course, this requires both software and hardware—in this case, the Shiva Netmodem, which differs from regular serial port modems. It is attached as a peripheral device on the network, just like printers and hard disk drives. This means that a single Netmodem can be shared by several people on the network. We installed two Netmodems and phone lines for the entire administrative suite. The cost is divided by all the users on the network so the Netmodem is extremely cost-efficient.

The Netmodem is accessed through the Macintosh Chooser and can be made to emulate the modem port even though it is connected through the LocalTalk (printer) port. It is transparent to the software, and no special commands have to be issued after the initial selection in the Chooser. Software is available to make the Netmodem available to the PCs on the network

but not the Apple IIs. When the Netmodem is in use, a small set of modem LED lights is displayed in the menu bar to help the user follow the progress of a call. Modem sounds are routed through the Macintosh speaker. The effect is as if the modem were inside the computer. If a modem is busy it sends a message for the user to wait until it is available. The Netmodem 2400 can also act as a connection to remote stations. Remote Access software supplied with the modem allows a user at home to dial the network with a modem and sign on through the Chooser. The network icons appear on the desktop of the remote station and the user is on line just as if he were physically present. Although access through the modem is slower because of transmission speeds over the phone lines, a network printer could be chosen, the files sent and the report printed by the time one arrives at work.

Under Development

We are currently creating a database of student test scores and related data. The mainframe programmers created the files and sent them to the school on floppy disk in ASCII format. We then created the database, entering local information including reading scores, SIT and SST information, and other types of data created at the local site. This database is maintained by the reading specialist and will be updated yearly to incorporate new students and delete graduates. Using floppy disks, mainframe programmers will supply new student data, to be pasted into the database. Much of this data is in hard format in the guidance office files, but its availability over the network will help counselors and students arrange scheduling. The information will also be available to special-education teachers and the SIT and SST teams.

IV. Conclusions and Future Plans

Phase I has succeeded beyond our expectations. Users caught on quickly and began using the

computers in a much broader range of activities than had been anticipated. Virtually all the users have become "evangelists" who regularly "testify" to the ease and usefulness of the network. The success of this program has created a need for more Macintosh computers for the school. In fact the favorite "whine" at Surrattsville is "I want a Mac."

A brief summer workshop is being planned to acquaint the users with other aspects of the software, particularly graphing, spreadsheet usage, and the drawing module. Macintosh basics will be reviewed and maybe even some HyperCard scripting will be taught if enough interest is shown. Also during the summer, other forms will be created in the work processor, a referral database will be linked to the HyperCard student stacks, and other applications will be streamlined.

Phase II, extending the network to all secretaries, the media center and the Special Education Department, should commence in the Fall. Plans are being made for Phase III and IV which will expand the network into the classroom for teacher-related activities. We also want to upgrade the file server to a Macintosh SE/30 with a larger-capacity hard disk drive and install a LaserWriter II in the administrative office suite.

Applefest '89 report

by Ray Settle

Well, another Applefest is in the books and for the first time there were no big product announcements or other historic news.

Jean Louis Gassée delivered the keynote address attired in the traditional Apple II sweatshirt. (That is one way to determine just which conference one is attending; if the Apple personnel are wearing sweatshirts or T-shirts, it's an Apple II conference; if they are wearing suits and ties, it's a Macintosh conference.) Jean Louis rambled on about the virtues of Visi-Calc and warned against programming in BASIC because it rots the brain. He championed Pascal as the savior of the microcomputer.

Yes, the upgraded IIGS motherboard is the new computer Scully promised for the year. No, the Apple II will not be phased out (as long as people keep discovering it even when it's not marketed). No, there will not be a laptop GS. No, there is no bridge machine for the II and the Mac. Yes, the GS is a great machine. No, there is no upgrade path for the new motherboard. (Most GS owners should be glad there isn't, since an upgrade would render many of their programs and add-on boards obsolete.) No, a memory expansion board is not included with the new package. (Add \$130 everyone, since the new motherboard only has 1 meg, and most new GS software requires 1.25 meg.)

Jean Louis demonstrated that both the old and new GS could run at the same speed when equipped with the new system software (which is now 5.02) and explained that the boot time for both would be almost indistinguishable.

Perhaps the biggest news was the confrontation at the conclusion of Jean Louis Gassée's keynote address between Jean Louis and Bill Mensch from Western Design

Center (the designer of the IIGS's 65816 chip). Mensch announced that he could supply a 12 MHz chip for the GS. An irritated Jean Louis mentioned something about a reliable production run and suggested that the topic be addressed in his office at a later date. Mensch persisted and was escorted out of the room while Jean Louis exited.

When approached later on the floor by this writer, Mensch showed a printout that supposedly demonstrated that his redesigned chip could function at 8, 10, and even 12 MHz. Mensch said that he would license the chip to anyone who would like to manufacture it, including Apple.

This writer was left to his own imagination as to why Apple was not jumping on this technological advance that would surely save the IIGS from its torpid speed problems until a gentleman at the Applied Engineering booth reminded me that I still have not received the 7 MHz Transwarp GS chip due to reliability problems. The only conclusion I can draw is that the failure rate on the faster chips is unacceptable to Apple. After further discussion with some CompuServe buddies, we reached a consensus that the faster chips were probably so unreliable that Apple chose to go with the slow chip and higher reliability rather than sacrifice their reliability and credibility with the faster chip. What good is a faster chip if it will only work half the time? How many trips back to the Apple dealer would a customer be willing to make before demanding a refund?

After those fireworks, the rest of the fest was a little anti-climactic. A few new and interesting but not earth shaking products emerged. Applied Ingenuity displayed a nifty little internal hard drive for

the Apple IIc and IIc+ along with a battery backed up RAM card, much like the Ramkeeper, for the IIc's. The hard drive replaces the internal disk drive while the RAM card functions like a normal memory expansion card in the IIc.

Claris made news by their perverse refusal to participate in an Apple II show even though they produce the two most popular programs (AppleWorks and AppleWorks GS) for the Apple II. Several Claris employees were conspicuously present on the show floor but were careful to indicate that they were not official representatives of the company. It seems that marketing at Claris has inbred with marketing at Apple to produce brain damaged offspring that can only stand one flavor of Apple. AppleWorks sold millions of copies and even knocked Lotus out of the number one spot once with no advertising. It seems that the Apple II is doing that now also, and its sales are fueling the ongoing improvements in the Macintosh line while the Apple II line is left to rot at the end of a very long tree limb; the same limb many Apple II developers now find themselves and their companies sitting on.

Speaking of developers, Barney Stone, Roger Wagner, Tom Weishaar, Mark Simonson, and a number of other developers managed to wrangle a meeting with some top level Apple people at lunch one day. This writer just happened to stumble into the meeting and caught a little of it before some stern looks and lowered voices persuaded me to relocate. I later learned that Barney and company had gotten some assurances from Apple of continued marketing support for the Apple II. One wonders just how strong that support can be when the marketing folks were not at the meeting and did not attend the open meeting of the developer's association on Sunday. Those fellows must be so busy building helicopters that no one gets to see them, not even Jean Louis who repeatedly said that marketing was not his job and he could not speak for them. Now we know who really holds the power at Apple! Even Jean Louis is afraid of marketing!

The Apple party was sparsely attended but well provisioned. There seemed to be more Apple people than conferees (the party was primarily intended for educators), but Dr. Gifford did get a chance to practice his speech for the next day.

Getting back to the conference, the exhibitors were fewer than the Spring fest but those that were there seemed upbeat about the Apple IIGS market. Fanfare exhibited some of its French imported arcade games with good graphics and speed. CMS was present in a big way pushing its

hard drives for the II and the Mac. Dan Lambert was there again showing that an Apple II could run a HyperCard look-a-like. Beagle Bros. released its TimeOut series for AppleWorks 3.0 to everyone but Beagle Buddies, so don't call up your Beagle Buddy just yet. (They did provide an excellent breakfast for the buddies, though.) Dave Gair had a booth for his newly formed AppleWorks Programmers Association and tried to sell ProSel, TIC, and his own MBE with limited success. It was suggested that the low prices of these great programs probably turned some buyers off. Apple chose to introduce the new

Mac portable (luggable) at this Applefest. It was easy to get to see it since nobody seemed that interested in it. The display is fantastic and the trackball mouse is innovative and functional. However, it only has a 68000 chip in it even though the Apple rep said that something special was done to it to make it better than an SE. It is cute, though.

Most of the conferences were well attended since most presenters ran out of handouts early on. InCider hosted a truly entertaining program patterned after a famous TV quiz show. Prodigy announced their new program for the Macintosh. No, they will not support the Apple II GS since they will only support a system that will grow with them into the nineties. Those who signed up for a free Prodigy package were rewarded the next week with a free package for the IBM!

The traditional user group breakfast featured group discussions rather than the usual corporate pep talk. We were informed that it was budget time at Apple and reminded about how expensive tech notes and video tapes are to make and distribute. The user group budget must have been all used up in the Spring, since the attendees at this breakfast did not get the little user group pins that are usually handed out. There were door prize drawings for some software from various vendors (good for the budget since they cost Apple nothing). One Mac user group president won a copy of AppleWorks.

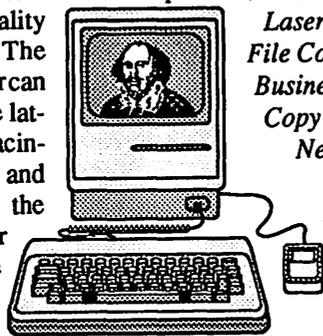
The real hit of the fest were the Winkies, a small simulated computer chip that can be programmed to wink with red, green, or red and green eyes. They started off costing \$5 but could be had in the shadows for a buck. Just about everyone had one.

The show wrapped up with a promise from Cambridge that there would indeed be an Applefest in Boston this Spring (May 10-11?). If the number of vendors who participate gets any smaller, the next Applefest could be held in Faneuil Hall. This Applefest was noticeably less exciting than previous ones (maybe this writer is getting jaded). 🍏

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Flexical—automated appointment calendar

by Gary Hayman

While walking the aisles of the Boston AppleFest last May, I ran across a fellow demonstrating a soon-to-be-released product called FlexiCal. Little did I know it was Randy Brandt himself—of Beagle and UltraMacros fame. I was impressed with the program and immediately whipped out my checkbook and placed an order, since it was only the beta version of author Lester Simpson's program that I was watching and I was promised that the shipping date would be soon (Ha!).

Well, FlexiCal finally arrived the other day and I would like to tell you about it and share a few impressions with you. The program is really a TimeOut additive to AppleWorks and uses UltraMacros to do its magic stuff. You must have AppleWorks but you DON'T need UltraMacros for FlexiCal to work.

FlexiCal produces, on screen and on paper, three types of calendars that you might use in your business or personal life to be better organized. The Daily calendar is a classy template that you can fill in manually once printed. It provides room for appointments (by 1/2 hour increments), diary record information, expenses and things to do. No big deal here, you could do that yourself with a piece of paper if you wished. It is in the Weekly and Monthly calendars that FlexiCal, with its use of macros, excels.

When the blank Monthly calendar appears on the screen you activate a macro to begin automatic labeling. After answering on-screen questions concerning "month," "year" and "day the month begins," the macro takes over and labels each block of your two page calendar with the proper day and inserts appropriate titles. The

calendar is set up for you to enter appointments or events, things to do, and expenses in an easy manner. You don't have to scroll around (although you can) to get from date to date. Using a macro you just enter the date you want and "bingo" you are there. When there, you type an entry such as "4 pm meeting with David," "Mom's Birthday" or "Weekly Staff Meeting." If your staff meeting is on Wednesdays, you could, with a macro, instantly copy the information to all the Wednesdays of the month. If later, your meeting with David is changed to 4 pm of a different day, you can instantly relocate it in the calendar by using a macro. If appointments are cancelled, you can instantly delete them. You can immediately move from one section of the calendar to another to look at or to enter information. This includes the Things To Do List and the Expenses section. When printed on paper, one half of the Monthly calendar is on one 8" x 11" paper and the other half is on a similar sheet. These sheets are designed to be maintained in a three ring notebook, so when open, you view the entire month.

Appointment or events information

that appears on the Monthly calendar can be automatically transferred to the Weekly calendar with a macro. This is one of the best features of the program. The Weekly calendar is labeled in a similar manner as the Monthly calendar—by using macros. You can also enter appointments, events, things to do and expenses, all facilitated by using quick macros. As with the Monthly calendar, the printout is neat and professional.

The program contains a generous number of help screens and printable documentation on disk. It is not copy protected and comes on a 5.25" disk. Orders are placed through JEM Software, P.O. Box 20920, El Cajon, CA 92021. I paid \$15 for it at AppleFest, but that may have been a special show price.

I feel that if you are not in business and don't have to keep appointment calendars, your only use for this program would be to play around with it. However, if you are a busy business person with many appointments and schedules to keep track of, especially if some are repeated, this program is well worthwhile for you to look at. Even if you only produced blank templates for the month, week or day and copied them with your copier, you can, in the long run save money when comparing the prices of normal office supply store appointment books to the low price of FlexiCal. 🍏

The author is currently serving as Director-At-Large of the Pi Board of Directors, is Chairman of both the AppleWorks and Apple IIGS Special Interest Groups.

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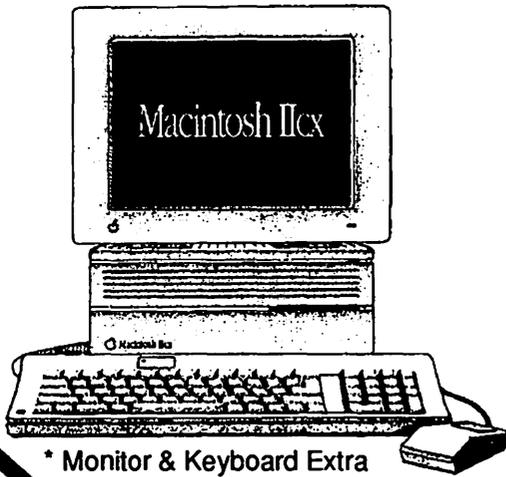
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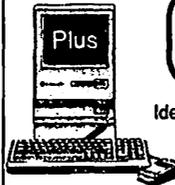
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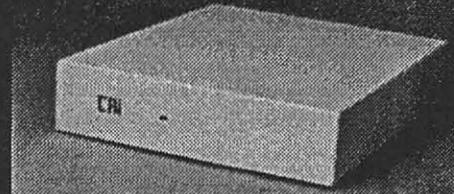
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SALE ENDS 11-30-89

by Paul Schlosser

Files recently uploaded to the TCS:

WAP members uploaded the following list of files to the TCS over the last 30 days. This listing represents only a small portion of the files available for download on the TCS. Call the Pi Office at 654-8060 to obtain a password, if you don't already have one.

File area 2 - Apple II Misc.

- 032 PT.RAM.SHK Patch for ProTERM 2.1/ProSel ram disk
- 031 APPLEFEST Report on Applefest
- 030 TIC.PI.LOGON TIC macro for Pi Logon
- 029 TIC.SCRIPT2.SHK Talk is Cheap dialing script

File area 4 - Apple II Utils

- 135 DISK.TEST.SHK Test disk speeds under ProDOS 8
- 134 INSPECTOR.SHK Sector Inspector 1.0.
- 133 DEARC2E.6.0.SHK DeARCer - handles 5 compression levels
- 132 CHG.FILE.SHK Change file attributes, v2.64
- 131 SQUIRT.SHK Program selector, version 1.8
- 130 IIPLUSHK14.XTX Update to II+ UnshrinkIT (v1.4)
- 129 DSR.SAMPLE.SHK Four Apple II utilities, shareware

File area 5 - GS Desk Accs

- 065 DTPAINT0.7.SHK DeskTop Painter NDA-revised & fixed
- 064 RINKY.SHK Screensaver-Moving Slinky-no burn-in

File area 6 - GS Fonts

- 003 FONT.SAMPL.SHK Font Samples

File area 7 - GS Games

- 034 DSGS.INFO.BQY Dark Castle GS Info
- 033 RETURN.WOZ.SHK Return of WOZ by Ravern Ware
- 032 BATTLESHIP.SHK GS Battleship.

File area 8 - Graphics

- 064 FLAGS.APF.SHK GS Clip Art from Applelink
- 063 CARTOON.APF.SHK GS Clip Art from Applelink
- 062 PSGS.GRAPH.4 PSGS Graphics
- 061 PSGS.GRAPH.3.SH Borders

File area 9 - GS Misc.

- 050 SYSTEM.5.02 System 5.0.2 changes
- 049 STAIRWAY2HEAVEN Stairway to Heaven in D-Tune format.
- 048 MOREMCSSNG.SHK MCS song files, odd bunch.

File area 10 - GS Utilities

- 062 PRINT.BUFF.SHK GS.PrintBuffer increase your print buffer
- 061 HTE.SHK HTE - Herb's Text Editor
- 060 UWGS.LAUNCH.SHK Utilityworks Launcher v.1.5
- 059 UWGS.SHK Utilityworks v.0.7—Requires GS/OS

File area 11 - AppleWorks

- 044 PAYROLL.SHK Payroll system, requires v3.0
- 043 SS.SAMPLE.SHK Sample spreadsheet for AW v3.0

File area 12 - ProSel Updates

- 038 PROSL16.7.9.SHK ProSel-16,

Version 7.9

- 037 INIT.PIC.SHK Source file for ProSel-16 InitPic
- 036 SHUTDOWN.SHK Shut-down command for ProSel-16
- 035 PATCHIT.SHK Patches for ProDOS w/ ProSel
- 034 HELP.SHK Help files for ProSel-16, v7.2
- 033 CMDS.SHK External commands for ProSel-16
- 032 TYPECMD.SHK TYPE.C command for ProSel-16 docs.
- 031 P16DOC.BNY Doc files for ProSel-16, v7.2

File area 14 - Mac Games

- 068 WHEEL.OF.FORTUN Same as the tv show
- 067 PONG Awesome pong game
- 066 SILICON.VOLEYBA Better than Brickles
- 065 DUCKHUNT Shoot lots of ducks

File area 16 - Mac Hypercard

- 114 CUSTHOME.SIT Custom Home/MiniFinder

File area 17 - Mac Technotes

- 024 SAMPLECODE.SIT Sample source code from Mac DTS

File area 18 - Mac Utilities

- 178 DISINFECT12.SIT Disinfectant 1.2
- 177 MACUTILALFA.SIT Files from WAP: Mac Utilities AAINIT
- 176 WATCHCURSORINIT New Watch Cursor
- 175 MAKECAL PostScript program - perpetual calendar
- 174 BMRANG.SIT cDev adds file/folder memory to dialogs
- 173 FHUP.SIT Font Harmony Updater 1.2.1
- 172 FOOTBALL.SIT Football pool XL SS
- 171 MOIRE.SIT V3.0 of Moire Screen Saver (Great Color)

File area 23 - Apple ///

- 011 A3.SIG.DESCRPT WAP/// SIG Description

In Defense of the Mouse(Talk)

by Dirk J. Bakker

I begin this writing with a copy of the TCS message/request which started this effort:

"I know that many here are high on Proterm. But many also use Mousetalk, including Mr. Raesly. I need a capable comm program with most download protocols that is easy enough for my wife and kids to use. I know I won't get a consensus. But give me some opinions, please. I like using the mouse, but am not hung up on it.

Thanks,
-John "

Many replies and threads were established, which for space's sake, I simply can not quote here (if you log-on the TCS, you'll see them, Conference 2, II Telecommunications, starting with Message 2425). Mostly, they revolved around the pros and cons of ProTerm (PT) and Mousetalk (MT). What I noticed most was how many "ideas" people held about the use of Mousetalk which were simply unfounded.

In the course of this article, I hope to illustrate some seemingly "unread or un-used" features of MT and to dispel what I consider to be "notions" about the program, but most importantly to point-out how we tend to develop these notions about various programs/systems in general.

One major "misconception" I read was that MT "had to have all or most of the dial-in or system settings entered every time you ran the program." I wondered if we could be talking about the same thing?

Which brings me to the concept of sessions. All parameters: system settings, word-format, phone number to dial, macros, etc. are supposed to be saved in a file referred to by the program as a

"session." Unlike other programs I've used (mostly in the IBM world), this means you can have as many "saved" defaults as you care to have files, or have storage space to keep them. This is done with the mouse the first time you want to connect with another system. You choose your settings, then, using either the mouse or the OA-W (Write) equivalent "save" the session as a file. You can establish a separate subdirectory for this. I call mine "CALL.BBS," where I have the program files, etc. in this same subdirectory. The files to log on the TCS I named WAP.TCS.VIEW and WAP.TCS.COPY. These files can start with the bare bones and as your "savvy" about the system you're logging into increases you simply edit them, then, OA-W (overwrite) them.

In response to a comment made about Mousetalk's MINISCULE review buffer, I downloaded the following macro component which I use in the session file WAP.TCS.COPY:

(Msg # 2,510 [II telecom., Conf. 2] WAP MT MACRO)

```
OA | Label |
      | Log-in |I/RAM5/WAP
I-[D#]"####.PSWD"[ABORTS]"
"<1 Main Menu>"B";Lreadcnf1

1 | readcnf1 | I+[]?"G";[]?"C";I-
[]?"2";readcnf2
      -2 | readcnf2 | [ABORTS]"
";I+[]?"G";[]?"C";I-
[]?"4";Lreadcnf4
      -4 | readcnf4 | [ABORTS]"
";I+[]?"G"[]?"LLog-off
      -5 | FileTrns | []?"Q"[Main
Menu]"F"
      -9 | Log-off | "O";[]?"Y"
```

The "I" macro command sets the filename to receive text to, namely, file /ram5/wap. (I usually have

Ramdisk size set to 128K in the control panel.) The "I+" command turns actual receive ON, "I-" OFF, to avoid garbage while changing conferences. You may wish to fine tune it further and avoid capturing more by relocating the points the commands are engaged or increasing their number. I've yet to want to re-read the Log-on messages, much less repeatedly save them. Note: this session is set up to log-in and off "UNATTENDED." However, if you want to reply to a message or anything else in the TCS, you can simply press ESC or RETURN and the macro disengages. After doing what you had to do, you can resume the macro by manually choosing the same or a new conference (i.e. "C 2") followed by pressing OA-2. You can also manually toggle the receive to file /ram5/wap with OA-I anytime. Once off the TCS, or, more importantly, an expensive ON-LINE service, you can use OA-G (to View) directly from MT to read the file captured, using the "spacebar" to stop scrolling, or, if you need to do extensive editing, a word processor.

The macro, starting with element "Log-in", pretty much works like this:

```
I/RAM5/WAP= "Set file
named WAP, in the /RAM5
volume to receive text to"
```

```
I- = "disengage text
receive,"
```

```
[D#]= "wait for character
string D# in password#," and
"####.PSWD" = "send TCS user
i.d." (#### should, of course, be
replaced with your TCS number,
PSWD with your password),
[ABORTS] = "wait for string
ABORTS in the Welcome mes-
sage," and " " = "send a
space to abort the message,"
```

```
<1 Main Menu> = "wait
for prompt on Main Menu" (note I
have chosen the angle brackets as
the "wait for" string delimiters,
because an angle bracket is used
within the string),
```

```
"B";Lreadcnf1 = "send a B
to choose the Bulletin Boards, the ;
(semi-colon) suppresses
the implied carriage return in any
send string, then, Link to macro
element 'readcnf1'."
```

Macro elements
 READCNF1, 2, 4 (OA-2, OA2, OA-4)

I+ = "Engage receiving text to file /RAM5/WAP."

[?]"G"; = "wait for the)? prompt, send a 'G', for Global read-all,

don't send a carriage return"

(meanwhile, Global Read-all shows me all the new messages on the Boards; I have previously "Z"elected in the main menu of the Conference; the macro is recording them into my HUGE "review buffer"),

[?]"C";I- = "wait for)? prompt, send a 'C', to change Conferences, disengage text send," "2";Lreadcnf2 = "send a '2', to choose Apple II Conference, then, Link to macro element 'readcnf2'" and so on until things change in element readcnf4, where once it reaches the Classifieds prompt, it Links to Macro element LOG-OFF (OA-9)

"O";[?]"Y" = "send 'O' for Off..., then answers 'Y' to prompt: Hang up, are you sure?

The session file WAP.TCS.VIEW differs from the one above only in that it does not have the "I" commands, so I choose between them depending on the amount of time I have to spend ON-LINE.

These macros combined with 3 excellent features of the TCS: 1. "Z"electing the boards you normally read, 2. "G"lobal read all, and, 3. Speed gains by "Zipped" systems, as well as the added speed of OS5 make for a very efficient visit.

It is true that for some purposes the "real" Review Buffer (8K) and definitely the Text Editor (35K) of MT are less than one would desire. But, in my experience, when I want to review something it is well within the 8K size. That is, I either recognize I want to re-read it right away, or it can wait. As to using the Editor, which, I presume, is done OFF-LINE, the "inconvenience" of launching a word-processor to edit an over-size file is not that great considering that what ever I want it for would eventually need to be done in one

anyway. For reading only, from within MT, using OA-G (View) is more than sufficient.

Another concern aired was MT's apparent lack of ability to set "defaults" for send, and receive files.

The following was my reply to that:

"If all goes well, this reply will have been sent to the TCS by my simply pressing OA-7 to evoke macro element to automatically send this text file from /RAM5/DJB, which in the macro element reads Sc /ram5/djb. This is the way, as best as I can decipher MT's manual, that setting defaults for Sending text is performed. The related commands are included in the Session file as was suggested to be the most optimal way. The various commands are as follows:

I/path/filename - establishes the "default" for Receiving text, I+ turns it ON, I- OFF; see prior discussion on this.

G/path/filename - does the same but uses Protocol. (Yesterday, to try it out, I downloaded a file from TCS File Transfer, which unshrunk just fine).

I have since "upgraded" my Session file to the TCS by adding a new macro element:

OA Label

```
6|download|"D";[?]"P";G/ram5/newload
```

In order of execution, it chooses "D"ownload (once I've "Browsed" and decided what I want), sets the "P"rodos protocol on the TCS and activates MT's own protocol and sends it to the logoff, etc.

Smh/path/filename establishes the "default" file for "S"ending a text file, the m determines sending mode, either "l"ine or "c"haracter, the h was a space as the line prompt,

```
OA Label-7|sendtext|Sc/ram5/djb
```

I simply prepare the text using /ram5/djb as the file name while off-line; then when I reach the appropriate place to upload press OA-7, the rest is automatic.

F/path/filename - as above, except

using protocol. I haven't had an opportunity to test this yet.

OA Label

```
-8|upload|F/ram5/upload
```

As above, I prepare the file and it activates MT's own protocol and sends file /ram5/newload after giving the file name to receive.

Also, there are other Macro commands to (Y) receive to Editor, (C) clear editor, etc. The only thing it does not do is allow you to input from the keyboard a specific name, so you have to rename the "generic" files. However, the file I received once "unshrunk" had the pre-packed name so that was unnecessary.

Note especially that once the macro element containing either of the I, Y, F, or G commands executes, the "default" subdirectory is set for that feature. But unlike a normal "default," it can be changed by the use of a different /path/filename from within another macro element.

One "notion" I, personally, held until more carefully reading the manual. That was, the "ritual" I had of launching MT.SYSTEM, and then, OA-L (load)ing the Session I wanted (usually the one for the TCS) and then, OA-K (call)ing the number: 3 steps. Turns out you CAN "launch" the Sessions themselves from Finder (or whatever program launcher you use). I have a special icon for the WAP.TCS session files, which appear on the desktop as soon as I "pop" the MT disk in. I, now, "double-click" the WAP icon and the program is loaded, the modem initialized, AND the phone is rrrring before I know it!! How's that for being able to set defaults!!!

Another "complaint" is that MT is "riddled" with major "bugs." In my own experience, naturally limited by my own hardware configuration, I have found that on the release of version 1.5 the "set up" procedure for my hardware got mussed in that the driver or definition for the Orange Micro ProGrappler does not work, as it did in the earlier version. I later discovered that if I chose the "generic" parallel card all was well.

Except for this workable "bug," I'd like to KNOW from those who talk of "major bugs" just what they are. I keep using the program and it works "in blissful ignorance."

Judging from my experience, the "comments" I've read in the TCS, it's *very* easy to establish "ideas" as to how something works.

1. You are anxious to start the program, so you skim the pages: "Hey the docs *encourage* you to 'go it alone'," and "After all these programs are so *easy*, why should you read the docs!"

2. You get it running "somehow," but you fail to WRITE DOWN the various settings which affect it. Not all settings are up to the program's control. Remember that "bug" one program developed after you had to change the Control Panel's slots, or system speed, to accommodate a certain Music program? "It must have been the 24-hour or more kind-of-bug."

3. After getting it running you go on to "other" programs and your barely- set-up program "suffices" to leave as is and you start thinking that is *really* all it can do.

4. *Bottom Line:* the manual barely gets read or not at all.

Being conscious of these tendencies, consider these suggestions:

1. As you get started with a new program skim the manual for the overall titles. Even if you don't yet understand the names of features or the concepts behind them, particularly their application, if you read the names they'll stick enough to make you curious about going back and re-reading them later.

2. By all means, *write down* not only the system settings, but your own observations at the time. They'll come in handy later on.

3. Make backup copies of intermediate settings. (I've managed to have to re-think and re-do a lot of work for failing to do both!)

4. Every chance you get *try* one or two new features, or press or click a new menu selection. Remember, that once you're an "expert" at the basic features, they're often the foundation for the more complex ones.

How many out there know or have

really used *all* the features of programs like DeluxePaint or WordPerfect? 'Nuff said?

If you're reading this, it's because I uploaded it to the TCS using OA-8.

And it worked! 🍏

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Apple II GS Multi-Kache Card

by David K. Page

So you wish you had the speed of a Porsche with your GS?? Well, if you have the TransWarp GS it is almost there.

I saw an ad in one of the popular magazines about the Multi-Kache Card and passed it by as not a problem that I had. I then read some questions and answers about the Multi-Kache Card on GENie. Now, speeding up my drives seems like it wouldn't be that big an advantage. I mean, I have a ROM disk and a hard disk and programs load very fast. But, on a whim I called Ohio Kache Systems and talked to their engineer. Since there is a 15 day, no questions asked, money back guarantee, I ordered the whole shooting match: the Multi-Kache Card with 1 Meg, the extended slot card, the SCSI adapter for the hard disk. This all comes to a total of \$660.

OK, what is it, you might say.... Well, it is a card that will speed up the access to your disk drives. Not just your hard disk but the 3.5" and 5.25" drives. How fast is it? Well, it depends on the operating system that is being used. I know that is vague, but, we all know how long ProDos 8 and GSOS take to load and there is a great time difference. It took me from my ProSel screen to ready-to-type AppleWorks with 53 TimeOut modules loaded on a hard disk a blistering 6 seconds.... Yes, 6 seconds. But, in GSOS from the ProSel screen to AppleWorks GS on a hard disk, loading all the modules, it took a little longer—15 seconds. I couldn't even get out of my chair let alone get that cup of coffee I normally go for after selecting AppleWorks GS.

Does it work on 3.5" and 5.25" drives that well? Wow, does it ever! I selected AppleWorks classic on a 3.5" drive and pressed the run key: under 3 seconds to choosing

the file to open. Most of the ProDos 8 disks booted from the 5.25" drives in under 2 seconds and a lot of them seemed as if the computer knew I wanted this file so it came up as my finger came off the reset key. All I can say about this Card is quick.

Before you go out and spend that hard cash, there are two sides to every silver lining—now the rest of the story.

Installation was interpretive at best. The manual explains a lot of things in detail, but leaves you wondering about the slot assignment. I had a problem where to put the Card for the best access of the 2 - 3.5" drives and the 5.25", not to mention the hard disk. Remember, the Card also has an extender to allow you to use more than 2 drives; this is a limit of ProDos 8 in a slot. So, I called the tech support line—remember those lines that no one answers, or they don't know anything about your problem because that guy is out to lunch—well, forget those old days. Ohio Kache Systems has one of the best if not the best on-line tech support groups, bar none. I was installed in only a few minutes after just one call. It did require some work though, as the SCSI Adapter connects to the Kache Card and makes it quite fat. I had to rearrange the slot configuration in my GS.

If you are running a TransWarp GS you have to have a special Eprom chip replaced. I called Applied Engineering and had it sent to me. The Multi-Kache Card will not run at full speed without it and hangs with the TransWarp in fast mode.

Once installed you notice some features that you may not like. The most important is that you no longer have the ability to have a RAM or ROM disk setup. The Card

itself is as fast or faster than the ROM disk for most accesses anyway. The major drawback that I saw with this card was that ProSel's backup/restore would not work, period. That is the only backup program available now that will back up and restore GSOS version 5.0. Ohio Kache sells an A/B switch box that will allow you to change between the Card and the built-in smart port in slot 5. This allows you to access the 3.5" and 5.25" from the smart port as normal drives and have a ROM/RAM disk, but without the speed of the Multi-Kache. With that setup ProSel works fine. But you must make those changes as you need them, not automatically. The reason that ProSel backup/restore doesn't work is that the drives on line are read into memory as soon as they are inserted into the drive. Then the next call to that disk is retrieved from memory, not from disk. ProSel will access the disk and eject the disk directly to speed up the operations. The Card isn't ready for the disk to be ejected so a "volume not on line" failure occurs, and ProSel terminates.

Something that has to be gotten used to is the constant access of the disks as the Multi-Kache Card reads the information. This is automatic in operation and allows you to continue with the program as it is being done. That means the drive light will be on as the disk is read into memory while you are typing or playing. It also means the write operation does the same thing. A save to disk takes a split second as it is read into memory. Then the Card will do a background write to the disk as you continue. Very distracting until you get used to it. But, it is very fast. The Card will not run copy-protected programs. It reads the disk into memory so the disk must be able to be read. The way around this is to de-protect the disk (remove the copy protection) and then it will run fine. The programs that died for me were Print Shop GS, MultiScribe GS (before they removed the copy protection), Arkanoids, Arkanoids II, and almost all the games. The same

*Continued on next page)

A Moscow Slice of Apple Pi?

by Phil Shapiro

The Washington Apple Pi has members from all over the United States, including such far-flung places as Alaska and Hawaii. We even have some members who use Apple computers in the heart of Africa, and in the Outback of Australia. Just last week the Pi office received news from one of its newest members — from the steppes of Russia.

Pavel Cherencov is a high school student in Moscow who uses both an Apple IIc, and an Apple II compatible of unknown origin. (Incidentally, an article in the latest issue of A2 Central discusses how Bulgaria is producing an Apple II compatible for distribution among the Eastern bloc of nations.) Cherencov wrote to the club with a long list of serious programming questions. The letter was referred to Ted Meyer, the chairperson of the PI-SIG (Programmer's Interface - Special Interest Group). Ted is taking pains to answer the questions as best he can, knowing that the future of East-West relations might turn on his response.

On the subject of computing in the Soviet Union, I read in the newspapers a few months ago that Gorbachev announced a "five year plan" to get one million microcomputers into Soviet schools by the year 1993. To me, the Soviets would have a lot to gain by going with the established K-12 standard micro in the United States, namely the Apple II.

First off, the software base is gigantic. Second, the Apple II is a machine of proven abilities in the field of education. Third, American educators have developed a great deal of expertise in using Apple IIs in schools. The American educational establishment stands ready and willing to help our comrades to bring computers into their classrooms.

These three reasons alone are enough to make the Soviets think twice about re-inventing the wheel. But what if the good folks in Cupertino jumped at this incredible marketing opportunity? What if Apple offered a good deal on an Apple II to every Soviet teacher,

and deep discounts for large purchases of Apple IIs for Soviet classrooms?

In the early 1980s, Apple initiated a distribution policy called "The Kids Can't Wait," where the company donated thousands of Apple IIs to schools all over California (This giant-hearted act of charity was helped along by some hand-tailored tax breaks, as you can imagine).

What if Apple Computer, Inc. were to initiate a parallel distribution policy for the early 1990s? What if Apple (along with some help from the federal government) started a new program called "Our Comrades Can't Wait"? The possibilities for such a marketing opportunity boggles the mind.

The truth is, about 280 million Soviet citizens are just itching to get their hands on a microcomputer. At this time there might be 100,000 micros in the entire Soviet Union. (By comparison, there are more than 20 million micros being used today in the United States).

So what do you say, Apple, Inc? Are you ready to blaze the pioneering path into new markets in this coming decade, and coming century? Do you dare to say "da" to such a bold idea? 🍏

(The author teaches computers in elementary school, and develops educational software for Apple II computers.)

Apple II GS Multi-Kache Card (cont'd)

programs ran fine with the protection taken off the disk. There isn't as much problem with the 5.25" disks as the 3.5" disks with copy protection. Most of the 5.25" disks that were protected ran just fine with no problem.

With the SCSI adapter installed I reformatted my drive to a 1:1 interleave. This gave me the best performance from the drive and made it sing. Just connect the adapter to the Multi-Kache Card and the drive cable to the adapter and you are ready to format and fly

like the wind.

What is the bottom line here, you might ask. Well, the Card costs as much as a new hard disk and takes some getting used to. But, oh the speed of this little devil is not to be overlooked for the drives you have now. If you don't have a hard disk or a TransWarp but need to speed things up a lot, this is the card to buy. But, at almost \$500 for just the Card it is a little chunk of change for a speed demon. Just some food for thought. 🍏

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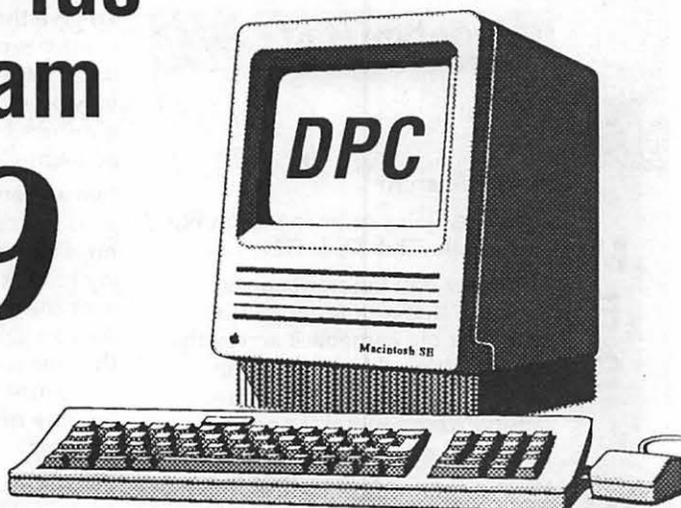
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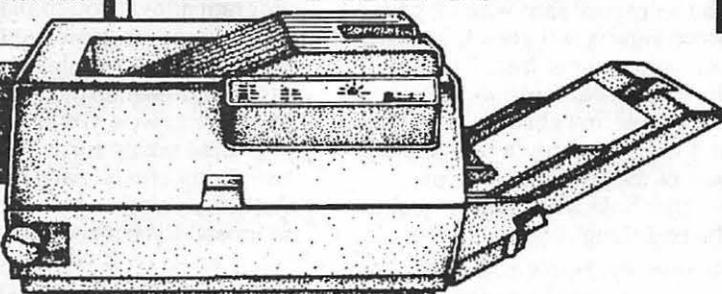
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Miniature Golf

by Phil Shapiro

Miniature Golf can be found on Big Red Apple Club Disk G24

The other day the newspaper reported that miniature golf is making a big comeback across the country. It's a wholesome, fun game — suitable for the entire family. And you don't need any great skill to have a good time.

Well, miniature golf is also making a comeback on the good old Apple II. A fantastic public domain version of miniature golf is available from the Big Red Computer Club. (More about the Big Red Computer Club later.) The game comes complete with water traps, windmills, and other lurking dangers. You can play against other players, or play against yourself. The program keeps track of your score as you navigate the pits and crevices of the ten holes.

Playing the game is really quite simple. You "point" your golf stick by using the left and right arrow keys. As you depress these keys, an arrow spins around on the screen. When your arrow is pointing in the direction you want the ball to go, you give the ball a hit by pressing one of the number keys.

To give the ball a gentle nudge, simply press number 1. To give the ball a giant whack, simply press number 9. All the intermediate numbers hit the ball with an accordingly corresponding force.

Just as you might expect, the ball goes careening if you give it a hard hit. The kid in you will take great joy in making the ball bounce all over the screen on your first game. As you gain experience and aim for the best score possible, your miniature golf skills will naturally become more refined and restrained.

What's amazing about this program is that it's very true to life. The simulation of real motion is uncanny. The golf balls move on the screen just as you would expect a real live golf ball to move. We're talking Newtonian laws of motion here.

The ball speeds up when it goes down ramps and goes splat when it falls into a water trap. And some of the holes have multiple sections to them: you first shoot for one hole, and then get thrown into another part of the screen to aim for another hole. This game is just like the real thing!

So anyway, here's a couple of free tips in playing the game:

- At the opening screen, when you see the words "Miniature Golf" in big letters, you need to press the space bar to move on.

- Hole number 3 is a killer. Do you see that revolving windmill right in front of where you want to go? Take a couple of small shots to steer around the windmill. Otherwise you'll be chasing golf balls into the next century.

On the other hand, you can really let loose on the first shot of hole number 6. Just aim the ball anywhere to the right. The ball has nowhere to go but down that nice curved, downward ramp. Isn't that fun?!?

At the end of the game, the score(s) for each player(s) is shown. Then the game starts over again with the first hole. A good score for beginners is about 65. If you score under 45 for ten holes, you're about ready to go on the professional miniature golf circuit.

One final note about playing this game with friends. Although the program allows you to play a multiple player game, you might want to opt for the single player game, and take turns on each of the holes. Otherwise you'll spend all your time taking turns with everybody else on each hole. And besides, miniature golf is not supposed to be a competitive heavy anyway. If you play the holes consecutively, and cooperatively, you might end up having more fun in the end.

Now, about getting a copy of Miniature Golf. The Big Red Computer Club (formerly called the Big Red Apple Club), allows non-members as well as members to purchase public domain software at very reasonable prices. The Miniature Golf program is on disk G24, Miscellaneous Games. The price is \$3.50, including shipping. Members pay the same price as non-members. (Nebraska residents need to add 4% sales tax.)

The address of the Big Red Computer Club is: 423 Norfolk Ave, Norfolk, NE 68701. You can also call B.R.C.C. at (402) 379-4680, and charge your order to Visa or MasterCard. You can also request a free copy of the most recent B.R.C.C. public domain catalog. The 1989 public domain catalog lists most of the recent public domain acquisitions, but not the entire B.R.C.C. public domain library. 🍏

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Balance of Power — the 1990 Edition (GS)

by David Wood

Who would've thought that multipolar geopolitical conflict would make a good theme for a computer game? Chris Crawford did, and despite his jaundiced attitude toward "conventional" adolescent-oriented action-and-not-much-thought computer gaming, he went ahead and wrote the sequel to his successful Balance of Power.

Balance of Power: The 1990 Edition is available for the GS, Atari, Amiga, and the I*M. On the GS, it requires 1 meg of memory, though an accelerator card and a whole lot of backup disks wouldn't hurt.

It works like this: You are in control of either the United States or the Soviet Union (your choice at the start of the game). In the course of eight years (1989-1997), you have to accumulate more prestige than your opponent, played by either the computer or another player.

One way to get prestige is supplying money and arms to other countries, who then like you more and your opponent less. Now, your opponent may call it a hostile move demand you take it back. This goes on, one side crying "Foul!" and the other responding "Tough Noogies." This escalates to the big complication in the game: The Button, explained below.

If a country doesn't respond to your kindness, then you have the option in the more advanced games to topple the old government and hope the next one is more predisposed to you. Any action like this is also likely to make some Button-fingers itchy.

Thirdly, if a shouting match does start up on the back channel between the Superpowers, and someone backs down, the backer-downer is going to lose face. The one who knuckled them under will gain some.

I promised a description of the Button. Consider this explanation of nuclear deterrent: Think of a very large checkerboard on a very

small table. The board hangs over all edges such that if one person is losing excessively, and he has an excuse, he can strike one side of the checkerboard, scattering pieces everywhere. Both players lose, but the one who was losing already doesn't care; just as long as he takes his enemy with him. That's not how the nuclear deterrent force works, but here, it might as well.

BOP:1990 plays in four levels. At the Beginner level, you basically give people money, send people troops, argue with the Soviets, and die in a huge fireball. At the Intermediate level, you get involved more in the politics of other nations. You can send diplomatic aid and destabilize governments on top of the rest. At Expert, you can impose economic sanctions and set up treaties, along with the rest. At the Multipolar level, everything stands, but every country is participating in its own way in global politics. Countries go to war, and the superpowers have to work with, in, and around them as well as grinding their own axes.

Now, as an amateur experimenting with artificial intelligence, I had some trouble understanding exactly what was going on in the computer's mind. Wars got escalated over minor countries like Nigeria and the like. Reading Crawford's descriptions in the back of the book, however, cleared up a lot of questions. He and I both suggest that you read the book thoroughly before taking the computer on in any major confrontation. You can also derive some strategy from his descriptions. The computer plays a pretty mean game, but any computer can be whipped but good if you study the computer's play and work around its limitations. One month wasn't enough for me to do that.

There are problems, too. These are inherent in the translation to the GS, though, and reflect nothing on the game itself.

First, when you save the game, it doesn't ask where you want it. It just puts it on the game disk and has done with it. If someone else wants to save a game, you need a second backup of the game disk. Fortunately, the copy protection is in the program instead of on the disk, so backups aren't a problem unless you lose your instruction manual.

Second, the drawing routines bog the game down something fierce. It was shipped with GS/OS 4.0, which means it takes more time drawing. And it does enough of that now, thank you very much. When you request a specific map, the system will go and FillDraw up to eighty countries for each map you request! There is a saving grace in this case: If you boot under System Disk 5.0, you can launch BOP:1990 (GS) from the Finder. Map drawing will take considerably less time.

Overall, the game is quite good, challenging, and worth at least considering. It may draw slow, but an accelerator card should take care of that. And almost everyone I know has at least one blank 3.5" diskette handy for a backup. All you need is patience, and you're ready to go.

Look: 8/10J(The map is laid out nicely, but by the time it's done drawing it, you forget why you wanted to see it. The interface, when it isn't drawing, is good. The title screen and many of the icons in the game are rather ugly. The pictures shown seem to have been dragged unsuccessfully from the Mac to the GS.)

Feel: 9/10 (I could go on for pages about how natural it feels to point and click at countries on a map, and everyone reading this knows it, so I won't. The advisors [Crawford is one of them] usually give reasonable advice. Sometimes, though, reasonable advice doesn't work.)

Play: 9/10 (The computer plays a strong game. A real strong game. Maybe too strong? Hope you like "hot" diplomacy...)

Total: 9/10 (At least take a look at it when possible. If you have a microwave, keep reminding yourself that if the computer gets real uppity, you can get the last nuke in. I'd suggest twenty seconds on low power in a ceramic dish to prevent arcing.) ♣

More ways to kill time

Arkanoid II: The Revenge of DOH (GS)

by David Wood

Of those people that pump money into video games at the local mall, few haven't heard of Arkanoid or Tournament Arkanoid. The breakout with the funny capsules and the artistic patterns reached the home market a while back, but not with the vigor (and improvements) that Arkanoid II packs. Taito, the manufacturer of both quarter-munchers, has entered the home computer software market not with a whimper, but a BANG.

Arkanoid II: The Revenge of DOH is for the IIGS with at least 768K (1 meg preferred). A stereo card is suggested, and if you got 'em, wear headphones. You don't need a joystick; you move your vaus (read: paddle) with your mouse (I'd be just a little happier with the joystick), so be sure your rodentimeter has lots of room to run left and right. At the time I was wandering around Egghead of Annapolis, I had a choice between this and Test Drive II. I chose this when I remembered Wood's Law of Mutability: When in doubt, get the one with the editor.

The premise goes like this... aw heck, the premise is weak, so I'll just describe the game.

First, you are confronted with a screenful of bricks, and you are holding a ball. The object: knock out all the colored and silver bricks. To help you, some of the colored blocks contain power pills that make you grow, fire lasers, shrink and get double score, catch the ball, duplicate the ball, give you extra paddles, and other things of greater power.

To your detriment, there are some special bricks out there: Gold bricks are, well, they're goldbricks. You can't destroy them unless you have Mega balls (No, I don't mean really gutsy, I mean the Mega power which lets your ball go through everything). There are bricks that

require several hits, and then reform a few seconds after they're knocked out. Some bricks move, which means you have to time shots. Things drop from holes in the ceiling and block shots, deflecting the ball in any direction. And the combination of all these things make some boards in the official Arkanoid II game screen file almost impossible.

When you've knocked all the bricks out, you got a choice. Exits open on the left and right. Go left, you go to one board. Go right, you go to another. Some levels are a lot tougher than others. Whatever you do, don't take the right exit from Level 14 unless you have a death wish. The object: The Final Confrontation with Doh (it's all described in the program).

After you're done playing with the Arkanoid II screens, you can enter the construction set and assemble your own devilishness. Change the background. Make every block yield pills. Make nothing yield pills. Make screens easy. Make them almost impossible (There is a way of aborting if you're sick of trying). Within a week, I had created two sets of screens: Crashanoid (It's an inside joke between myself), and Artanoid (Everything looks like something). I've uploaded them to the TCS, so when you do get ArkII, you'll have a few other screens to mess with. Other people have gotten into the act as well. Arkanoid 2 games have been appearing on GENie, and they should be appearing on the TCS soon.

The game actually looks like arcade quality. The colors are bright, the vaus/mouse movement is smooth, and the animation is excellent. The sound? Get a stereo, or a set of speakers, or at least get a stereo card and those headphones, because the sound is a kick. As far

as speed goes, it starts out smooth, but when it speeds up, it turns to greased lightning (This is on GS/OS 4.0. Be surprised). I'd like to personally welcome Taito to the wonderful world of home computer software. I, and a lot of other game companies, could learn from these people.

Problems? Just one. The game saves high scores on the disk, and there is apparently no way of clearing them. The game uses a key disk system which is easy to back up, but the system writes no obvious high score file. A function to clear high scores would be useful because some users' game screens may be easier than others, and yield higher scores. The high score table would then not properly reflect the overall talent of those shown.

Look: 10/10 (Seeing is believing. The graphics and sound are fantastic! Someone has finally figured out how to program the IIGS Toolbox RIGHT!)

Feel: 9/10 (At times, I would much prefer a joystick, or a paddle, or something to a mouse, if only because my desk is disk-locked. A trackball would make my day.)

Play: 10/10 (Exciting, fast-paced action. You don't have to think much. Who cares? This is fun!)

Total: 10/10 (Action, an editor so you can beat the tougher screens... What more do you want?) 🍏

GameSIG Meeting

by Steven Payne

Since our October meeting, GameSIG has a new leader. How did it happen? Choose your favorite scenario: 1) President Bush, fresh from the embarrassment of the failed Panamanian coup (and to prove once and for all that he is "not a wimp"), successfully engineered the overthrow of General Charles "Noriega" Hall, or 2) Paul Moore was unanimously chosen as the new GameSIG Chairman after threatening to release FBI files on GameSIG members, or 3) GameSIG proved itself once again to be one of those rare places in the world (and in WAP) where a peaceful transition of power is still possible.

And the answer is...Paul Moore was elected the new GameSIG Chairman by acclamation at our regular meeting on October 5, 1989, while ex-chairman Charles Don Hall agreed to continue with his famous monthly reports on news and rumors from the gaming

industry. Paul began his stint with a promise to try a number of new things at the monthly GameSIG meetings, such a discussion in November of special tricks and techniques for game mapping. We also hope to be able to have more demos at the meetings once the equipment problems are solved.

Charles discussed new and forthcoming games, such as an up-graded version of **Fokker Triplane** (Bullseye Software, Mac) which previous owners can obtain for \$15. He also mentioned a new Apple IIGS fantasy/role playing game from Electronic Arts entitled **Keef the Thief** ("become a teenage God-king!" says the promo) and the two programs handed out for review:

Prince of Persia (Broderbund, Apple II series with 128K and joystick): an action adventure in the tradition of **Karateka**;

The Dark Heart of Uukrul (Broderbund, Apple II series with 128K): a fantasy/role-playing game.

We have also taken to heart the recent article on the Pi in the *Washington Post*, and have pledged ourselves to even greater efforts in recruiting more orcs, gnomes, wyverns and other minorities into our group. (Someone suggested we adopt the motto "GameSIG WANTS WOMEN!" as our slogan for the year.)

Going around the room, people discussed some of the games they have recently played, including **Space Rogue**, **Might & Magic** on the Mac, **Sierra adventures**, **Journey**, **John Madden's Football**, **Sim City**, **Arkanoid** and a variety of golf simulations. The meeting concluded with our usual **Robot Tanks!** tournament, which programmer Jeff Stetekluh, as usual, won.

Next month's meeting will be held on Thursday, November 2, 1989 at 7:30 PM in the WAP Office. If you have your own special hints for game mapping (or would like to hear some), be sure to come!

The Play Room

by Steven Payne

Because of journeys back and forth from Elmira, New York I haven't had much time to keep up with the latest gaming news this month, but here are a few items gleaned from various sources.

Infocom's *Mines of Titan* and New World Computing's *King's Bounty* should both be available for the Apple II series by the time you read this. The former is a multi-character role-playing science fiction mystery set on Titan (one of the moons of Saturn). The latter is a single-character role playing adventure where you track down a different set of futuristic villains each game. Sierra is now providing a 24-hour automated hint line for their games, at (209) 683-6858. Mindscape has announced that its future releases will be free of disk-based copy-protection. And Broderbund's

Where in Europe is Carmen Sandiego? is now available for the Mac, with a revised interface and several enhancements. Most of these tidbits are culled from the latest issue of *QuestBusters: The Adventurer's Journal* (P.O. Box 5845, Tucson, AZ 85703, \$18 per year). Each month, Shay Addams' "Adventure Hotline" provides the late-breaking news on gaming; subscribers will also notice a few familiar names among the contributing editors.

In other news, *Computer Gaming World* recently announced its "Game of the Year" awards for this season. Among the winners available for Apples and Macs: **Neuromancer** (Interplay, Apple II family) was named "adventure game of the year"; **Star Saga I** (Masterplay, Apple II and IIGS)

received a "special award for literary achievement"; **The Magic Candle** (Interplay, Apple II family) was named "role-playing game of the year"; **Battles of Napoleon** (SSI, Apple II series) got "best war game"; and (surprise!) **SimCity** (Maxis, Mac) was chosen best all-around "game of the year." For further information on the other nominees, see the October issue of *Computer Gaming World* (P.O. Box 4566, Anaheim, CA 92803, \$24 per year), which also contains a special article on computerized football simulations

Finally, Broderbund has released an educational game for children entitled **The Play Room**, which (naturally) simulates a walk through a child's playroom. I *knew* I should have copyrighted the title of this column!

Buckle those swashes! Do what to the mainbrace!

The Ancient Art of War at Sea

by Jim Wellman

When I reviewed Pirates! in July, I mentioned that it was a great game. That was before I played The Ancient Art of War at Sea (Brøderbund, Apple II family, \$44.95 list)! The difference is like that between a Volkswagen and a Volvo. I feel that The Ancient Art of War at Sea is better, and I'll tell you why.

Brøderbund lets you set the pace of the action by selecting the "Admiral" you will battle against; your foes range from Thor Foote (weakest) to Lord Admiral Nelson (hardest). You can control the port repairs, supplies, wind, your crew and the conditions of shallow/rough water. You oversee all aspects of the war, from issuing orders to your ships/squadrons to controlling each ship in battle. You can also fire the cannons, set the sails, change direction and board the enemy vessel.

After you board, you must do battle (with your marines) from the quarterdeck or poopdeck. The object is to cross over successfully to the other ship and either subdue their fighters or capture their flag. Don't expect an easy time of it when you battle Lord Admiral Nelson, since his crew is the best.

To win the war you must sink all of the enemy's ships or capture their crown without losing your own crown or all of your ships. If you think it's easy, try the last scenario, "You Only Live Thrice," and I think you'll change your mind.

If you don't like the 11 campaigns provided, you can modify them or create your own, from actual historical battles or one that you've made up. The Game Editor is the section that will let you create your own war. This feature allows you to trade your battles among

friends. The Ancient Art of War at Sea will also create a data disk for you, but that disk must be one that has not been previously used. You are guided through six steps to create your own war scenario:

1. Making the map
2. Placing the squadrons of ships on the map
3. Selecting the enemy leader
4. Setting the rules
5. Writing the story
6. Writing the title of your campaign.

When you make your map, your "world" is a puzzle 10 x 20 squares in size. You create the shore, islands, rivers, mountains and ocean (with curved tiles to smooth out your area). To make any battle work you must think in terms of a relatively small area, such as a bay, island, river or other controlled areas.

I created a battle between the player and Blackbeard the Pirate, with the setting at the very tip of Florida, and with Blackbeard's camp placed on Cuba. In this scenario, your crown and repair ports have to be defended. Your mission is either to sink Blackbeard's fleet or capture his crown. Sounds easy? I don't think so, since I have Blackbeard as the superior naval force.

With the programming feature added, I feel that The Ancient Art of War at Sea is an excellent game. However, I was disappointed that the program is copy-protected and therefore couldn't be loaded into RAM or onto a hard disk.

Brøderbund has presented its documentation in four books (an instruction manual, a planning

guide, a brief history of the age of the fighting sail, and a volume of appendices describing ships, captains, and terminology) within a softbound manual. I was very pleased with The Ancient Art of War at Sea, and I think you will be too!

The Ancient Art of War at Sea (Apple II family, including IIGS) Brøderbund Software, Inc.

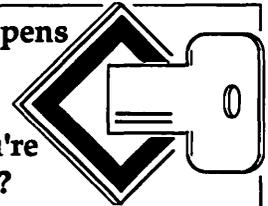
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COLOR OPTIONS. MicroPhone II lets you assign color icons to your scripts, thus turning the *icon bar*, shown here, into your control panel. The icon bar can be scrolled,



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John C. Dvorak:

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SOFTWARE
VENTURES

New Apple III Happenings...

By David Ottalini
Apple III SIG Co-Chairman

Happy turkey gobbles to you, III SIGers!

Your column begins this month with an important announcement: Jim Jutzin has agreed to take on the Co-Chairmanship of the SIG from Tom Bartkewitz. I'd like to say thanks to Tom for helping out over the past couple of years, especially answering questions for those of you on the Virginia side of the river. Tom also spent considerable time and effort on his Pascal version of Menu.Maker, which is one of our best PD offerings. Jim is a relative "Nuer" to the III community but has worked hard to come up to speed on his III. He has helped out with our hard copy library and will be involved with planning meetings, getting SIG members more involved, etc., so I can concentrate on these columns and the PD library.

PD Offerings

As long as we're on the subject, our PD library grows by six this month with a number of graphics disks. There are too many to introduce all at the same time, so I'll hold some for next month as well. See the main PD article for more information, but here's the basic scoop: This month's batch includes two formerly commercial programs that are now in the PD. First off is FIG FACTORY in both its black and white (1070) and color (1071) versions. SIG member Seth Mize has transcribed the manuals for us, and you'll find them both on disk 1069 in both ASCII and 3EZP formats, along with a bibliography of articles about graphics on the Apple III. FIG FACTORY was originally released by SUM Software and is a rather different graphics program. See what you think.

Our second commercial offering

comes on two double-sided disks and is really aimed at the more advanced Pascal users in our group. Third Wave Graphics' Raster Graphics Toolkit (1072) and 3D Modelling Toolkit (1073) are a series of Pascal procedures that give the user a sophisticated way to display graphics on the III. They are the only programs known to make use of the III+'s interlace mode.

I want to thank III SIG member Thomas Fisher, of Chardon, Ohio for donating a copy of the Third Wave Graphics programs to our PD, as well as having a complete set of the 500-page user manuals copied for us. To say thank you, we'll be sending him an "I Love My Apple III" Tee Shirt.

Our final offering this month is an original Apple PD disk for the III called "Chartmaker III" (1074). Originally designed for use with an Apple Plotter to create overhead transparencies, you might still find it useful by saving your creations to disk and using Graphics Manager or other graphics program to actually print it.

Next month we'll have even more graphics disks, including some specifically with foto files you can use with Draw On or other graphics program. Many thanks to our own John Ruffatto for donating many of those files in Apple II format so we can move them over to the III.

Kudos and Comments

We do get letters on occasion, and I'd like to pass one of them along to you now. Eric Sheard of Flemington, New Jersey wrote to say how much he appreciates your SIG's efforts on behalf of the III. Sheard is the President of Lescon, Inc. They are "Liquid Elastomer Specialists." Lescon uses 3 Apple IIIs, which are considered to be indispensable.

Eric says "you are appreciated by those of us who use the III everyday in our business and have nowhere else to turn and no interest in changing entire data bases, tax records, etc. to another system." Thank you!

Power Supplies

How do you replace a power supply in your Apple III? It's really not as hard as you might think. In a thumbnail: Turn off your III, unplug any internal cards and the power cable. Now turn the machine over. You'll first need to disconnect the power supply cable from the mother board (yes, that means unscrewing the large pan). The power cable is attached to the mother board on the side of the pan with a "notch" in it (use a screwdriver to pull it up). Next unscrew all the nuts from the smaller pan and remove the power supply unit altogether from your machine. Replace with a new power supply and reverse the order to put everything back in place. There are more detailed instructions in our WAP hardcopy library if you need them.

Sun Remarketing (PO Box 4059, Logan, UT 84321 1-800-821-3221) sells power supplies for the III and III Plus. You might also try Shreve Systems (2421 Malcolm St., Shreveport, LA 71108 318-635-1121), N.D.R.C. (see below) or Pre-Owned Electronics (30 Clematis Avenue, Waltham, MA 02154 1-800-274-5343). Prices are in the \$85 to \$150 range so compare before you buy.

You might want to consider using a III+ power supply simply because it is newer and was designed to better handle a 4-card load. Steve Brineaux on the III section of CompuServe described how to handle this:

"Recently I replaced the power supply in one of our standard IIIs with a power supply from a III+. I chose a III+ power supply specifically because it is somewhat more powerful and there was no difference in price. What I discovered in the process is that the III+ power supply is virtually identical in all aspects except one: it uses a 10-pin connector vs. the 11-pin connector on the standard III power supply.

At first I thought all was lost—especially when I found out that the power supply cable uses extremely-hard-to-find (impossible-to-find is more likely) end connectors—thereby ruling out the chance that I could simply make my own. Well, diligent study of wiring diagrams and a go-for-broke spirit prevailed and I discovered that the standard power supply cable will work—simply connect the first 10 pins (ignoring the 11th) and everything is fine. Just thought I'd share."

Al Bloom Strikes Again

SIG member Dr. Al Bloom, who has contributed many useful articles and programs to our PD library recently sent me a new program, that will convert ASCII text files (a la Apple Writer files) into 3EZP/AppleWorks files. I've tried it out and it works great. It might prove useful to those wishing to convert a number of ASCII files without having to waste time within 3EZPs.

Dr. Bloom suggested our Pascal Interface SIG might want to try converting it for use on an Apple II and says he'll be happy to provide source code for anyone

interested. Look for this program in our PD in the next few months.

I also asked Al to take a look at Tom Bartkewitz's Pascal Menu.Maker program and make some suggestions. Bloom says Menu.Maker is a "fine program" but thought we could improve it by using the Pascal run-time package to save space (rather than putting the full System.Pascal on the distribution disk). He also suggested the program be modified to ignore standard system files that can't normally be executed anyway. These and other suggestions were good ones, which I'll pass along to Tom and see what he thinks.

Joe Dobrowolski News

It would appear that Major Dobrowolski, late of the Apple Users Group International, did not go to Japan to be with wife and children after all. A recent package from him had this address: PO Box 21477, Barrigada, Guam 96921. In any case, we continue to maintain the fine PD library he passed along to your SIG. We have already begun to use its vast resources to

include in our own offerings to you.

NDRC Special

I recently spoke with John Goldwater, the President of an Apple parts company called N.D.R.C. who said they have a special on CP/M for the Apple II. \$25 buys you the plug-in card along with the appropriate CP/M software. There's a tremendous library of programs out there for this parent to the MS-DOS operating system, including some in the WAP PD which should work without any problems on your II. NDRC's address is: 8511 Manderville, Dallas TX 75231. Phone is 214-750-9889. They also sell power supplies and other Apple III parts so check them out.

ENDIT

That's all for this month. Please join us at our next III SIG meeting if you can! We have a great time discussing our little SARA, her problems and possibilities. You can even buy PD disks or an Apple III Tee shirt if you like (they make great Christmas gifts...). ☺



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Cheap Computing...

by Ron Evry

From time to time we hear computer industry pundits decrying the lack of a "home use market" of any significance. This line of thought made orphans out of the IBM PCjr, the TI-99, the Adam, the Aquarius and a host of other entrants. Since Apple's development of the Macintosh, the general perception of the company's support of the II line has been a series of mixed signals. Every time Apple comes along with a new development for the II line, it is usually accompanied by guilt-ridden statements of apology for lack of previous support.

These statements usually foster the impression that Apple could drop the entire II line on a whim. Now, to its credit, Apple has not dropped the II and has managed to expand it while maintaining support for all of the earlier models. But the concentration of Apple's marketing efforts has been overwhelmingly for the Mac. But one has to wonder how the folks at Cupertino see the positioning of the IIe's and c's and GS's in the marketplace. Generally, they are priced way too high for the first-time home computer buyer, and they are not even considered seriously as business tools amidst a sea of MS-DOS machines available.

Face it, nobody needs to drop two or three thousand dollars on a machine to balance their check-books or to jot out letters to relatives. And as far as game-playing is concerned, a Nintendo unit costs less than a hundred dollars, with hundreds of cartridges available for rent at local video stores.

So why should somebody with meager needs even think of buying a computer? Well, part of the answer lies in the power that a computer gives a person to accomplish new things, and move in new

directions. Just by using Appleworks alone, a person can suddenly become capable of writing articles instead of notes to the milkman, produce inventories of household goods with insurance values figured in instead of just throwing stuff in the garage, and even project household budgets so as to figure out where the money will come from for that vacation or new car, instead of simply balancing the old checkbook.

In short, owning a computer can release hidden talents in a person. The computer can help a person explore their own potential. It is not simply a tool — a home computer can be a catalyst for personal growth and achievement. But returning to the original argument here, the ability expansion qualities of the computer may not be evident enough to someone to justify spending a lot of money in the first place, and conversely, there are undoubtedly many people who do recognize the potential personal value of a home computer, but simply do not have the money to spend on one!

Out of Lake Zurich, Illinois, has come a wrinkle that may actually inject new life into the Apple II line in the form of a little healthy competition: the Laser 128 series of Apple II compatibles. The Lasers can truly be called Apple II clones, and incompatible software is a rare find. Lasers are downright cheap compared to Apples — they usually cost less than a good VCR, come with a single disk drive, and printer and modem ports built in. The folks at Laser could teach Apple a thing or two about marketing: their computers are readily available at more than one national department store chain, and they have continued to sell well.

Finally, this has to be said for the Laser computer — by drastically

increasing the number of Apple compatible computers in people's homes, the market for software developers for the II line also increases, making more and more sophisticated software available for the II and the Laser.

The aim of this column is to explore the directions one can travel in the computer world without spending a lot of money. Next up will be a tour of the world of public domain and other cheap software. Future columns will cover telecommunications, used equipment, and that cheapest of software routes: writing it yourself! Until then, keep a tight grip on your wallet! 🍏

Best of the TCS (Apple Style...)

By Paul Schlosser

New TCS Disk Available!

FROM LEE RAESLY, ON 09/17

New library disk! TCS-1 (version 1.04). This new disk is now ready! It contains everything you would ever need for the TCS (and other BBS's). It also includes the complete TCS manual. A total of 12 text files of the complete TCS manual are included, and able to be either read directly on your computer screen, printed out, or loaded into your word processor (AppleWorks of course!) and printed with Superfonts. Next month we hope to have disk TCS-2, the TCS companion. We will tell you more about this disk later. For you Mac owners Nancy Seferian is heading a group to prepare a TCS Mac disk. It should be ready in about 60-90 days.

Communication Program Questions

FROM JOHN MCDOWELL, ON 09/19

I know that many here are high on ProTERM. But many also use MouseTalk. I need a capable communications program with most download protocols that is easy enough for my wife and kids to use. Applelink does that for its specific purpose. What kind of consensus can I get? Whoops, I know I won't get a consensus. But give me some opinions, please. I like using the mouse, but am not hung up on it.

FROM JON THOMASON, ON 09/19

I used to like MouseTalk because it was interesting to see the windowed interface implemented on an Apple II. The same thing was neat to see in MouseWrite—but when it comes down to it, AppleWorks' word processor was truly easier and more efficient than MouseWrite. The same thing is true with ProTERM and MouseTalk. I've heard from several "novice" users that ProTERM really is easy to learn for them, particularly with its automatic macro-writing command, which actually makes the outside services seem easier to

use. A few features of MouseTalk are a real bear to use without a mouse, while a few features of ProTERM sometimes make a person wish it allowed the use of one. For the most part, though, telecommunications is a heavily keyboard-based application, and switching back and forth between that and the mouse is not such a good idea as would be, for example, a graphic drawing program (I've used my share of keyboard-based drawing programs, and it's not fun). ProTERM uses the keyboard very well, in my opinion, especially if you are familiar with any of the more recent MS-DOS terminal programs. The most important difference, though, is that USII (MouseTalk) doesn't support their product nearly as well as Checkmate (ProTERM) does. There are a number of dangerous bugs in all versions of their software, particularly v1.5, and they have fixed many of them in-house, but not released the fixes. ProTERM is less hardware-dependent, is much more reliable, and has a more dedicated following. The best thing you can do is to see both in action, though, and I encourage you to do so.

FROM PAUL SCHLOSSER, ON 09/19

MouseTalk is a little buggy, and I find it more difficult to use than ProTERM. ProTERM is very easy to learn, and easy to use on a daily basis. It has all the popular protocols. It can 'learn' a logon sequence, making signing on to your favorite BBS very easy. Talk-is-Cheap is very popular also.

FROM RICK ZEMAN, ON 09/25

Talk-is-Cheap has an easy interface to use. The scripting language is the easiest I've come across in A2 and PC communications programs. The docs are good generally, but a bit iffy on the macro writing. But the support is exceptional. You can ask Don Elton a question on any of the three major services and get an answer within two days. If you have access to a Proline system, there response is much quicker, plus some prolines (like Pro-Novapple) have the tic.feed, an

area devoted to Talk-is-Cheap and scripts. Hope this helps.

The Latest AppleWorks Information

FROM GARY HAYMAN, ON 08/29

Here are some AppleWorks-and-associated-items information that may be of interest to you. AppleWorks 3.0 is now being shipped. Beagle should be shipping AppleWorks 3.0 compatible versions of its TimeOut programs as of this writing. The updated TimeOut modules work with AppleWorks 2.0, 2.1, and 3.0, and many have enhancements not included in earlier versions of the programs. The enhancements only work with AppleWorks 3.0. (When you receive your AppleWorks 3.0 you should update your TimeOut series by contacting your WAP Beagle Buddy. See the WAP Journal for a listing and phone numbers.)

Beagle Bros. is developing two as yet unnamed AppleWorks 3.0 enhancement products for release this fall. One is a customization disk that lets you modify AppleWorks 3.0. This disk offers many of the patches previously available on the JEM Patch-Mania and Late Nite Patches disks and some additional enhancements. The patches:

- embellish the AppleWorks menus with mousetext characters,
- let the Enter Key on the Apple IIs numeric keypad move the cursor down to the next cell in a spreadsheet,
- bypass all the "Do you really want to do this?" questions,
- let you set the cursor to insert or overstrike mode at startup,
- redefine keys so the Apple-Tab key moves back one tab stop,
- let you put the spelling dictionaries in different directories,
- lock segments of AppleWorks in memory so they are preserved if you work with large data files,
- provide a separate graphics clipboard you can use to transfer Graph, Paint, or SuperFonts documents between files.

The second enhancement will include a collection of UltraMacros development tools and sample macros that work with Apple-

Works 3.0. This disk will replace the MacroTools I and II disks and will use the new features of AppleWorks 3.0 and UltraMacros 3.0. Quality Computers will release an AppleWorks 3.0 compatible version of RepairWorks shortly. JEM Software is releasing TaskMaster 3.0. TaskMaster is a development system that lets users create stand-alone macros that operate with AppleWorks. The long awaited Beagle TimeOut TeleComm should ship by late September. SuperPatch 5.0 is now shipping. It is not compatible with AppleWorks 3.0.

AppleWorks and the Grappler Plus
FROM RICK FOLEA, ON 09/05

My mother-in-law just bought an Apple IIe that came with AppleWorks 1.0. Whenever she prints anything, the first thing that comes out is "80N." She is using a Grappler Plus with a Star-10 printer (Epson compatible). Could someone step me through the fix? I'm sure it is just a printer setup problem or something. Thanks.
FROM JIM PENDARVIS, ON 09/05

The problem has to do with initializing the Grappler Plus card. More recent versions of AppleWorks have an option to do this in the printer set-up area. This is the "Interface cards" option. I don't remember if AppleWorks 1.0 had this. If it does, you would enter something like: Control-I80N (or whatever code your Grappler expects).

AppleWorks Classic versus AppleWorks GS

FROM PAT JOHNS, ON 09/07
I recently purchased a //GS and also received the letter from Claris regarding the update. I am trying to decide whether I should go with the 3.0 update or get AppleWorks GS. I have used AppleWorks for several years at home and the kids use it for school. Any opinions would be welcome.

FROM FRANK EVANGELISTA, ON 09/07

My personal experience with AppleWorks GS is not at all enjoyable. I guess it depends on how you use it. The AppleWorks GS spreadsheet is useless to me. When trying to load a spreadsheet from my 2.1, AppleWorks GS

would only let me load 600 cells. For my use that is not enough. The graph feature is nice but you can get that with other programs. The paint and draw is nice but so slow. The flexibility of the word processor is nice but it takes forever to print. I have AppleWorks GS but have just ordered AppleWorks 3.0 and am looking forward to it. I guess AppleWorks GS will be put aside (as far as I'm concerned) with my Multiplan and Screenwriter II and several data base programs that are gathering dust. I don't know if this reply helps but the \$99 bucks I spent for the AppleWorks GS upgrade could have been used better elsewhere.

AppleWorks Questions

FROM GARY HYATT, ON 09/11
I just received my upgrade to 3.0 and am running into a problem. When accessing a 2.0 data disk I am unable to retrieve a spreadsheet from a subdirectory, nor can I change the current drive to a subdirectory. The list all files feature under "other activities" shows that the files are on the disk but AppleWorks 3.0 will not retrieve them. Is this a known problem or am I running into the famed "Operator Error" syndrome?

FROM PAUL SCHLOSSER, ON 09/11

Gary - when AppleWorks 3.0 displays the correct subdirectory you must confirm it by pressing 'Open-Apple-Return'. Just plain return won't work.

FROM KEN DE VITO, ON 09/24
Why can't I use Copy][+ or even Prosel to alphabetize the files on a disk full of AppleWorks files? Tried both of them numerous ways and the disk always comes up the way it was sorted/alphabetized prior to my efforts.

FROM DALE SMITH, ON 09/24
AppleWorks does its own thing as far as alphabetizing is concerned. If you look at the disk in any file utility - C2+, Cat.Doctor, BASIC.System, ECP8, ECP16, DAVEX, ProSel Shell, ORCA/APW, whatever (except AppleWorks), the files will be as you sorted them. AppleWorks sorts by filetype followed by alphabetically within filetype.

The Latest Version of ProDOS and Basic.System

FROM HENRY FEINGERSH, ON 09/24

I just scanned the file transfer section and saw a patch for ProDOS Ver 1.8 but I only have up to version 1.7. How can I get this newer version? I looked in the download section but could not find it. Is 1.8 the latest version? Also, what is the latest version of Basic.System (and is that on the board either)?

FROM DALE SMITH, ON 09/24

We do not yet have the authorization license to electronically distribute the GS/OS or ProDOS system software, but I understand the licensing is being pursued. Until then you will not find ProDOS 8 or Basic.System on the TCS for downloading. Yes, ProDOS 8 is currently at version 1.8; it is on the System 5.0 distribution for the GS. I do not know if they have released any new ProDOS 8 System Utilities with the newest ProDOS 8 and Basic.System, but I suspect not. **WARNING!! DO NOT** get the Basic.System v1.3 which came with ProDOS 8 v1.8. Apple made a mistake in that update and it is potentially disastrous for what ever file you're working with if you trigger the bug. Apple has said to GO BACK to Version 1.2 of Basic.System until they get a fixed Basic.System out to replace v1.3.

Icons and System Disk 5.0

FROM HARRY ERWIN, ON 09/19

Is there a way to fix the icon files that have been uploaded to make them compatible with GSOS 5.0? Are any of the files OK? FROM HARRY BACAS, ON 09/19

I think the fix is simply to run any icon editor program (there are a couple in the downloads area) and load all the icon files. Then, without making any changes, save them again (using OS5, of course) and they will work.

FROM DAN HUGHES, ON 09/19

Also make sure you have no duplicate Finder icons in your custom set. I had a problem with a duplicate font icon that wouldn't let me open the Fonts directory. You'll have to check out the custom icons under System 4.0 and see if any of the Finder.Icons or

Finder.Icons.X from System 5.0 are duplicated in your custom set. If they are delete the duplicates from the old icon set. Then reload them under 5.0 and save them again.

System Disk 5.0 Problems

FROM BOB RUSK, ON 09/19

I confess. I've had it with GSOS 5.0 and spent a week reverting to 4.0 - a non-trivial accomplishment.

Several problems, upper/lower case incompatibility, hidden files, trashed key disk copy protection systems, ad nauseam. OI' Ben Franklin was right: be not the first by whom the new is tried. I must have spent 50 hours getting everything back into 4.0 format. Give me a shout when 5.01 is out and certified bug free; I can't handle this again, especially the blocks 0, 1, 2, and 3 hard disk wipe outs.

FROM SAM KNUTSON, ON 09/19

Bob, many of us have been running 5.0 since it came out without any of the terrible problems you describe. I have not had any file/disk problems, only the occasional incompatibility problem with old software. I will stick with 5.0 for the performance benefits.

FROM RICKY JUDGE, ON 09/29

I called a local Apple dealer today to make sure that I could come by with a couple of disks and get a copy of System 5.0. The salesperson said that Apple Computer had made the decision NOT to let them copy the system disks for customers because "if you don't have the manuals, you won't know how to use the new system software." Is this guy just blowing smoke, or did Apple really make this incredible decision?

FROM DALE SMITH, ON 09/29

You should be able to get copies of the disks only, or you pay for the whole set of manuals and disks. I don't think the docs have anything significant in them that you can't see right on the screen—though others with the docs may know different. I do not have the docs and don't miss them.

FROM MICHAEL OSBORN, ON 09/30

I am having problems using GSOS 5.0 and Backup II from the SCSI utilities disk. It gives me an "unsupported storage type" error when I am backing up my hard

drive to my 3.5 drive. Has anyone had this problem?

FROM SAM KNUTSON, ON 09/30

Backup II does not support backing up forked files which are now used in GSOS 5.0, e.g. CDEV's. You can work around this by backing up pathnames that don't have the files in them or by switching to another backup program. I highly recommend the latter and suggest you purchase Glen Bredon's Prosel utility package. It comes in both 8 bit and 16 flavors. Prosel is a program selector and includes many utilities especially useful for hard disk owners.

Which Mouse is Best?

FROM JEFF MURPHY, ON 09/08

I have recently added a 3.5 drive to my mouse-less IIe to IIGS upgrade and discovered that many of the programs on the 3.5 disks seem to require a mouse to operate them; any suggestions on how to get around this or if all else fails what to look for in the way of a mouse?

FROM SAM KNUTSON, ON 09/08

You should probably consider the Apple ADB mouse which I have been very satisfied with. Do you already have an external ADB keyboard? If not you probably would enjoy having one in addition to a mouse.

FROM RICK ZEMAN, ON 09/09

There is a desk accessory in download section five that lets the keyboard emulate a lot of mouse movements. I think it's called Mousetrap, and it's freeware.

FROM KIM BRENNAN, ON 09/09

Well, the others have mentioned a way of not having a mouse as well as the suggestion of getting the Apple ADB mouse. Another alternative to consider is getting a third party mouse such as the ADB Turbo Mouse from Kensington. Although I don't really like it, my Dad loves it. I prefer the standard Apple ADB Mouse, which by the way is cheaper too.

FROM TIM MCGRAW, ON 09/11

Nothing's cheaper than the A+ Optical Mouse. I've seen it for as little as \$60 mail order. Nothing lasts longer either because there're no moving parts.

PublishIt!2 Questions

FROM BILL WYDRO, ON 09/03

My school has purchased ThunderScan. I have a scanned picture, in DHR. Please remind me how to get PublishIt!2 to recognize it. I have a IIe, some extra memory, and a 3.5" drive.

FROM GARY HAYMAN, ON 09/03

Easy. Even though you have scanned it in DHR, you must save it in DHR too. Then all you have to do is pull down the file menu and import a picture once you have made your graphic box. I can give you details if you get stuck.

FROM BILL WYDRO, ON 09/04

I did it! That's really neat. As long as you keep close to the same proportions as the original, the graphic reproduces faithfully whether tiny or filling up the paper. Next question: I scanned a newspaper cartoon that was approximately 3" x 4". With the heading it was a little taller than wide, and didn't quite fit on one screen. IS there a way to import scanned pictures that are bigger than one screen? The PI!2 graphic adjustment box wouldn't expand any further. Or did I overlook something? What program(s) can I use on my IIe to "clean-up" or modify the scanned graphic?

FROM GARY HAYMAN, ON 09/06

Bill, when using ThunderScan you can adjust the size of the scan (both area of the scan and what appears on the screen) from within the program, so your 3x4 will not overflow the screen. Then, once inside of Publish.It! you can make further adjustments to the size of the graphic. In fact, I have taken a very small graphic (such as a PS graphic) and made it fill one entire document page. At first, I used Blazing Paddles to "clean up" my DHR pictures—but I discovered that TimeOut Paint is superior because of the way it presents Fat Bits. It is easier to use and is more accurate. TimeOut Paint is a Beagle Bros additive to AppleWorks and comes with the Graph or Super-fonts packages. ☛

Apple IIgs Disk Library

We are pleased to offer FOUR new disks this month for the Apple IIgs. WAP2022 Icons I - is a disk full of icons and icon editors including 95 separate icon files (each file has many icons) and icon editors DICEd and IconEd. The disk is self booting and includes documentation. This disk was completely prepared by Chris Hutmire WAP#7693 and I would like to thank him very much.

WAP2023 Diversitune Songs I - is a collection of songs for the commercial music program Diversitune. Diversitune is required to play the music. The selections include some excellent classical tunes as well as more popular music. Many of these songs were supplied by Doug Hass of the Columbus, Ohio based user group COACH.

WAP2024 NUCLEUS Graphic DEMO - is the most amazing demonstration of sound and animation I have seen to date on the IIgs. The demo features three complete musical scores which may be switched by pressing the Enter key on the numeric keypad. A series of tiny moving balls form many shapes and the shapes may be rotated under viewer control by pressing the keys 1-9. The screen of the demo has small labels which refer to keys on the keyboard and what they do for further documentation. This disk was created by a European group of programmers and uses a custom operating system which allows the disk to completely boot in about 12 seconds however the finder will not show the disk as containing

any files. This one is must have. You simply have to see it to believe it!

WAP2025 Print Shop IIgs Graphics - is a collection of graphics for the commercial program Print Shop IIgs. Print Shop IIgs is required to view or use these graphics. Almost all of the graphics on this disk were contributed by Jack Mortimer WAP#5139

If you notice we have moved from 1 new disk last month to 4 this month but just hold on because next month we hope to debut almost 20 new disks with a FONT EXPLOSION! We will have a wide variety of public domain and shareware fonts as well as font editors and more. So keep your eyes on this space for more announcements of new library disks. 🍏

Apple III Disk Library

by David Ottalini

Graphics take center stage this month and next, III SIGers. I'm happy to announce six disks this month, including more commercial programs now placed into the PD.

Disks 1069, 1070 and 1071 deal with a program called FIG FACTORY from SUM Software, originally of Tustin, California. Disk 1069 is the manual, while 1070 is the black and white version of the program. Disk 1071 is the color version.

FIG FACTORY, as described in the manual is a "Hi-res graphics system designed to make fast, professional on-screen sketches using your own easily made symbols." You can design your own set of symbols or figures by drawing them on the screen. Up to 102 figures or symbols can be saved to disk.

Unfortunately, this program, like many early Apple III programs, has some drawbacks. For one, it will only directly print to a Silentype printer. But you can get around this by simply saving your design to disk and then use Graphics Manager (from On Three) to print it in any size you desire. Doing it this way also takes care of the other problem, having to reboot after

printing to the Silentype. Why it was set up in this manner is beyond me. But the program may provide you with some fun, so try it out.

On the reverse side of disk 1069, by the way, is a bibliography of articles about graphics on the Apple III. This is in both 3EZP and ASCII format and can be read or printed using MenuMaker. All three disks are self-booting.

Disks 1072 and 1073 come from another former California company, Third Wave Graphics. Their Raster Graphics Toolkit and 3D Modelling Toolkit are Pascal procedures that turn the III into a very powerful graphics machine. Unfortunately, unless you are a Pascal programmer (Tom Bartkiewitz, are you listening?), these disks may not be of much use to you. They do come with example programs but are not self-booting. The manuals for both are so huge we could not put them on disk. Instead, you'll find a copy in our hardcopy library at the WAP office. Thanks to Bruce Hodge for agreeing to place this into the PD. And many thanks to III SIG member Thomas Fisher of Char-

don, Ohio for getting us this complete copy of the two disks and for making a copy of the manual as well. The folks who developed these programs originally came from Apple and are the only ones I know of who wrote graphics programs designed to take advantage of the III+'s interlace mode. These programs were actually demonstrated to SIG members a number of years ago (yes, even before my time...).

Finally, Disk 1074 is called Chartmaker III. Apple wrote this as a PD disk for the III many years ago. Its original purpose was to design textual overheads (no actual "graphics") using an Apple Plotter. Since there aren't too many of those around any more, you can at least save these to disk and use Graphics Manager to print them. I like this program simply because it gives you larger fonts than other programs (it actually plots each letter). This disk is self-booting and has help files, but no manual per se.

Next month, more graphics disks, including some new foto files you can use in other programs. See you then! 🍏

by Dave Weikert

No Virus, Part 2

The saga of reports of the dreaded **VIRUS** on our disks continues. The latest report was the result of a WAP produced sample disk distributed at the Fed Micro Conference in September. Some of the recipients of the disk (wisely) ran an Anti-Virus utility before moving the programs to their hard disks. Unfortunately (for us), they used Virex, a commercial program from HJC Software authored by Robert Woodhead. Virex incorrectly reports our disk as infected it detects our invisible INIT which is named System. Our INIT file resides on most of our Mac disks and if you try to boot your computer from one of these disks, our INIT loads and displays our name, address and telephone number and a message that this is not a boot disk. After this it resets the computer and is ejected.

The upshot of this whole evolution was a call from Cynthia Morgan, columnist for Government Computer News asking for comment on the article she was preparing about the virus on the disk that WAP distributed. After hearing our side of the story she contacted Robert Capon, the president of HJC Software. To make a long story short, Robert subsequently contacted me, requested copies of our INIT and said that the next version of Virex would include code so that our INIT is no longer flagged as a Virus. Hats off to Cynthia for checking out both sides of the story and making call backs to be sure of the facts and to Robert for a fast and positive response to a problem that adversely impacts both WAP and HJC Software.

A few other anti-virus utility programs flag the WAP INIT as a possible problem to be investigated and most ignore it since the code resource and length do not match any of the existing viruses. Interferon and Virex are the only two programs I have run that uncondi-

tionally declare that our INIT is a virus. Unfortunately the Shareware program Interferon, also authored by Robert Woodhead, will not be updated any more. To eliminate the continuing reports, the disks we are issuing this month do not include the INIT and we intend to continue this practice for all new disks until further notice.

Mac Disk Catalog

The disk catalog includes a list of disks and titles, a new introductory section, descriptions of files on all the disks, a list of files on the disks sorted by alphabetical order by file name and an second list sorted alphabetically first by file type and then by file name. The catalogs cost \$3.00 at the meeting or office; add \$1.50 for mailing.

New and Recent Disks

We have three new disks and one revised disk this month. The new disks are the second FKeys disk, the first disk in a series of INITs/cdevs disks and the first disk in a series of Miscellaneous disks (this one specializing in Excel templates). The revised disk is Anti-Virus Utilities, Mac Disk #1.01A which now includes version 1.5 of Virus Rx. Members who purchased the recently reissued #1.01A with the older version of Virus Rx (1.4a2) may exchange it for this newest version at the office for no cost.

Recent disks include Anti-Virus Utilities (Mac Disks #1.01A and #1.02A), FKeys (Mac Disk #4.01A), ImageWriter Fonts (Mac Disks #5.05 through #5.15), LaserWriter Fonts (Mac Disks #6.04 and #6.05), System Utilities (Mac Disks #16.07B and #16.08B) and Apple System Software LaserWriter Ver.. 6.0 and 32-Bit QuickDraw (Mac Disks SS.LW 6.0 and SS.32-BitQD). Most of the ImageWriter fonts and the System Utilities are new to the Washington Apple Pi disk collection.

Function Keys Series

Mac Disk #4.02A is the second of the 800K FKeys disks and includes FKeys that are new to the WAP collection. This is the second FKeys disk prepared by Tony Salerno who annotated and the tested this disk. Tony is our most prolific duplicator and I'm sure that you will see more of his work in the near future.

INITs and cdevs Series

William Jones, our Mac Disketeria annotator par excellence, has done it again. As a follow-up to a sterling past history of exemplary annotation (who can forget his monumental Desk Accessories and System Utilities series), he has just completed the first of the INITs and cdev Series. As Bill says in his introduction to the series:

"What are INITs and cdevs? INITs (also called Startup Documents) 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. These programs often have to be loaded in a particular order to work (e.g., either before or after other INITs or cdevs). In the absence of any other instructions, they load in alphabetical order by name. However, various programs, including ChooseCDEV in this collection, can be used to alter the order of loading."

Miscellaneous Series

This month marks the debut of the Miscellaneous series. The Miscellaneous series will be a potpourri of programs and templates that didn't seem to fit anywhere else. The first, Mac Disk #10.01, includes Excel 1.5 and 2.2 worksheets, charts and macros. These have been selected for their utility or for their illustration of some of the techniques of spreadsheeting. Future additions to the Miscellaneous series will feature templates for other applications. We would also like to feature additional spreadsheet templates for our members' education and use. I challenge the Excel and Works Sigs to assemble some candidate disks featuring efforts by our members or useful or educational spreadsheets that they have acquired.

Real Computers Have Real Warranties, Part 2

To recap last month's report, the hard disk in my SE/30 died of the strange disease that seems to be affecting many of the 80 megabyte manufactured by Quantum. I did not have Appicare since computers are supposed to break during their infant mortality period (which Apple must believe is sometime in the first three months since they offer only a 90 day warranty). Since I had my SE/30 for six months, I was outside the warranty period. I called Apple anyway since there have been numerous reports of failure of the Quantum drives and rumors of a program by Apple to fix the units much like they did for the previous failures of the 20 and 40 megabyte Seagate drives. I was told that Apple did not have any reports of problems with Quantum drives or any program for them. Strangely enough, even though there were no reported problems, Apple was willing to give me a complementary (read free) year of Appicare coverage on the replacement drive. However, only two weeks after my call to Apple, all is now right with the world. Apple has just announced a program to fix the Quantum drives or to reimburse those who have already replaced them. The program covers

all Quantum drives and will last for approximately two years according to MacWeek.

I guess I should feel fortunate that so many people had failures of the Quantum hard drives that Apple made this special offer. However, I still feel had by Apple. If I had purchased a minimum configuration SE/30 and installed the Quantum drive myself or through a dealer, I would have ended up with a two year warranty on the hard drive directly from Quantum. Buying the SE/30 with the same drive installed by Apple gets me a miserly 90 days. Apple is one of the few computer manufacturers that offer such a short warranty.

Help Wanted

I would like to welcome Bradley Tesh, who has volunteered to test and annotate some of our disks. Brad responded to our plaintive plea in the September Journal. We still need volunteers to test and annotate disks for the Mac Disketeria particularly in the area of Programmer/Hacker Utilities. The backlog of candidate programs for our library is expanding faster than our ability to test, annotate and assemble them. We need additional volunteer help. The skills required include enough writing ability to describe the function of the program in a few sentences, a general knowledge of Macintosh operations and an ability to assess a program's worth to our members. If you have these skills and can devote 15 to 30 hours per month to annotation and testing, call me at (301) 948-9646 and leave a message.

DISK #4.02A — FK 2 FUNCTION KEYS

+/-FontScaling f: +/-FontScaling and NoFontScaling. By Fred D. Reed. This FKey disables/enables Font Scaling, making an application choose the nearest available point size for display, rather than scale to a nonexistent size. This improves the font appearance on the screen and speeds things up also! When the INIT file "No Font Scaling" is placed in the System Folder, it will set the default to no font scaling. (FKey #7)

2nd Window.FKey f: 2ndWindow.FKey. By David O. Rourke. An FKey to toggle be-

tween the two frontmost windows. 2ndWindow.Txt is the abbreviated documentation. (FKey #5) *Shareware - any contributions or compliments.*

Bomb Alert! FKEY: By Andrew Welch. If you know the ID number of the Bomb, this FKey will list possible causes. (FKey #5) *Shareware - \$5.*

CacheToggle.FKEY f: Cache.Toggle.FKey: By David Fry. Toggles Ram Cache on/off from the keyboard rather than from the Control Panel. Works with new ROMs only according to the Cache.Toggle.doc (FKey #5)

ComKey FKey: Lets you read the comments attached to files by programmers. (FKey #5)

CrashSaver Key f: CrashSaver Key: By DailSoft. Allows for a return to the Finder when a system error occurs. An earlier version of this FKey appears on Mac Disk #4.01A. CrashFKEY.Note is the documentation. (FKey #7) CrashSaver Init, and CrashSaver Init.info are an INIT version and supporting documentation (both authored by Jack Mello). (FKey #7)

dvorak/qwerty: Toggles between the qwerty (normal) keyboard layout and the dvorak layout. Works on new keyboards, and requires System 4.1 or higher. (FKey #9)

ErrorKey f: ErrorKey: By W. J. Bock. For programmers; enter an error code and the explanation is displayed on the screen as described in ErrorKey.doc. (FKey #7)

F-Key Restart(4.1): By David M. Gelpham. MacWrite document explaining the Application of the Restart and Shutdown FKeys. Retrieval of the FKeys from the information in this document is left as an exercise for the programmer.

F1F4v1.3 f: F1F4v1.3: By David Hirsh. This INIT allows Mac SE/II users who have the Extended Apple keyboard to make use of the function keys [F1(undo), F2(cut), F3(copy), and F4(paste)] within all Macintosh editors and DAs that adhere to Apple software guidelines. F1F4.doc is the documentation. *Shareware - \$1.*

FinderFKEYS f: FinderFKEYS: By Tim Smith. Three FKeys perform Finder functions. FKey #5 opens the folder that the mouse pointer is on and closes the window that the folder was in. FKey #6 performs a similar function but in the opposite direction. FKey #8 is for users of MultiFinder and kills the finder while one or more applications are active. Finder FKEYS.notes explains their use.

FinderClickFKEY: The function of this FKey is left as an exercise to the student. (FKey #8)

Fit to Mac f: Fit to Mac: By George Deriso and Léo Laporte. Will resize a window to fit the whole screen or to the location of the mouse. Fit to Mac Installer installs the FKey and includes a brief description. **Fixed Dvorak/QWERTY:** A debugged ver-

sion of "dvorak/qwerty" FKey above. (FKey #5)

FKEY Collector 4.1: By Loftus E. Becker, Jr. Allows you to either install and/or sample every FKey found. A collection of 18 FKeys is included. *Shareware - \$10.*

FKEY File Installer: By Andrew E. Page. Allows checking of DAs and FKeys on the disk. Limited to twenty (20) FKeys before the program aborts. *Shareware - \$7.*

FKey Mover f: FKey Mover and FKey Mover FKeys: By Andrew Welch. Installs FKeys onto your own disks. Five special keys included; DateKey, SpecialKey, MemKey, PrintKey and Inversion. (FKeys #5, 6, 7, 8 & 9) *Shareware - \$15.*

FKEY Sampler f: FKEY Sampler: By David Kalin. Allows you to test other FKEYs and DAs before installing them. See the **FKEY Sampler Documentation** for information. *Shareware - any donations of chocolate.*

FKeyMaker Application f: FKeyMaker Application. By Loftus E. Becker, Jr. Creates a file of FKEYs (Open DA FKeys), each of which will open an installed DA from the keyboard.

FKeys Programmers f: By Neil Trautman. **InvisiWin FKey** makes the content region of the front window transparent and **SendToBack FKey** sends the front window to the back of the window list as described in **FKeys.Doc**. **InvisiWin.o** and **SendToBack.care** the code. (FKey #7 and #8 respectively) *Shareware - \$3 and \$2 respectively.*

Flipper FKEY 2.0 f: Flipper FKEY 2.0: By Mark Chally, Chally Micro Solutions. Allows you to change the type of Flexware report file from "TEXT" to "LLWR" and back without using special-purpose application programs or an editor to do it. The real utility of this FKey is with the generic version that permits changing a file of any type and creator to any other type and creator. **Flipper Docs(MacWrite)** is the documentation and **Flipper Info** is the supporting file that permits modification to get the generic capability. (FKey #0) *Shareware - contributions in kind.*

Folder Maker f: Folder Maker: By Andrew E. Page. Will make new folders complete with the author's shareware request in the **Read Me** file left in the folder. Install **Folder FKEY** installs the FKey in your system. (FKey #9) *Shareware - \$5.*

FontFkeyDalnitPictSnd f: FontFkeyDalnitPictSnd S... By Dave Kalin. Allows you to look at your FONT, FKEY, DA, INIT, Picture (MacPaint or PICT resource), or Sound(SoundCap or snd resource) items without running the FONT/DA mover, ResEdit, SoundCap, HyperCard or any other Paint-type programs. **Sample Instructions** is the documentation. *Shareware - "send a CD (Compact Disk, Certificate of Deposit, Charitable Donation,*

or Carol Doda) ..."

Fontsie 1.53 f: Fontsie 1.53: By Loftus E. Becker, Jr. Allows you, while running MacWrite, MacPaint, or other programs with a "Font" menu, to have access to fonts stored not only in the System file, but in any Font files on disk as described in **Fontsie 1.5 Doc**. (FKey #5) *Shareware - \$5.*

Fontsie Special 2.0 f: Fontsie Special 2.0 and Fontsie Launcher 1.2: By Loftus E. Becker, Jr. Accesses font files on disk (not in System) while in practically any program that uses fonts as discussed in **Fontsie Special Documentation and Documentation Text**. (FKey #60 and 7 respectively)

Function Keys: Font/DA Mover document. By Loftus E. Becker, Jr. Creates a menu listing of current FKeys & lets you use them from a menu.

Launch f: Launch: By Greg King. Permits you to launch applications from within other applications without returning to the Finder, as long as the applications do not write temporary files. **LaunchKey 2.0a4 doc** is the documentation. *Shareware - \$3.*

Launch DA/FKEY f: Launch DA/FKEY 1.4 and Launch DAs Key 1.3: By Loftus E. Becker, Jr. Lets you launch Desk Accessories and FKeys by typing in all or part of their names. **Launch DA Key Docs** is the documentation. (FKey #7 (both))

Load/Unload FKEY: By Glen L. Austin. Loads and unloads paper in the ImageWriter tractor feeder. (FKey #6)

MenuSelect 3.1.FKey: By John Holder. Will wait for you to pull down a menu, then do a screen dump to disk (Cmd-Shift-3). Only necessary with machines with new ROMS. (FKey #0) *Shareware*

Misc Docs: By Loftus E. Becker, Jr. MacWrite document describing the freeware FKeys "PrinterBurpKey1, Load Keyboard, Make FKEYs, and the patches 'Patch Init' and 'Patch Key'".

Morse FKEY f: Morse CDEV, Morse FKEY and Morse XCMD: Sounds a series of dots and dashes when invoked. **Morse.doc** is the documentation.

MountEm 1.4 FKEY(5) f: MountEm 1.4 FKEY(5): MountEm 1.4 Doc: By Bill Steinberg. Permits you to mount and unmount SCSI volumes from the keyboard. A special feature for power users even permits the unmounting of volumes with open files. (FKey #5)

MovesMemKey f: MovesMemKey: By William J. Bock. This FKey for programmers looks up Mac routines placed on the clipboard to determine if they move memory. **MovesMemFKey.doc** tells all about it. (FKey #6)

NTSC FKEY f: NTSCFKEY: NTSC dox: By Matthew Russotto. Installed with ResEdit and using it with caps lock as an on/off

toggle, this FKey will turn on the NTSC video on monochrome video only. (FKey #8) *Shareware - \$10.*

PatternListKey: By W. J. Bock. For programmers; shows the standard patterns and their key numbers. (FKey #8)

Pop-Keys in MultiFinder: By Carlos Weber. Procedures are given to overcome the problems that MultiFinder 1.0, Apple System 4.2/Finder 6.0 have created.

Preview FKEY-6 f: Preview FKEY-6: Preview: By Randy Ubillos. Allows you to preview a documents appearance in miniature before actual printing. **Preview.doc** tells about its use. (FKey #6) *Shareware - \$10.*

Print Clip Key: Prints the contents of the clipboard.

Print Clipper: This is similar to Print Clip, but requires FKey #18.

Quit to FKey: Allows you to select an application other than the Finder to quit to.

Resource Handler 2.11 f: Resource Handler 2.11: By John Holder. For programmers; permits you to examine resources of type ALERT, DLOG, STR, PAT, ICON, ICN#, CURS, WIND and PICT. Displays other resource types in Hex and ASCII. (FKey #6) *Shareware - \$10.*

Run Time Logger FKEY: By Loftus E. Becker, Jr. Will keep track of your time spent on a Macintosh.

SetSound.FKey: By Bill Steinburg. Allows setting the sound level without going through the Control Panel. (FKey #6) *Freeware*

SetVolume f: SetVolume: By Dennis W. Manasco, Jr. Allows setting the sound level without going through the Control Panel. **SetVolume Instructions** tells how. (FKey #8) *Stampware - "frank it [letter or post card] with the most beautiful or unusual stamp in your possession"*

SS Key: And yet another FKey to set the sound level. (FKey #9)

StdFile FKEY f: StdFile FKEY: By Dewi Williams. Meant to be used in a Quickkeys environment to set volume and folder that the "Standard File" Open and Save dialogs will initially display. **StdFile FKEY Docs** describes its use.

Switch-A-Roo.FKey f(11): Switch-A-Roo.FKey: By Bill Steinburg. Will quickly switch all your Mac II video monitors from one preset mode to another preset mode (color/mono) and how many colors or gray levels are displayed. **Switch-A-Roo.Doc**. **Wrt** tells all about it.

Text Source FKEY is a Lucky Strike extra, another exercise for the student. (FKey #9)

Tilde 1.0: Another FKey function left as an exercise to the student.

Toggle Key 1.40-: Supposed to restore the keyboard. (FKey #5)

Transfer FKey f: Transfer.FKey: By Peter Bryant. Allows you to go from one appli-

cation to another application by-passing the Finder. **Transfer Doc** is the documentation. (FKey #8) *Freeware, \$2 for source code.*

Volume FKey: By Brian Ressler. And yet another FKey to set the sound level. (FKey #8) *Shareware - \$5.*

Window Clip: Places an image of the current window on the clipboard. (FKey #5)

Window Manager FKeys f: **FKEY-Close Window, FKEY-Send Window To Rear and FKEY-Toggle Window Size:** By Michael Long. Several FKeys to close, change size, alternate front/behind position, of the windows. **Window Mgr FKEY's Notes** tells about it. (FKeys #5, 6 and 4 respectively)

Write Now Tools FKey f: **WriteNow Tools FKEY.** By Andrew Welch. Allows you to save your WriteNow files as plain text files, and load text files in from within WriteNow rather than going through the translator. **WriteNow Tools Docs** includes instructions for use. (FKey #9) *Shareware - \$5.*

Xpressway FKEY f: **Xpressway FKEY:Xpressway File:** By Andrew Welch. Another FKey to switch applications without going through the Finder. For those without the MultiFinder. **Xpressway.Docs** tells you all about it. (FKey #0) *Shareware - \$10.*

DISK #9.01 — I/C 1 INITs AND CDEVs

NoICON: By Sven Axelsson. A Startup Document which causes the icons of INITs and cdevs which load after it not to be displayed on the startup screen. Must load ahead of other INITs and cdevs to be effective.

Spy! 1.0b4: By Edward Kandrot. A debugging tool which puts a status line showing memory size, SysHeap, AppHeap and Stack size above the menu bar.

!DeskPict 1.1: By Clay Maekel. An INIT that puts up a color, greyscale or monochrome background picture on your desktop. For Mac II and SE/30.

512KE XPRAM INIT f: **512KE XPRAM INIT:** By Scott Armitage.

Description: Makes a 512KE think that it has the Mac Plus XPRAM by storing this information somewhere else instead. A small bit of data is appended to the System file and is read from and written to instead of the XPRAM. Not tested. For 512Ke only.

Aesthete: By David Dunham. Changes Multi-Finder icons to more closely resemble system folder icons.

AltWDEF f (v1.1): **AltWDEF INIT:** By Alexander S. Colwell. A different version of the Macintosh window (an alternative Window Definition (WDEF)). It alters the looks of the window bar and adds an additional

"shrink" button next to the "zoom" button. This button shrinks and un-shrinks the window to an iconic window and back. **AAAReadMe .AltWDEF** documentation says it may trash system files, also notes problem if window is opened after having been moved in its shrunken state.

Answer: By Steve Bryan. A cdev init manager, which allows individual INITs to be enabled or disabled from the control panel.

ApFont f (v3.2): **ApFont:** By Jim Hamilton. Changes the default font used by applications as described in **ApFont Dox.wrt**. *Shareware - \$5.*

AppleShare Kill f: **AppleShare Kill:** By Bob Hablutzel. Designed to solve a common problem on AppleShare networks, with public units.. AppleShare Kill removes all the startup logins from the system before the AppleShare INIT runs. This disables startup mounts while the AppleShare Kill INIT is in the system folder. Not tested. Must run before AppleShare to work. There is a space at the start of the name to accomplish this as noted in Read Me. The text file **Kill Appleshare logins.a** is the source code.

ApplicationMenu f (v3.5): **ApplicationMenu:** By Larry Rosenstein. Provides a popup menu of the current applications under MultiFinder™. Accessed by clicking to the left of the apple menu, to the right of the MultiFinder icon, or anywhere in the menu bar while a designated modifier key is held. **ApplicationMenu.doc** is the documentation.

ASharePonder f: **ASharePonder:** By Kees de Ridder. An INIT which takes the name from the AppleShare Prep file and pastes it to the ChooserName so when a user autologs on a server the choosename will always be correct after logging in. **ReadMe** is the documentation. Not tested.

aSoundInit: By Fractal Software. Plays a designated sound resource (named "Startup Sound") on startup. Labeled to load early.

AutoBlack 1.5 f: **AutoBlack1.5:** By Itty Bitty Computers. When AutoBlack is installed, after five minutes of user inactivity, the Mac screen will go black to prevent burning an image of the desktop. Perhaps the original Mac Screen blanker, but a bit out of date these days. *Shareware - \$5.*

AutoLoader 2.01: By Deneba Systems, Inc. **AWindef f (v1.3):** **AWinDEF:** By Richard R. Ragan, based on Alexander S. Colwell. A modified version of AltWDEF, above; this one with better documentation.

Backdrop f (2.16): **Backdrop:** By Tim Maroney. Puts one out of a collection of pictures in the background of the Macintosh screen, behind all the windows, in place of the normal grey pattern. Also included: **Backdrop DA** which lets you change pictures in the midst of a program.

BBaudΩ 1.0 f: **BBaudΩ 1.0 cdev/INIT:** By Mathew Alan Milroy. Adjusts the parameter RAM settings for the modem port in the CMOS clock chip and stores them there until the user, decides to alter them once again. Meant to: 1) help with null modem cable file transfers between IBM PCs and the Macintosh and 2) help stabilize network communications. Not tested. For SE's and II's. *Donation to Shriners Hospital, Québec.*

Beep Init f: **Beep.Init:** Causes the Macintosh computer beep to become the sound stored in the file named BeepSound. The BeepSound files mentioned in the documentation aren't included here. Can be used on 128K Mac if added with ResEdit.

BeepShuffle f: **BeepShuffle:** By Alex Chaffee. Patches SysBeep to select a random beep from all installed snd resources. Not tested.

Big Screen INIT f: **Big Screen INIT:** By Kurt J. Hebel. The Big Screen INIT is a program which allows you to use a much larger screen bitmap on your ordinary Macintosh. It features selectable screen sizes, and automatic scrolling to any region on the *virtual screen bitmap*. Not tested. *Shareware - \$5.*

Blackout f (v1.1): **Blackout:** By Andrew Welsh. A screen blanker cdev, configurable from the control panel, which displays a moving field of stars. For 512E and later. *Shareware - \$5.*

Boomerang f (2.0B8): **Boomerang:** By Hiroaki Yamamoto. Boomerang is an INIT/cdev utility which makes it easy to use the SF Dialog (the dialog which appears when you choose open or save as from the File menu).

BroadCast f (1.2): **BroadCast:** By Joachim Lindenberg. A Chooser Document used to send short messages between Macs on a network. Not tested. *Shareware - \$25 a machine or \$100 a network.*

Burning Fuse INIT f (v1.0.1): **Burning Fuse INIT:** By Ron Hayter. INIT which plays a short animation on shutdown. *Shareware - a postcard.*

CasheControl f (v1.1.1): **CasheControl:** By Jim Hamilton. Allows the caches on the 68020 and -30 chips to be set, and fixes a bug in Excel 1.5 with -30 machines. For machines with 68020 or -30 chips (SE/30, Mac II, IIX, IICx, etc., and those with accelerator cards).

Shareware - \$10; 12.50 for new disk.

cdev Shrinker f (v1.0): **cdev Shrinker:** By John Rotenstein. Once installed, removes the icons from the listing of cdevs in the window in the left-hand window of the Control Panel. *Shareware - a postcard of your hometown.*

ChimeINIT f (v3.1): **ChimeINIT:** By Robert Flickinger. Plays up to 4 snd. resources on the hour, half-hour, and quarter hours. A coo-coo clock chime is included.

ChooseCDEV (v1.0): By CE Software. Lets the order in which cdevs are loaded be set. **Cmdr.Dialog [f (v1.0.1) Cmdr.Dialog]:** By Andrew Welsh. An init which associates keyboard shortcuts with dialog boxes, so the "y" key will choose a "yes" box, "return" an "OK" box, etc., puts "smart quotes" in dialog boxes, and assures an I-beam cursor in dialog fields. *Shareware - \$10.*

DISK #10.01 — M 1 MISCELLANEOUS (EXCEL)

MortPmt-30: By Harmon Skurnik. Template for a 30 year mortgage that illustrates use of the table function. Can be made more powerful if the table row and column values are based on formulas that vary as a function of the the input principal and interest. *Shareware - \$5.*

AMRTBL.BIN: A amortization calculator for a specified payment number. Protected spreadsheet; password is Joseph.

Black-Scholes Model: By JMT. This model is provided for the adventurous stock market options traders. Protected worksheet; password is Profits.

Calendar: Type in the month and year and print out a page size printout of a calendar for the month. There is space for a small amount of typed annotation and plenty of room for handwritten notes.

Compound Interest Calculator f: Compound Interest Calculator: By Donald M. Peaslee. Calculates compound interest (yield) from simple interest using a brute force technique. **Quick docs** tells all about it. Protected worksheet; no password. *Post-card requested.*

CopyRows.Macro: Copies rows from a source worksheet and transfers them to a destination worksheet as data (Paste Special, values). An effective illustration of macro looping with control by counters.

Donoghue Signal f: Donoghue Signal and Donoghue Signal Chart: Calculates the Donoghue signal from the weekly 7 day average yield for the stock and bond investor. **Read Me - DS** is the documentation. Protected Excel 2.2 worksheet; no password.

Excel Flight Plan f: Excel Flight Plan and FPMacros: By Stan Puckett. A flight planning worksheet for a Cessna 172 that makes extensive use of macros. Illustrative of a number of macro techniques.

Excel Templates f: AreaFormula.xl, CircleData.xl, StockValu.xl, TI-DI-VEL.xl and TravTime.xt By Frank P. McIlhenny. A collection of spreadsheets designed to illustrate how spreadsheets work as indicated in the **Read This** file. Protected worksheets, no password.

Fuel/maint log f: Fuel/maint log: By Andrew Douglas. A spreadsheet to collect vehicle

fuel mileage information for the record keepers. **Fuel log read me** is the documentation.

Help Template.Help: By Rick Sonntag. Permits you to create a help file to go with an Excel 1.5 worksheet, chart or macro.

LOAN4: By Kevin McDaniel. A loan payment schedule that shows interest, starting and ending balances and principal paid when the principal, interest rate, start date and monthly payment are inputs. Good examples of selected text operations.

magic number f: magic number and magicmacros: By Dan Kittay. Use this to keep track of the magic number for your favorite baseball team (too late this year but useful for next). **magic number notes** is the documentation.

Morning Line*: By Ken Corey and Jack Habeck: to give the experienced handicapper a more accurate betting line for thoroughbred racehorses. Protected worksheet, password unknown.

MortAmt.MS v4.1: By Ray Sanders, Green Grass Software Inc. A macro to build a spreadsheet showing mortgage amortization based on starting principal and interest rate. *Shareware - \$10.* Doesn't run w/o error, check w/ 1.5

Personal Finance f: 89inc, 89ckbook and 89exp: By Steve Proffitt. Income, expense and checkbook spreadsheets and associated 89macro macro permit you to run this simple accounting system.

PlusMenu f: Plus_Menu: By E. Graham, Spreadware. A macro that adds a menu containing formatting shortcuts to the right of the Excel menu. **Plus Instructions** is the documentation. *Shareware - \$7.95.*

Real Estate f: Farming Record, Expense Record and Farming Chart: By Maria Lima. A spreadsheet based record of real estate mailings "farming" to prospective residents. **Breakdown and Totals** are macros. *Shareware - \$25.*

Replace+ f: Replace+: By Rick Sonntag. Adds commands to pull down menus of Excel 1.5 to provide formatting functions and adds a very useful search and replace function.

Retirement f: Retirement: This rather comprehensive spreadsheet permits you to determine your financial needs and position at retirement. Macros supports the calculation or future value and present value of an annuity.

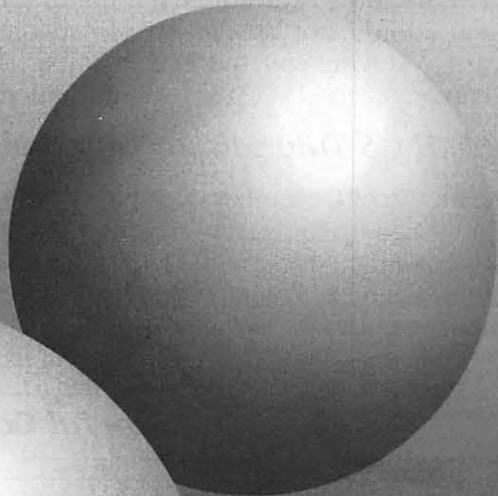
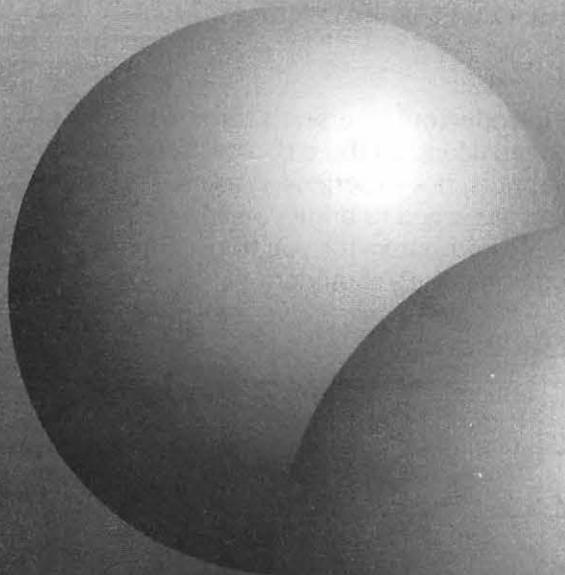
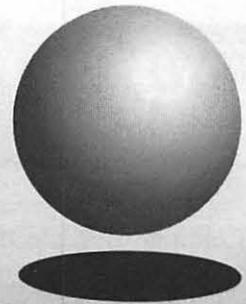
Runner! f: Runner!: By Dale A. Charletta, MD. Enter your times for running a fixed event so you may chart them. **Run.Enter, Run.List** and **Run.Macros** are the supporting files.

Time f: Time: By L. Roger Doherty. This function macro subtracts two values of time in Month, Day, Year, Hours, Minutes, Seconds, AM/PM format to find the difference rounded to the nearest 15 minutes. *Shareware - \$5.*

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Washington Apple Pi Tutorials

by Rob Clark

Information
Tutorial Calendar
Application Form

Information

Washington Apple Pi provides training to its members and to non-members on a regular basis. Due to the holiday schedule, only the Apple II GS Courses will be offered in December. More and different types of Macintosh and Apple II training will be offered once the new year begins. By the way, the Tutorial Coordinator Job has been filled jointly by Rob Clark and Eileen O'Grady. We're looking forward to serving you, the WAP member, in the future. Please feel free to contact either one of us. Rob can be reached at (301) 428-9207, Eileen can be reached at (703) 532-0641.

Apple II GS Tutorials for December

In the month of December, we are providing the Apple II GS Introductory Courses, a three-part series. You may sign up for one, two or all three, if you wish.) Of course, taking all three courses provides a beginner with the most benefit.) This class is designed for beginners, not experienced users. The fee for each session is \$15 for members, \$20 for non-members. You are urged to bring your Apple II GS (computer, monitor, disk drives) with you to class, as we have no computers for you to use. If you can't bring your own computer, you will have to look over someone else's shoulder.

Tutorial Calendar for December

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	Apple IIGS INTRODUCTION 7 p.m. WAP Classroom	6	7	8	9
10	11	Apple IIGS SOFTWARE 7 p.m. WAP Classroom	13	14	15	16
17	18	Apple IIGS OTHER APPLICATIONS 7 p.m. WAP Classroom	20	21	22	23
24						
31	25	26	27	28	29	30

 Scheduled Class Night

Application Form

Washington Apple Pi, LTD
7910 Woodmont Ave, Suite 910
Bethesda MD 20814
301-654-8060

Name: _____
Address: _____
Phone #: _____
Bringing a computer? _____
Class you wish to take: _____

Please mail form to WAP Office or phone-in your registration—classes held at the WAP office

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Apple Hi Res B&W monitor \$125. Call Bill at 703/486-8470

Apple II Plus, 1DD, monitor, misc. software, good cond. \$300/neg. Gordon 758-9373

Daynafi 360K drive reads IBM disks for Mac. New in box. \$295. 703/978-7037.

Apple personal modem 1200 baud, new in box. Best offer. 703/820-0539

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Mac IICx, 40M drive, 5 M RAM, Apple CLB mon., software, more. Best offer 202/462-3177

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Dac Easy Light Accounting; Hayes SmartCom II; IDD MacDraft; Odesta Double Helix II. Call Jeff Alpher, 301-630-2036, please leave message. Everything goes to Best/First Offer.

PowerPoint 2.0 (original documentation) = \$125, More II (shrink wrapped, with warranty card) = \$195, Oracle for the Mac, (with warranty card) = \$150, Trapeze 2.1 (with warranty card) = \$110, MindWrite Express 2.1 (with warranty card) = \$99, Super 3-D 1.0 = \$75. Call Lynn, 301-845-2651 evenings before 10:30 PM.

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I would like to do application programming, word processing, or data entry at home on my Macintosh SE. I have had several contracts developing HyperCard stacks, developing a FoxBase database, and working with FileMaker. I have worked for four years as a database manager and have experience in database design and development using dBase and Paradox on the IBM PC and using Star on the Alpha Micro. I have had one years' experience programming in Pascal on the Macintosh. I have done some technical writing and users documentation. I can provide references. I would like to work part-time, primarily out of my house. I have a Macintosh SE and ImageWriter II. My rates are quite reasonable. Please call Jenny Hoerst at 464-5857.

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WAPAcrostic for November

Using the Definitions, fill in Words. Transfer each letter into the corresponding square of the grid. The resulting quotation will read across. The first letters of the Words column spell out the Author's name and the Title of the work, reading down.

by Dana Schwartz

	1	P	2	F	3	J	4	M		5	O	6	N	7	B	8	H		9	Y		10	B	11	H	12	R		13	A	14	V									
	15	L	16	K	17	D	18	X	19	Q	20	U		21	A	22	C	23	P		24	K	25	F	26	L		27	S	28	Y		29	O	30	G	31	X			
32	R	33	U	34	W	35	B		36	U	37	Q	38	I		39	E	40	Z	41	N	42	L		43	J	44	X	45	N	46	K	47	R	48	Y	49	I	50	N	
51	E	52	B		53	R	54	G		55	R	56	T	57	E	58	X	59	U		60	Y	61	A	62	D	63	O		64	Z	65	O		66	B	67	I			
68	X		69	S	70	B	71	M	72	V		73	A	74	C		75	A	76	S	77	B	78	X	79	P	80	W	81	M		82	F	83	G	84	W	85	Q		
86	S	87	V	88	D	89	P		90	Q	91	O	92	I		93	T	94	R	95	Q	96	E	97	Z		98	X	99	W	100	Z		101	W	102	U	103	F		
104	C	105	K		106	N	107	S	108	I	109	Q	110	T	111	M	112	L		113	O	114	B	115	G	116	S	117	N		118	G	119	X	120	A	121	M	122	F	
123	U	124	C		125	S	126	V	127	M		128	R	129	W	130	A		131	Q	132	P	133	M	134	U		135	K	136	L		137	J	138	Z	139	G			
	140	M	141	X	142	Q	143	P	144	O	145	N	146	Z	147	K	148	C	149	R	150	H	151	U	152	F	153	I		154	U	155	X	156	A	157	G	158	M	159	L
160	F	161	Q		162	S	163	D	164	V		165	Y	166	L	167	A	168	S		169	H	170	P	171	N	172	C	173	T	174	L	175	Y	176	G	177	J	178	R	
					179	I	180	E		181	W	182	E	183	K	184	V		185	Z	186	N	187	P	188	S	189	B	190	G	191	L	192	J							

Definitions

Words

A. Sleep inducers

156 120 167 21 13 73 61 75 130

B. Savagely

70 35 114 189 7 66 77 10 52

C. Facial embellishment

124 74 22 148 104 172

D. Dane king, 1397

88 163 17 62

E. ___ table

51 180 182 39 57 96

F. Nostalgic hairdo

82 25 152 103 122 2 160

G. AC to DC converter

83 30 157 190 176 54 115 139 118

H. Double reed

150 169 11 8

I. Given

153 108 67 49 179 38 92

J. Consumer

3 177 137 43 192

K. Make coarse

105 135 183 24 16 46 147

L. Declares

15 166 42 26 174 136 159 191 112

M. Listened to

158 127 140 4 71 111 133 81 121

Definitions

Words

N. Utilizing

117 145 45 50 186 41 6 171 106

O. From one to another

29 144 5 113 65 63 91

P. Sizeable

170 23 1 143 187 132 79 89

Q. Following

161 37 90 109 142 85 95 131 19

R. With a jerk

128 32 149 12 47 94 53 178 55

S. Chooseably

107 188 125 27 76 86 162 116 69 168

T. Oval centers

173 56 93 110

U. Low cost housing

102 134 123 59 154 33 151 36 20

V. Young female terrapin

126 164 87 14 72 184

W. Frugality

34 129 101 99 84 80 181

X. Passed to another

31 58 98 18 78 141 155 44 119 68

Y. Fr. theologian (1509-64)

175 9 60 165 48 28

Z. Plotted

97 185 138 146 64 40 100

*Ever wondered about the answers to all these puzzles?
See next month's issue.*

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