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washington apple pi

The Journal of Washington Apple Pi, Ltd.

Volume 11, Number 9 September 1989

Washington Apple Pi
Your User Group
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WAP Artists Exposed to Public View 16

Juggling Fonts and DAs With The Masters 37

Contorting Text With The Best 53

Recover Crashed Files With ProDOS 67

Pro Football for Chairbound Fans 81

And Much, Much More:

President's Corner, 9 • Minutes of July Meetings, 11 • Book Reviews, 13 • Artists on Exhibit, 14 • SIGs and Slices, 19 • Adventures in Excel, 29 • Insights into *Insight*, 33 • MasterJuggler Revisited, 37 • MacNovice on MultiFinder, 40 • Math Rabbit, 51 • PageMaker 3.02 Reviewed, 52 • SmartArt I Reviewed, 53 • Coming Mac Events, 57 • Apple III Intensifiers, 58 • The Beagle Compiler Reviewed, 60 • National Collegiate Software Clearinghouse, 65 • AW 3.0 Compatibility, 66 • ProDOS 16 to the Rescue!, 67 • The Cutting Edge, 71 • Fall TeleCom Spectacular, 74 • HyperStudio (IIGS) Reviewed, 77 • The Latest and Greatest, 78 • Sonic Blaster Reviewed, 79 • John Madden Football Reviewed, 82 • Gauntlet Reviewed, 82 • Shufflepuck Café Reviewed, 83 • The Best of the TCS (Apple II), 85 • Download City (from the TCS), 87 • Wap Disk Library for the Apple II and III, 88, 93 • and for the Macintosh, 94 • ***and all the regular condiments***

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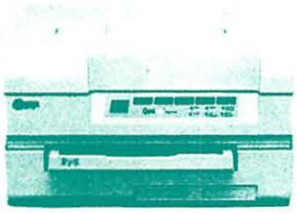

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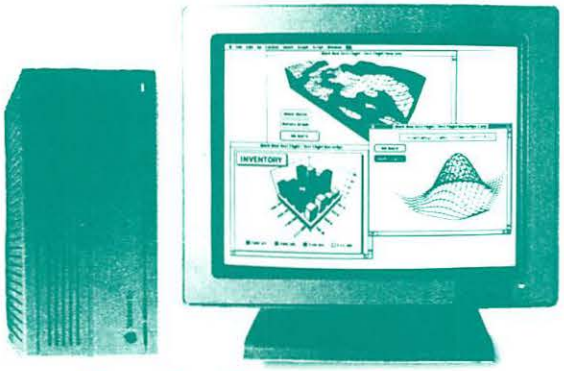

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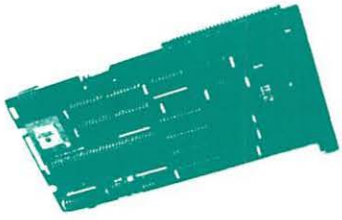

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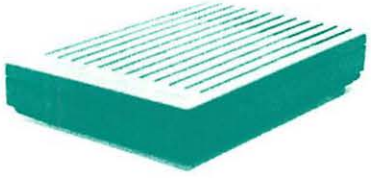

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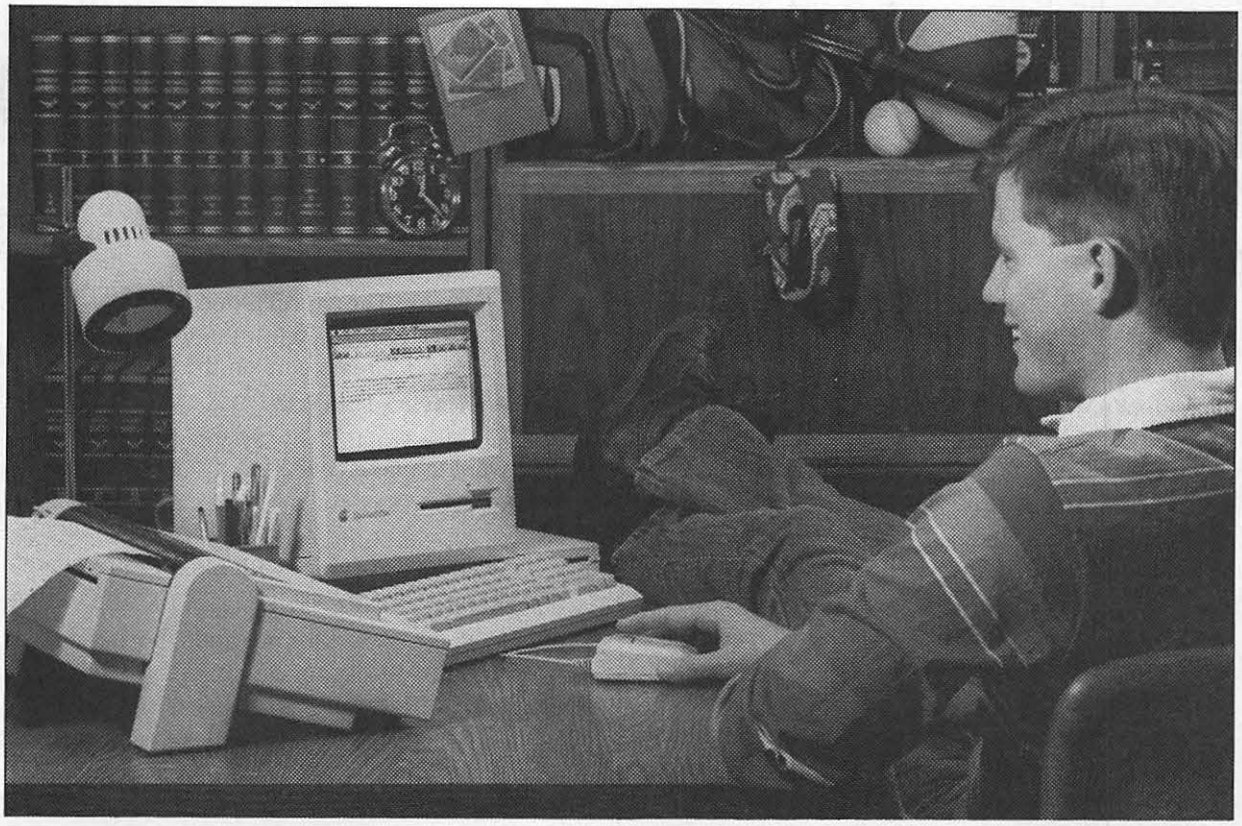

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Table of Contents

Volume 11 ..... September 1989 ..... Number 9

Club News

Editorials 7
by Frank Potter/Journal Issues
Letters to the Editor 7
President's Corner 9
by David Morganstein/Club News
Minutes 11
July Board of Directors Meetings.
Book Reviews 13
by Frank Potter/ PageMaker, Design, and a little gossip about what really happened at Apple.
Alternative Cover Designs 14
Artists on Exhibit 16
New directions in computer-generated art.
Report on MacWorld Expo, D.C. 18
Map to WAP Office and Meetings 46
WAP Hotline 47,50
Names and numbers for help.
Calendar 48,49
Index to Advertisers 92
Classified Ads 94

SIGs and Slices

AVSIG 19
ExcelSIG 20
FedSig 21
NeXTSIG 21
PI-SIG 23
IIGS SIG 24
WorksSIG 24
Columbia Slice 25
Annapolis Slice 27

Macintosh Articles

Adventures in Excel 29
by Larry Feldman/ An Excel spreadsheet to . keep score is a non-trivial task.
Insights into *Insight* (Review) 33
by Cindy Carter/A user-friendly accounting package for small businesses.
MasterJuggler Revisited 37
by Phil Noguchi/ Keeping track of stray fonts and desk accessories is easy, when you know how to do it.
Back to Basics: The MultiFinder 40
by *Ralph Begleiter*/MultiFinder explained, as MacNovice reappears on the scene.
Are We Having Fun Yet? 42
by Lynn Trusal/ New system and other software to make your lives more productive.
Math Rabbit (Review) 51
by Martin Milrod/ In which our hero reveals what he *really* does with his computer.
PageMaker 3.02 (Review) 52
by Frank Potter/ It's out and it adds some useful features.
SmartArt I (Review) 53
by Frank Potter/ How to make your PostScript printer do new tricks.
Calling Dr. Mac... 54
by Robb Wolov/ Power tips, when you thought you wouldn't need them any more.
But I Don}t Understand... 56
by Morganstein & Milrod/ Searching answers to questions you hoped that you would never have to have answered.
Coming Events—Past & Future 57
by Eric Rall/ What's happening to the Macintosh side in the next several months.

Apple II Articles

Where Are All Those Apple IIIs Coming From?58
by Hendrik Van der Straeten/ How to make your old Apple feel like a young one.
The Beagle Compiler (Review) 60
by Phil Shapiro/ Speeding up Applesoft programs with new software.
National Collegiate Software Clearinghouse ..65
by Joseph A. Hasson/ All about an association to improve the use of computers in eductional systems.
AW 3.0 Compatibility? 66
by Gary Hayman/ Making AppleWorks files readable; sending files to telecommunications systems.
ProDOS 16-To The Rescue!!! 67
by Richard FitzHugh/ A program to recover recalcitrant files; includes a listing for those of us with keen eyes and accurate typing skills.

The Cutting Edge 71
by Lee Raesly/ A discursive discussion about AppleWorks, RepairWorks and more! With lots of exclamation points!

Fall TeleCom-Spectacular! 74
by Gary Hayman/ New public domain disks for the Apple III, and information about its present situation.

HyperStudio (IIGS) (Review) 75
by Frank Evangelista/ IIGS owners no longer have to live with sand kicked in their faces by Macintosh owners.

The Latest and Greatest 78
by Ted Meyer/ New system software for the IIGS; printing potential expanded.

Sonic Blaster (Review) 79
by Don Slaven/ Make your Apple II create strange and wonderful sounds. Wow the neighbors! Thrill law enforcement personnel!

Games/Entertainment

John Madden Football (Review) 81
by Nigel Broder/ An Apple II game that allows y ou to match wits with Dexter Manley.

Gauntlet (Review) 81
by Dave Romerstein/ A new arcade-style game for the Macintosh. Not a rave notice.

Shufflepuck Café (Review) 83
by Stephen Jablon / Another Macintosh game; needs quick reflexes and a capacity for enjoyment of a game that depends on reflexes.

The TCS

Best of the TCS 84
by Paul Schlosser/ Chatter on the Apple II boards. Mac people don't seem to talk much.

Download City 87
*by Paul Schlosser/*New Files, available for downloading.

WAP Disk Library

Apple II, III 88,93
Macintosh 90
Disk Order Form 94

Membership Application Form 94

Updates and Corrections

The current version of dBase-Mac, listed in the August Journal, is 1.01

The review of Flexware, in the July Journal (p. 20) should have stated that Flexware is compatible with SYLK files. At this time WingZ does not write in a SYLK format, and therefore WingZ is not fully compatible with Flexware.

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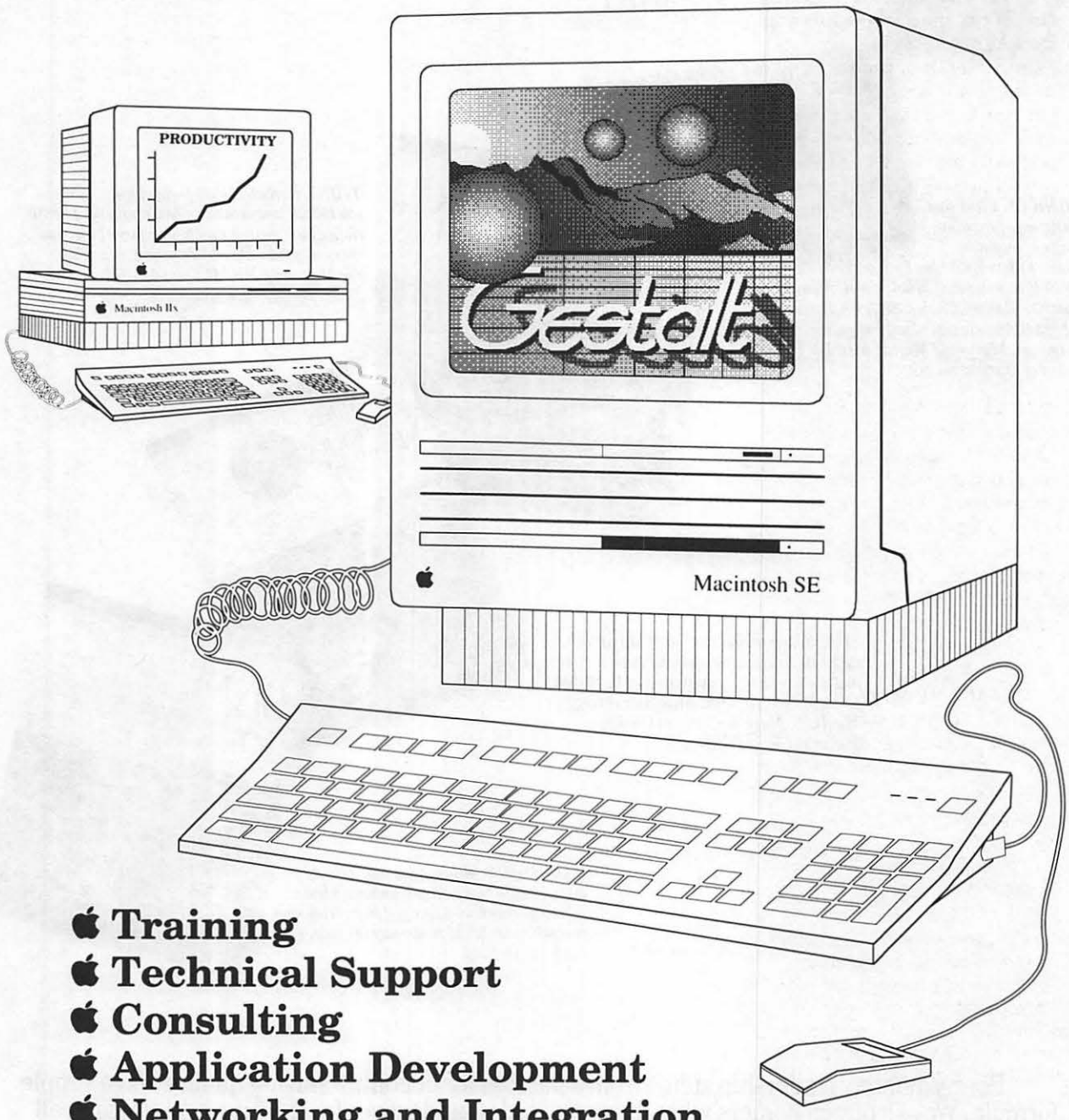

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What you see is...what you see

Responding to reader requests, vague threats and quite precise descriptions of the fate of various parts of our anatomy, we continue the search for an improved format for the Journal in general, and its logo and cover in particular. Three talented members have taken a shot at new cover designs for the Journal; two of them appear on page 14, and the third you saw when you picked up this issue. About all that everyone seems to agree upon is that we need to continue the process of upgrading the look and content of the Journal, and this is a quest that we are delighted to endorse.

A minor controversy has been brewing on the Bulletin Board about whether the Journal cover should be confined to a listing of the Table of Contents, devoted to eye-catching graphic displays, or some combination of the above. The controversy is by no means resolved as we go to press, nor may it be for a while. If our readers have views on the subject—as we hope you do—we urge you to communicate your feelings to us, either on the TCS or by phone to the office. (No one in the office has yet seen this request, so the threats of bodily injury will probably escalate as soon as this issue hits the street.)

A committee is still in search of a more permanent arrangement for the production of the Journal, and they will doubtless also be interested in the views of the membership on these questions.

Certainly those who would have the cover show the full contents have a point in saying that it would ease the problems involved in searching for material in elderly issues—at least until the full index is published at year-end. Equally strong arguments can be made that the appearance of the Journal is, for many, the only presentation that WAP can make to the rest of the world, and that an attractive cover can be a powerful force to attract new readers and new members to the club itself.

Very possibly the best solution may be to adopt a less extreme approach, and this we have done on the cover of the publication that you are reading today. It adopts an interesting and imaginative logo created by Mike Swartzbeck, and steers a careful course between those who want the full contents on the cover and those who cringe at the thought, perhaps offering an acceptable compromise between the extreme positions. (We are uncomfortably reminded of the Texas apothegm that the only things to be found in the middle of the road are dotted yellow lines and flat armadillos.)

The creator of this page, Jim Donnelly, comments on how he did it:

"The editor has asked me for a 'short description' of how this thing is put together, and for 'the aesthetic considerations, to the extent that you can articulate them.'

"Well, it's put together by taking Mike Swartzbeck's original design and making room at the left for photos (when they're available) and at the bottom for something like a more traditional table of contents.

"There's a lot of built-in flexibility. For instance, the stack of photos can contain anywhere from 1 to 3; the screened boxes containing feature articles could probably number from 3 or 4 to 6; and the table of contents could either line up flush left and right with the feature articles, or be extended, as space requires, to the right and/or left. On those occasions when no pictures are available, the screened blocks could all be extended to the left, as in Mike's original design.

"As for articulating aesthetic considerations, I adhered to two principles presented in a graphics course that I took long ago. The instructor, a Japanese-American, was wholly devoted to the 'Swiss' school of design, and these were his words of scrutable wisdom:

'(1) Everything on the page has to line up with something else.' It was supposed to be exceptionally neat if you could find some kind of axis in a photograph or in artwork, something like a steeple, for example, and line that up with one or more elements of type on the page. I did that once, and I still take it out and look at it from time to time, but naturally nobody ever noticed it. (I think, actually, they're not really supposed to notice.)

"'(2) Some day you'll be asked 'Why did you put this here rather than there?'and sometimes the only truthful answer is 'Because that's where it belongs.'"

...and that's it for this issue...

Frank Potter

Letter to the Editor

Sir:

I would like to add a few comments to the review of the Applied Ingenuity Inner Drive in the August edition of the Journal.

Since the review was originally submitted in late December, 1988, there have been a few changes to what was noted there. First, the Inner Drive direct mail prices have gone up slightly, but they are available at the original prices ($599 for 40MB and $449 for 20MB) from Programs Plus, and possibly other dealers by now.

Second, a native-mode 16-bit driver is now standard. This resulted in noticeable reductions in the seek and access times. Although the numbers quoted in the review are good for rough comparisons with other drives, the actual times should now be approximately one-third less than was noted there.

Finally, I have had my drive installed and running flawlessly for 9 months. With a UPS for my system now, I keep the unit running 24 hours per day. I still run the Kensington System Saver with it, so the unit benefits from having two fans; with this setup I have had no cooling problems with the unit. This information may be of use to anyone considering a hard drive for a IIGS.

Dan Slaven

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President's Corner

by David Morganstein

Who Are We? One thing that can be said safely: we aren't the same handful of hackers we were eleven years ago when we all fit in a classroom. We are not the organization of 500 members who welcomed Steve Wozniak, genius of the Apple II, to the G.W. auditorium. Nor are we the same organization that greeted the Woz a second time when he brought four of the Macintosh developers to meet 2,000 of us just a day after the Mac was introduced five years ago. We have changed a lot.

I recently attended a very enthusiastic Desktop Publishing SIG meeting. Jody Joy, an active contributor to the SIG, said it well: there are now lots of WAP members whose livelihood depends upon their computers. We are a real potpourri. We still have our hackers and programmers, we have our educators and our parents and we have our professionals. The challenge for us is to find ways to insure that all members receive value for their membership fee, regardless of their machine of choice.

Your board of directors actively seeks your thoughts and ideas, your time and enthusiasm to meet this challenge.

By-Laws. At the July meeting, there was a short discussion on procedures for changing By-Laws. Three different approaches were discussed. 1) The current approach is to leave all By-Law changes to the Board of Directors, thereby allowing changes to proposed and voted on at the same meeting. 2) The original procedure required that all proposed By-Law changes be placed in the Journal and subsequentally voted on by the full membership at a regular meeting. I am told that this earlier procedure was rejected by the membership as being too burdensome. 3) One intermediate procedure would be to have all proposed By-Law changes printed in the Journal before they can be approved by the Board. This would allow membership review and comment at a main meeting (and even a vote if the membership felt strongly about the issue) or time for members to contact board members with their views or time to attend the Board meeting where the approval vote is to be taken. The attendees at the July meeting were fairly unanimous in rejecting the current procedure and more or less split over the second and third alternatives. The Board would like your opinion on this matter, since it is considered very important by many.

Editor Search Committee. The WAP is seeking a long-term arrangement for the production of the Journal. At present we have a three-month agreement with Frank Potter, who has done a fine job with July and August issues. The job description is to collect the copy from all contributors and edit and prepare the material to produce a "blue-line" final copy. The material arrives in a variety of formats: Apple II diskettes, Mac diskettes, via modem or in hard copy. The Editor is responsible for assembling and processing the copy and getting it to our printers in time for distribution at the monthly meeting. If you can provide such a service and would like to discuss your background and a cost proposal with the committee, contact Nancy Seferian, the office or myself.

Membership Survey. Milt Goldsampt has kindly volunteered to conduct the member survey mentioned last month. The survey form should be mailed out to a random sample of members shortly after you read this.

Standards of Conduct. As the WAP has evolved and the backgrounds and interests of its members and active volunteers has changed, there has been discussion of the issue of standards. For an example, as many of you know, some members receive monetary compensation for work they perform (e.g., the regular introductory tutorial instructors receive $30 for teaching a three hour course.) One potential element of a Code of Conduct, as mentioned last month, might be an annual report, available to any member, listing all funds paid to members for services rendered to the WAP during the year.

This committee was certainly **NOT** formed because the Board believes that WAP's hard working volunteers need to be told what is proper. Rather, these 'gray' areas have simply never been addressed in an open discussion which resulted in a codification of the issues. I was told by Lee Raesly, for example, that the current understanding is that software reviewers retain software they have reviewed. But do you and the reviewers know this? Further, what is expected of reviewers: how long a period do they have to prepare the review? If they can't prepare it in that time, what is expected of them?

As I mentioned earlier, many WAP members join because of business needs. Some members feel that potential conflicts may arise. What is the current understanding in this area? As a simple recent example, one of the SIGs was sending reminder notices printed with a member's business return address, thinking that this was the most efficient way to find out if an address was incorrect. Is this appropriate or should all SIG communications contain only the WAP office address? In a brief discussion it was decided that the WAP's address was the recommended approach since the club needed to

know of address corrections as well. Should this 'understanding' between a few members be considered the appropriate policy for all SIG mailings? If so, it should be documented.

Given that it is better that we all work from the same 'song sheet', there is a need to clarify these 'gray areas'. Sam Knutson and Dave Weikert have agreed to serve on a proposed Standards of Conduct. They could use another interested party. If you would like to assist or have suggestions for the content, please contact either of them.

Consumer Advocate. We thank Gary Hayman for offering to serve as a Consumer Advocate. Watch these pages for a comments from Gary on ways to resolve problems you encounter with local dealers or with Apple. Since Gary's strengths are with the Apple II equipment, it would be nice to find someone with Macintosh experience to work with him. Anyone interested?

Dog Days of July/August. During the heat wave of July, the TCS hardware suffered badly and many of the boards were out of service. Unfortunately, the building's AC is turned off after 7:00 P.M. each evening and is not on over the weekend. We have taken a few steps that we hope will solve the problem. An air conditioning unit was purchased and the window in the TCS room will be covered to minimize heat entering the room. Paul Schlosser and Lee Raesley have spent a lot of time trying to get the heat problem resolved. They have had help from Greg Pochepko, Sam Knutsen and others concerned about saving the equipment and keeping the TCS up and running. Other suggestions have included replacing the low-cost switching power supplies in each computer with one large unit capable of dealing with higher temperatures. If you have the technical know-how to assist with this later suggestion, please contact any TCS member to volunteer!

Tutorials. We are in need of co-ordinators for tutorials. The job can be done in less than a dozen hours per month. It involves scheduling tutors and working with the Editor to place a notice about the courses in the Journal. If you are interested please give me a call.

Elections Procedures. As mentioned in previous Journals, the ballots will be made available to any WAP members interested in examining them. If you would like to examine them, please send a note to Jonathan Hardis via the office. Once we determine if anyone wants to do this, we will set up a time in early October and notify those interested.

At a July board meeting, several members expressed their concerns about some of the confusion that arose during the election, particularly dealing with the issue of the election of a secretary. Two of the people who raised good points, Gail West and Mike Hartman, have agreed to serve on an Elections Board during the next year, to help insure that appropriate procedures are worked out well in advance, to minimize any confusion. I'd like to thank Mike and Gail for their willingness to assist the WAP in this way.

Office News

By Nancy Pochepko

Unfortunately, we must bid a fond farewell to Kym Knutson as she leaves the office staff to return to school in Ohio. Kym was a great asset to our office; her skills and enthusiasm will be missed.

Kym's departure also leaves us with a position to fill. If you are interested, please look in the classified section for more details.

We would also like to thank Thomas Jackson for his help while staff members were on vacation. Through his efforts our library is back in top condition.

As with many offices, ours needs a few volunteer hours here and there. If you would like to donate a few hours a month, please let me know. Additionally, some equipment needs minor repairs—if there is someone out there who is knowledgeable about monitors, disk drives, and other peripherals and would be willing to give the Pi a hand (or two), please get in touch.

As always, we are trying to improve the quality of service to our members. If anyone has suggestions, please let us know. We are eager to hear your comments.

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Minutes—July B/D

The Washington Apple PI Board of Directors held its regular monthly meeting on Wednesday, July 12, at 7:30 PM in the WAP Office.

1. Announcements: A budget Planning meeting will be held on August 7, 1989, at 7:00 PM in the WAP office. All are welcome. CLARIS SOFTWARE is sending Bill Campbell to speak to WAP on the evening of September 16. WAP has been invited to participate in a computer show and sale in New Carrollton, at which several members will speak.

2. The Board discussed and approved a set of rules governing meeting conduct, replacing the use of Robert's Rules of Order with more informal procedures. The new procedures will be applied by the Board, and reviewed at the September meeting.

3. In light of Barbara Garlack's decision not to take her seat as a Director at Large, The Board appointed Harvey Kaye, who received the next highest number of votes in the June election, to fill the vacancy.

4. The minutes of the June 14 and June 22 meetings were corrected and approved.

5. The Board delegated supervision of the office staff to Bob Shaffer, and appointed David Morganstein as Presiding Officer of the Board.

6. A resolution re-establishing the Audit Committee was approved, with Andrew Lang appointed as Chair. All former members of the Committee will be encouraged to continue their participation. The Committee's first responsibility will be to select and hire a tax preparer for the Club's income tax returns.

7. Frank Potter was engaged to do the paste-up work on the September and October issues of the Journal, for a payment of $1,500 per issue, plus incidental expenses. Frank was also named as Editor for the same period. A Committee, chaired by Dave Morganstein, was appointed to search for a permanent Editor and paste-up contractor (not necessarily the same person), and to develop ideas on Journal design and content. Nancy Seferian, Chris Bastian, Dave Weikert, Gary Hayman and Lee Raesly were appointed to the Committee.

8. Discussion was held on the appropriateness of publishing material in the Journal with author's copyrights (requiring their permission before being reprinted in other User group publications). The issue will be discussed by the Editor Search Committee; in the meantime, such material will be permitted.

9. The Board reappointed the Committee set up at the June 22 meeting, to select outside Counsel to assist the board in resolving problems with the MacWorld Lottery, Labor Laws, and the Club's contract with Thomas J. Piwowar and Associates. Charles Calkins (Chairman) Rich Waltman, Ed Myerson, Harvey Kaye and Tom Warrick were appointed to the Committee.

10. An architecture and engineering SIG was recognized by the Board. Dave Bernhart will serve as SIG Chair.

11. The Board discussed the removal on May 31 of the backup disks to the membership database, which had still not been returned. Bob Platt stated that Cynthia Yockey, to whom he had given the disks, did not know where they were. It was decided that a member of the Board would contact Cynthia, and that if the issue were not resolved by that method, the Secretary would be directed to send a certified letter formally requesting their return.

12. Because several members were scheduled to be at MacWorld in Boston during the second week of August, the Board meeting scheduled for 8/9 was moved one week to 8/16. The meeting will be held in the WAP office starting at 7 PM.

13. As the result of a disruption which occurred in the office during the meeting, the Board passed a resolution barring Bob Platt from visiting or contacting the WAP office or staff until the date of the next Board meeting.

14. Discussion was held about resolving the problems surrounding the MacWorld raffle. The Board voted to send a check for $2,128.76 to the National Air and Space Museum's Office of Education (the raffle's designated charity).

15. The disposition of outstanding bills by T.J. Piwowar and Associates (for publication of the Journal through June, 1989), and the return of Journal materials, were discussed. It was felt that the inability to resolve matters was in part due to misunderstandings by both parties. Another attempt will be made by those involved in prior negotiations to resolve matters before the August meeting.

Following the meeting, the Board agreed by telephone caucus to ratify an agreement with National Trade Productions providing WAP with a booth at the upcoming FED-MICRO show, in exchange for advertising space in the Journal, and a set of membership labels to be used for a mailing of ticket order forms.

A Special meeting of the Board of Directors was called for by Bob Shaffer and Lee Raesly. The meeting was held on Friday, July 21 at 7:00 PM in the WAP Office.

1. The Board considered a Resolution of Expulsion against Bob Platt, accompanied by written charges, submitted by Bob Shaffer. Extensive discussion was held by all attendees on the charges themselves, and on alternative solutions to expulsion. The Board voted to present to Bob a proposed agreement in which he would agree to a set of terms including 1) absence from Board meetings, and the WAP

during SIG meetings), 2) no contact with the office staff, and 3) a return within 72 hours of all WAP property; all conditions to be in effect until July 21, 1990. In exchange, the Board would drop consideration of expulsion. It was understood that any agreement would have to be in writing and signed, and had to be concluded by the end of the meeting. This proposal was discussed privately by Bob and his representatives during the remainder of the meeting. At 11:00 PM, when all other business had been concluded, Bob Platt's attorney reported that Bob would accept the terms, but wanted the period of effectiveness to last only until March 1, 1990. A motion to accept the agreement with this change was defeated by a vote of 5-7. With no agreement arrived at, the Board voted to expel Bob Platt by a Director's only vote of 9-2, sufficient to meet the 2/3 margin required by the Bylaws. The Board further resolved that it would not consider requests to reinstate Bob's membership prior to July 21, 1990.

2. Discussion was held on acquisition of items in the Capital Budget, as approved by the membership at the January 1989 meeting. Dave Morganstein said he wanted to begin acquiring the items approved, and wanted to ask the membership to re-ratify the acquisition of two items; a Mac IIcx computer, and LaserWriter printer. The Boards voted to present these items to the membership for reauthorization at the July 22 meeting.

3. Dave Morganstein asked the board to form a Committee to be charged with drawing up a code of ethics standards for members and Officers. The Board appointed Sam Knutson (chairman) and Dave Weikert, and empowered them to select an additional member not on the Board of Directors.

4. Discussion was solicited on the conduct of the June elections, in response to three challenges and one inquiry received by the Secretary. In the Board's opinion, none of the complaints were sufficient to invalidate the election results. The Board agreed to direct the Election Commission to arrange a public and candidate inspection of the ballots, assuming a request for one was received, and to publicize the opportunity in the September issue of the Journal. It also asked Gail West and Michael Hartman to assist the Board in drawing up revised rules for next year's election contest.

Full minutes of Board of Directors meetings are available for inspection in the WAP office and on the TCS following their review and approval by the Board.

*****

Summary of the Business Portion of the WAP General Membership Meeting

July 22, 1989

The meeting was opened at 9:05 AM, and was chaired by WAP President David Morganstein.

1. Dave announced he was interested in establishing the post of "Consumer Advocate" to assist members having difficulties with computer dealers and stores. Gary Hayman volunteered to serve.

2. Alan Beach offered to fill the position of "Tutorial Coordinator". Suggestions from the audience for new tutorial subjects included Graphics, AppleWorks, Hardware Maintenance, and Home Accounting software.

3. Dave announced that Senior-Net , an organization promoting computer literacy among senior citizens, was interested in working with WAP. Virginia Valaki offered to serve as Senior-Net contact.

4. Discussion was held on the format for passage of Bylaws changes, and how to ensure adequate member consultation in the review process. Dave suggested three possible approaches:

a] leaving the decision making responsibility to the Board.

b] letting the Board make endorsements of Bylaws changes, but bringing them to the membership for final approval.

c] leaving the final decision to the Board, but with a final vote held after the proposal is published in the Journal.

The consensus of the audience was that options 'b' and 'c' were preferable. It was suggested that the pros and cons of each option be published in the Journal and discussed at a future meeting.

Wanna Job?

Our Search Committee is looking for a permanent editor for the Journal. The following is a list of areas for which the editor may be considered responsible.

1. Soliciting publishable materials, motivating authors who may not consider themselves regular contributors to submit material, and to see that the material they submit is timely, relevant and interesting.

2. Coordinating (to the extent the office staff doesn't do it), and placement of ads

3. Editing

   Supervising technical editing for material submitted by various editors handling machine-specific material.

   Editing for continuity, length, grammar, spelling and content.

   Reviewing the final copy after the proofreaders have seen it.

4. Laying out the semifinal and final pages before submission to the printer.

5. Production—printing out camera-ready copy.

6. Reviewing the "blue line" at the printers immediately before publication.

7. Improving the content and appearance of the Journal, getting people involved in contributing ideas for design and layout.

8. Writing editorials and coordinating editorial policy with the Board of Directors.

9. Attending Board meetings.

At present, the job takes 60–70 hours each month.

Page Layout, Graphics & AppleGossip

by Frank Potter

The Inside Scoop...

Using PageMaker: Macintosh Version, C.J.Weigand, Que Corporation, Carmel, IN; $24.95.

Using PageMaker is about as good a PageMaker publication as you are likely to find—at least it is the best one I have seen so far. The author takes you through the process of laying out a publication, provides hints on various shortcuts available to you (by no means all of which are described or even hinted at in the documents) and even provides suggestions on good graphic design. Certainly there are other publications that go into much more detail on that subject, but this covers the essential points well. I found the book useful and I am recommending it to people that I have trained to use the program.

The book can be used as a tutorial, and if the new user reads it as he or she works through the program, the result will be a reasonably well-informed beginner. It can also be used as a reference for the intermediate user, and its index is workmanlike. The author knows what he is about, and the book clearly reflects this.

If you are thinking about getting the program, or are using it already, you had better buy this book.

I expect very little negative feedback from this review.

Better Graphics

The Visual Display of Quantitative Information, Edward R. Tufte; Graphics Press, Cheshire CN; $34.

If you use your computer to present graphic data to customers, clients, employees or employers, you owe it to yourself to take a look at The Visual Display of Quantitative Information. It describes, in a literate and informative manner, the history of using abstract, non-representational pictures to show the meaning of numbers and data. That history has been surprisingly recent: it was not until the middle of the eighteenth century that such charts began to be produced, and surprisingly enough, the state of the art has not progressed very far in this century.

Interesting and informative examples abound—about good graphics and those that are not so good. The book discusses many of the underlying factors in good graphics design and suggests promising approaches to complex graphics challenges.

In many respects, designing statistical graphics is much like desktop publishing: because it can be done easily, many people do it. Unfortunately, however, easy to do does not mean easy to do well. This book indicates some of the ways that the presentation of statistical graphics can be improved for just about anyone who needs to use them.

Well-designed data graphics can be an enormously powerful medium for communicating information, and this book will get you on the road.

What's Happening?

The Way Things Work, David Macaulay; Houghton Mifflin, Boston; $29.95 in hardcover, ? in soft cover.

This is not a book about computers, although it discusses them briefly. It is a book that you owe it to yourself to look at. It is a readable, whimsical and thoroughly entertaining publication that describes the physical principles underlying much of modern technology. I saw it at Reiters' bookstore on K Street, bought it as a present for my wife and then wouldn't let anyone at it until I had finished it—it's that good.

The dust jacket describes the book as a "visual guide to the world of machines," and it fills that description and takes off from there. Those who are artistically gifted will delight in the author's illustrations and those who are mechanically inclined will be able to use it to understand things that they have been curious about but never really understood.

Reading this review, your likely reaction may well be on the order of: "why is he telling me to look at this book?" Trust me. Find it someplace and take a look—at your local library, if you can find it on the shelves, Crown Books...wherever. If you aren't at least tempted, I will be truly surprised, and if you take it home with you, remember that I told you so.

What Happened?

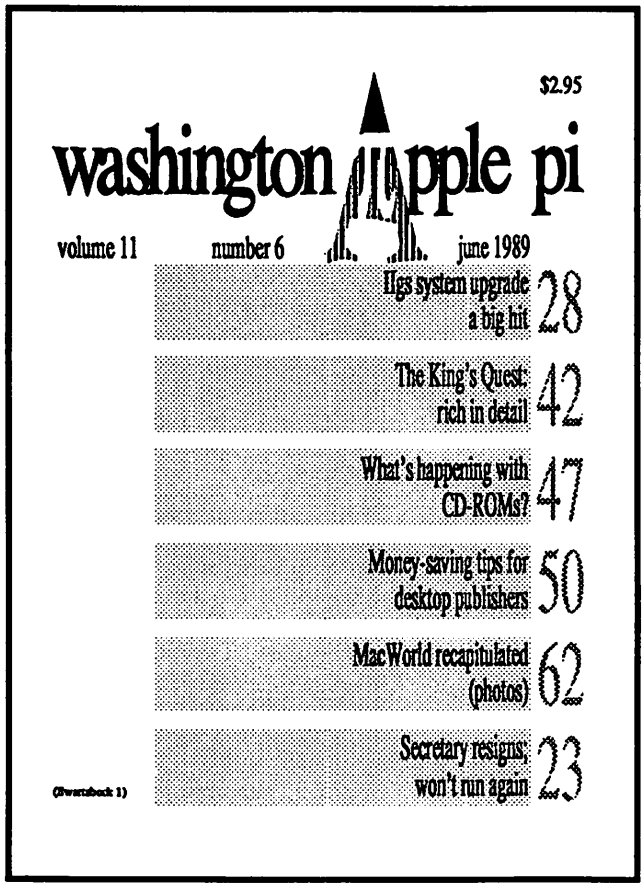
West of Eden: The End of Innocence at Apple Computer, Frank Rose; Viking Penguin, Inc. NY; $19.95.

If you want to know what really happened to Steve Jobs, or to the Apple III, or to the File Server that Apple promised Macintosh users but never quite got around to producing, this is probably the book to read.

It has the virtue of not having been written by any of the protagonists in the ongoing saga of Dynasty West, and it is written well. By well, I mean to say that I had trouble putting it down, and I really don't care all that much about the Byzantine intrigues that characterized life at Apple as things began to come unstuck. The author clearly spent a lot of time in getting his facts straight, and from everything that I can see, he did. He writes well and clearly, a quality that is rarer than one might think these days.

Would I buy it? Probably not. But Fairfax County did buy it for their library system and I have spent more time reading it than I had ever anticipated.

UNCLASSIFIABLE



Alternative Cover Designs

The cover design to the left was created by Mike Swartzbeck, a person whose name TCS regulars will quickly recognize, and whose art is featured on pages 16 and 17 of this issue.

Readers will already have been struck by his redesign of the Journal logo, a redesign that both the other artists incorporated into their treatment of the covers that they designed for this issue. Startling and distinctive, it creates a very definite first reaction on the part of every viewer who has seen it.

The screened boxes and page numbers provide a summary of some of the material contained within the issue itself, responding to requests from the readers for a cleaner visual impact, but providing some information about the contents.

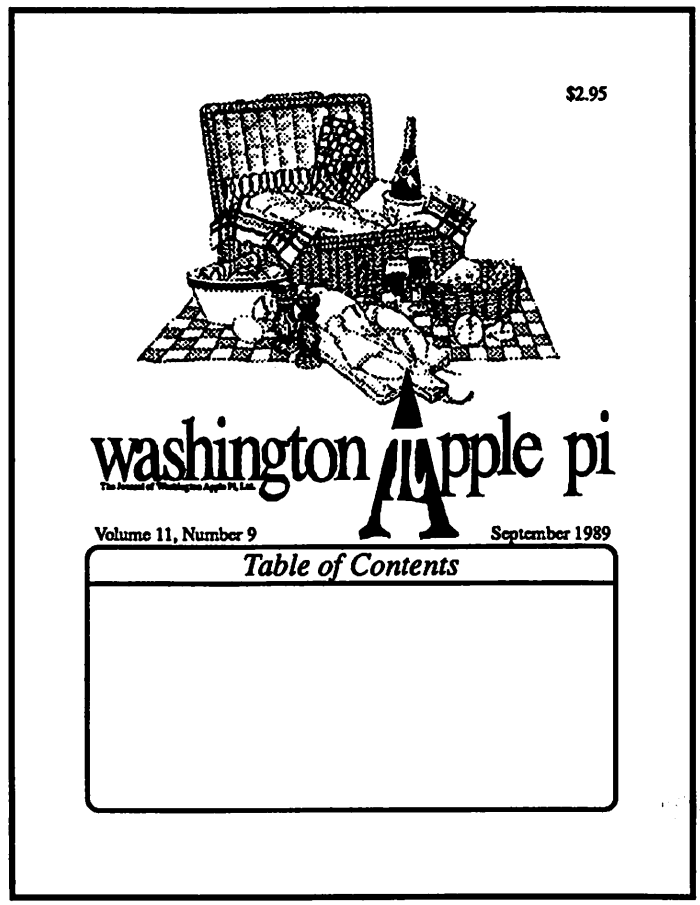
This design was posted on the bulletin board several weeks ago, and provided the other artists with a starting point for their own conceptions of what the cover might look like.

Notice the "funky" design of the letters in the name, *Washington (A)pple pi*. Some like it, and others don't, but few are indifferent

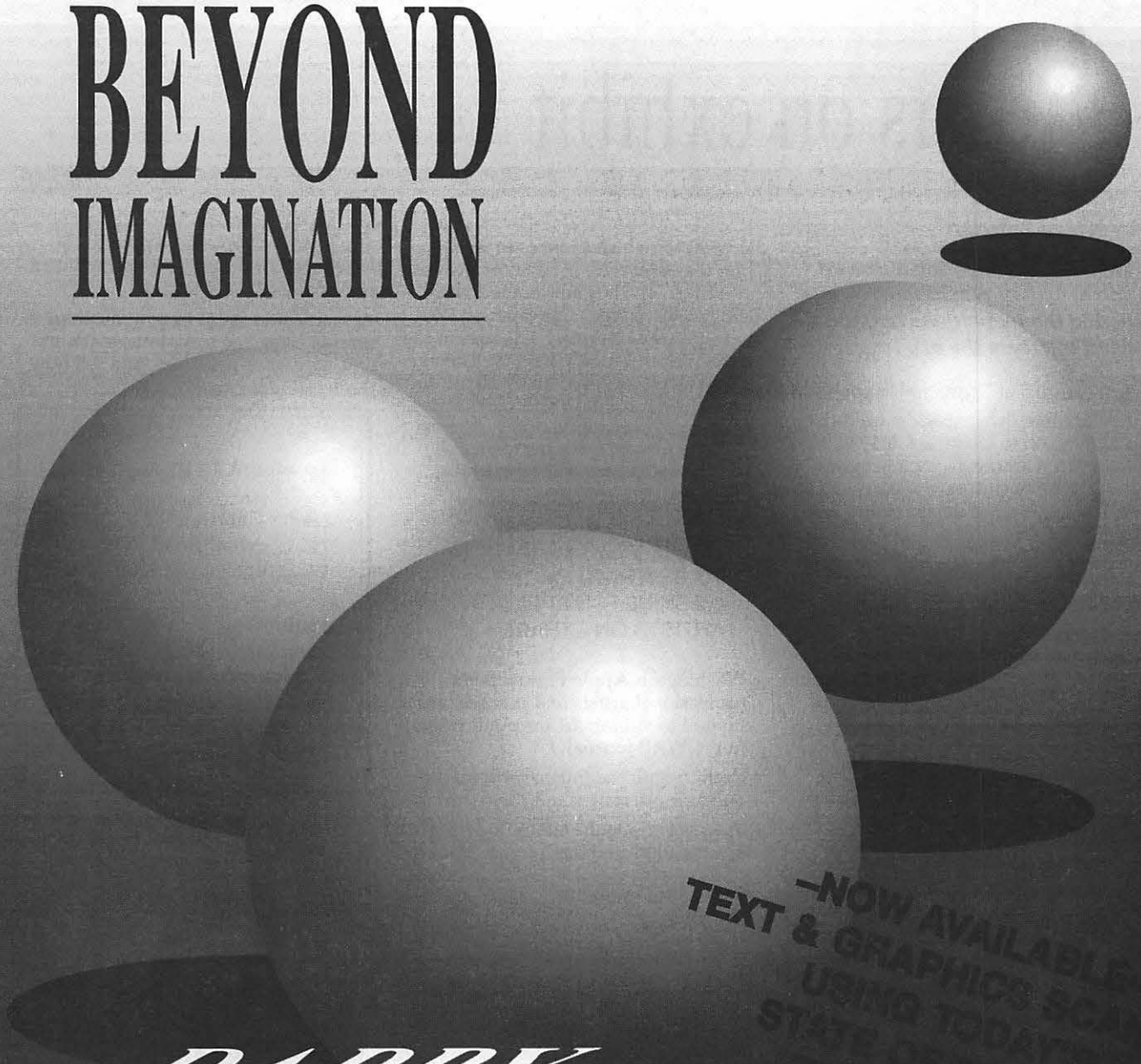
The cover to the right was designed by Bill Baldridge, a WAP regular and Hotline guru who has been around about as long as some of us can remember.

Bill is also a commercial artist, and he offered this design (and several others) as a way of creating a specific graphic image that could be changed to suit the time of year that each issue appears.

Notice that he also uses the Swartzbeck logo, but that the "A" is a solid color, rather than one that has been graduated, as in the logo on the cover of this issue.



BEYOND IMAGINATION



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Artists on exhibit

by Nancy Seferian

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

Art: Nantucket Tsunami (opposite)

Artist: Mike Swartzbeck started using a Macintosh to create art in 1985. He works in Alexandria for a programming and consulting company in the in-house graphics department. His computer art has been published in MACazine, MacUser, Earthbeat, and Verbum, to mention a few.

Mike has been an artist since junior high school when he started drawing cartoons for the school paper. He studied at Nova (commercial art), and at Radford (Fine Arts).

"All the stuff I do now I originally went to school to learn. Then in 1985, the company I was working for in Vienna, Virginia, got a Mac 512, two 400 K drives and an ImageWriter. A week later we got Thunderscan. About a week later the LaserWriter came out, and we got on the list.

That's what really set me off. So much pain in the... work could be eliminated, and clients could see what a piece would look like right away."

Tools: Macintosh 512, Thunderscan, MacPaint, PaintCutter (a DA for grabbing full frames), and Click Art Effects.

How It Was Done: " I scanned all the pictures separately and trimmed everything I didn't want out of the background. I used the lasso for most of that. For larger areas I grabbed a window at a time and reassembled the pieces in a destination file. I had images in about 10-12 separate files, and then I had one paint document set up for doing the final assembly. Every now and then I did a *Save As* to have a version to go back to because you couldn't have separate layers then. When setting up to print I selected *Options*, turned Smoothing *On*, and set it for *Precision Bitmap Alignment*, which reduces to 96 % so that the pixel ratio is right for the LaserWriter. The bitmap on the screen is about 3-4% larger and leaves a little hairline when printing full-size on the LaserWriter. I used Click Art Effects, a desk accessory that allowed you to do skewing, rotation and perspective, to tilt the little houses."

CALL FOR ARTISTS

THIS IS YOUR INVITATION TO BE A PART OF THE WASHINGTON APPLE PI ARTISTS ON EXHIBIT

Washington Apple Pi members, professional artists and novices, are invited to submit art for publication in the WAP Journal.

Each month the Journal will feature one or more artists and their work.

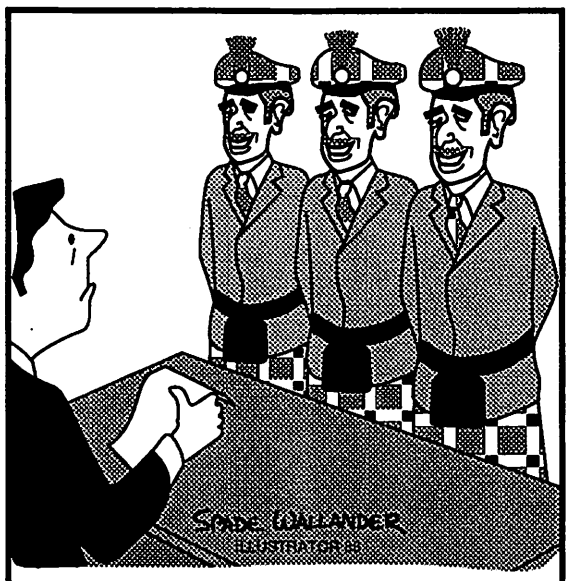
Your work may be submitted by mail or uploaded to the telecommunications system (TCS). Art that is mailed may be submitted on disk of almost any format (Apple II, Apple III, Macintosh or other). Please include a hard copy of the work.

Also, include some biographical information, state the programs, software and hardware you used, and tell how the work was created.

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.



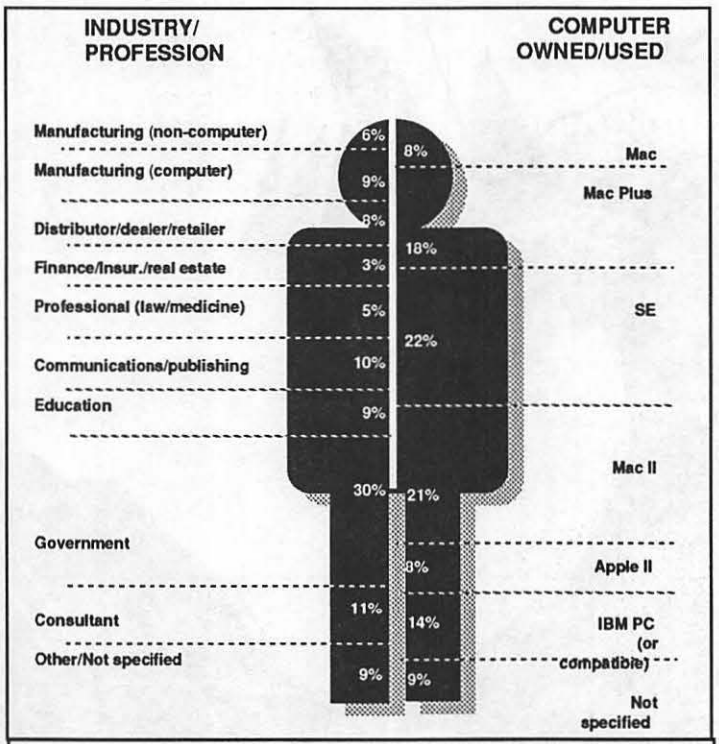
"Weren't you expecting us? We're the Macintosh Clones."

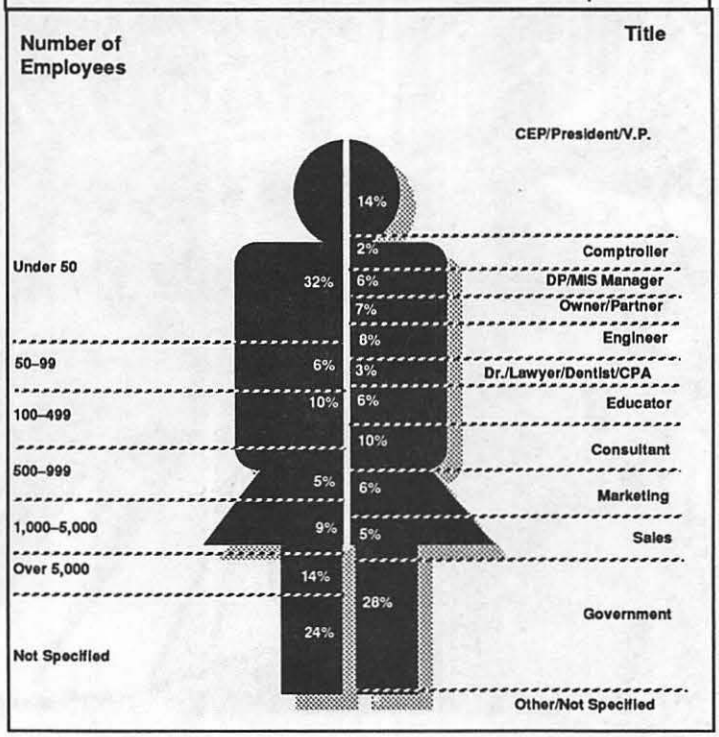
Nantucket Tsunami 6.17.86

MacWorld Expo DC

Statistics*

Attendees: 28,000





* Source: Mitch Hall Associates

The figures to the left tell it all: Washington came to the MacWorld Expo in April and these are the people who showed up.

The promoter of the Expo, Mitch Hall, has indicated that he is quite satisfied with the turnout and that he expects to be back. Just when is another question, since the expositions in 1990 have been somewhat changed around by the nonExpo in January in SanFrancisco.

Of course, since the Boston MacWorld Expo participants are just now straggling back to town, 1991 may seem, to them at least, to be much too soon...

Help Your Neighbor...

The Pan American Development Foundation is a non-profit (501(c)(3) organization that has been set up to assist Latin American and Caribbean countries to improve their economic and social skills. Part of their program is called Tools For Training; this involves the transfer of used tools and equipment, including computers, for helping people in these countries to achieve a better life for themselves and their children. TFT is soliciting the donation of equipment in good condition, and offers the possibility of significant tax deductions for excess inventory or equipment that you may have outgrown. If you wish further information on this program, you are urged to contact The Pan American Development Foundation, 1889 F St., N.W., Washington, DC 20006–4499, or to call them at (202) 458-

Meeting Plans

by Nancy Seferian

AV SIG is planning an exhibit for graphic and fine artists within the year. Joan Kirsch and Mariane Giguere will curate. All WAP artists and members are invited to participate by sending slides of work you would like to enter, along with a resume to:

Joan Kirsch
Box 157
Clarksburg, MD 20871
(301) 972-3083 (H)

or

Marianne Giguere
5423 Amberwood Lane
Rockville, MD 20853
(301) 460-9758 (H)

This year we will again be publishing the AV SIG Directory. Ann Sulkovsky will be mailing a survey to any WAP member who wants to be included. The Directory will include name and address information, art areas, software most used, and computers used. It is a great resource for us.

The planning committee has scheduled the following meetings:

Picnic—Sunday, August 27, 1989, 3:00 PM.

Ellen Mac Brayne's house:
8616 Western Oak Drive
Springfield, Va 22153
(703) 451-2802 (H)

Ellen and her husband will grill chicken. Everybody is invited to bring salads and what-you-will. Call to R.S.V.P.

Come and meet the artists and members. This is a great chance to find out what others are involved with, and what projects and what programs they're working on. This summer picnic is traditionally one of our most popular get-togethers. Call for directions or if you need a ride.

Meeting—Wednesday, September 27, 7:30 PM, Office.

Bring samples (hard copies) of projects you're working on, problems, questions, resources, and tips. We will sit around the table and talk about what we're doing, and generally help and inspire each other. Emphasis will be on projects, and art, not machines, so everyone is welcome.

Meeting—Wednesday, October 25, 7:30 PM, Office.

This meeting will include a panel of artists who will discuss graphic art on the computer. The rest of the meeting will follow the September meeting format.

Meeting—Wednesday, November 22, 7:30 PM, Office.

Bring samples (hard copies) of projects you're working on, problems, questions, resources, and tips. We will sit around the table and talk about what we're doing,

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and generally help and inspire each other. Emphasis will be on projects, and art, not machines, so everyone is welcome.

Party—December 27, time and place to be announced

The Art and Video SIG Survey

by Ann Sulkovsky

Twenty members of the Art and Video Sig were selected for and responded to a preliminary questionnaire. Questions coveredtopics of computer and software usage and interest, meeting time, location and format, special interests and suggestions. A revised final questionnaire will be sent to all AV SIG members.

Results of the preliminary questionnaire indicate that the Mac II is the computer most used by the group, followed closely by the Mac SE. Apple IIGS users outnumber Apple II users. Graphics programs are the most popular software packages, followed by a tie between video/animation/music and desktop publishing packages. Paint program popularity trails.

Most respondents prefer hands-on workshops, but also want variety in the meeting format to include, in order of preference, question and answer/trouble shooting sessions, demonstrations and lastly, product comparison.

Wednesday evening edges out all other weekday evenings as the meeting night of choice. Tuesday is the least popular. Only one member would attend a Sunday afternoon meeting. Most respondents said they would attend meetings in Bethesda, if the meeting topic was of interest and even though the location was inconvenient.

Our members have varied interests, ranging from commercial graphics, 3-D graphics, animation, slide making and multi-image, music, games and desktop publishing to drawing and illustration. The following phrases are representative of respondent suggestions and comments:

more emphasis on graphics; demonstrations too superficial; want to see work of other artists; more on MacII video/animation; want demo of Thunderscan; want to see artists work; change day occasionally; more discussions on computer art philosophy and aesthetics of computer art; tutorial on desktop; more journal articles; concrete examples and realistic ideas from software packages and procedures to produce; more IIGS focus; each computer represented at each meeting; do not like sales demos; prefer users to salesreps; problem solving around general concept (ie multi-image not software); more structure to meetings; more artist participation; more art

We would like to include, in the final questionnaire, a membership software inventory, so that members with the same software packages can contact one another.

Please contact Ann Sulkovsky, (301) 530-7935 if you have a question that you think we should include in the final survey.

ExcelSIG

A Peek at 2.2

By Larry Feldman

July's meeting was devoted to exploring what Microsoft hath wrought with version 2.2. Tom Cavanaugh, who has long been an Excel beta tester, led us in a systematic fashion through the many (many) changes and additions—which made for a somewhat more structured meeting than normal.

This is no place for a review of 2.2. Suffice to say that Tom showed us and commented on a wealth of interface improvements, new features and widespread changes to many parts of the program. None of it seemed conceptually beyond reach but there is a lot of new material to master. Enough, in fact (to employ a very crude measure of "progress"), to take the code on disk from roughly 450K in 1.5 to almost 750K in 2.2. Enough also so that our informal 9:30 ending time came and went with practially everybody still in place for another hour.

Worksheet Tutorials for August & September

Tutorial may not be quite the right word. It's used because it is the intent for these sessions to shed light on common problems, but the group as a whole is both learner and resource. I organized the sessions by choosing the material; but since some of it at least involves stuff that continues to puzzle me it's hardly accurate to say I'm giving the tutorial. The fact is, the SIG has an interesting blend of levels of skill—in sessions like these people just alternate roles.

To give you the flavor of it, some of the topics that we will cover include: how best to use worksheet functions; common syntax mysteries (love those commas) that apply across the board; or subjects as specific as how the devil do you make a particular function function?

Ever have the experience of setting out to use a function and have it persist over many hours in behaving differently than the manual or Cobb would lead you to expect? Maybe it marks me, but that sort of thing happens to me all the time in anything having to do with computers. In this instance I'm asking for help on two functions (DOCUMENTS and WINDOWS) that uniformly operate (for me anyway) in a fashion totally different than described in any of the Excel reference materials. Given the culture of the SIG this is the kind of question that turns into a tutorial by someone on the form, syntax, and perhaps most importantly, the use of these functions.

In addition, there will be time spent on miscellaneous database issues, printing puzzles, memory management, and document linking.

Remember too, anyone is invited to bring any operating problem to SIG

meetings for group consultation—no requirement for prior membership. That's the first item on every month's agenda. Time and place: 7:30 PM on the 3rd Wednesday evening of the month at the Pi office.

On September 20 the Works and Excel SIGS will feature a joint meeting at which local Heizer software authors demonstrate the products each developed (a math function Macro set using Excel, and a single spreadsheet accounting system for sole proprietors whose primary accounting needs are to keep business records to meet IRS Schedule C requirements) and other software/template demos using Excel or Works. In addition, the authors will discuss how to become a Heizer author and answer questions.

FedSIG

July Meeting

by Craig Hirai

FEDSIG meeting attendees met at the U.S. Department of Agriculture and were treated to a lively panel discussion of Macintosh training, both from commercial training sources as well as government agencies. The discussion panel was comprised of many of the Macintosh training vendors in the metropolitan area including ComputerLand MidAtlantic, Gestalt, Systems Resource Group, CCT, and Falcon Microsystems. The government training activities were represented by NASA and the USDA Graduate School. Discussion topics included "why are you doing Macintosh training; screening the potential student, types of training available, what are "authorized" trainers and what do I get by going to one, other training sources, how do I pay for training, and how do I justify training".

The next FEDSIG meeting will be September 20, 1989, at the USDA, Jefferson Drive entrance between 12th and 14th Streets, S.W. on the Mall side of the building. If you come by METRO, take the Mall Exit from the Smithsonian Station. The meeting is again in Room 104A and will begin at 7:00 p.m. The subject of September's meeting is " The Paperless Government?" and will include discussions by vendors of forms generation and completion tools and representatives of government agencies using these electronic forms. If anyone has electronic forms that they've created, please bring them (printed copies as well as on diskettes) to the September 20th meeting and FEDSIG will initiate a program to get these to other federal agencies.

Future FEDSIG meeting topics include: Using the Macintosh as a Training Platform, Stunning Desk Side Presentations, Building a Media Center, Data Storage and Retrieval, Accessing Mainframe Databases from the Macintosh, Connecting and Communication Between Macs and PCs, and DOS on a Mac. If you or your company or agency would like to participate in an upcoming FEDSIG meeting or you have suggestions for meeting topics, please write to me in care of the Pi Office or the Pentagon Macintosh Users Group, P.O. Box 46867, Washington, DC 20050-6867.

NeXTSIG

Next NeXT...

by Gary Letourneau

It has been several months since our last article. During this time NeXT has been busy getting version 0.9 of the operating system out the door. So far, reports of its performance have been very favorable, and it looks like version 1.0 will make an appearance sometime in September.

The NeXTSIG group has been active, even though NeXT computers, or "cubes," are still in short supply. On the evening of June 21st we met with representatives of Businessland at their D.C. office. Businessland has signed an exclusive agreement to market the NeXT cube in non-academic (read: business) settings. While they fully intend to actively promote the NeXT computer, major marketing efforts will center upon the availability of version 1.0 of the operating system.

Our second major event was held on July 15th in cooperation with the Capital PC Users Group. Before a gathering of about 80 people, John Carroll and Mark Feldsman from the University of Maryland talked about their experiences using the NeXT computer. John, a member of the Computer Science Center support staff, and Mark, a graduate student in computer science, have been active NeXT beta users for some time, and use the cube daily.

John presented an introduction of the NeXT computer to the audience which, for the most part, had never seen a NeXT cube in action. This introduction included a 15-minute video presentation showing the making of a NeXT cube. Mark followed John's intro with a 90-minute talk on the some of the more technical elements including a demonstration of the Interface Builder.

On another note, for those who participated in the group purchase of Bruce Webster's The NeXT Book, it should be available at the WAP office by the time you read this.

Last—good news for NeXTSig members! We now have a regular monthly 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 the 2nd Thursdays 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.

If you have any questions concerning the NeXTSIG activities, please call me at 946-1791 or Hugh O'Neill, NeXTSig chairman at 328-9510. Hope to see you there.

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July Meeting

by Bob Golden and Ted Meyer

We paid our repects to the Fourth of July by having the July meeting on the second Monday of the month. Dick Fitzhugh demonstrated his software that made use of the analog inputs to the Apple IIGS's Ensoniq chip, and follow-up was provided by SIG Chairman Ted Meyer with a demonstration program written in Orca/C.

Dick's experimental equipment consisted of a home-made two-pin socket, a 1.5 volt flashlight cell, clip leads, a step-down transformer, a resistor, and a potentiometer. The socket was connected with the positive lead at the number one pin of connector J25 leading to the Ensoniq sound chip and analog-to-digital input. Pin number one carries input to the 8 bit a-to-d converter which is part of the 5503 Digital Oscillator Chip (DOC). Pin number two connects to ground. This chip can be used for digitizing input sound and other analog inputs. It has 29 digital sampling oscillators that can be paired to form voice generators. The DOC has a general logic unit serving as interface between it and the remainder of the IIGS. 64K RAM is dedicated to its use. The allowable input voltage through J25 is zero to 2.5 volts.

Using an Orca/Pascal driver linked with an assembly language program for accessing the sound chip, Dick was able to load a musical scale into four data blocks of 32K each and save it to disk. Sampling from one to nine KHz (1000 cycles) provided a range in pitch of sound, and choosing from one to eight blocks of memory governed the time duration of the sounds.

Starting with the elementary equipment connected to the computer, a constant voltage from the battery resulted in a straight line across the screen with small sharp spikes arising at equal intervals. We guessed that these spikes represented some kind of interference.

By adding a step-down transformer and resistor to maintain less than 2.5 v, and to introduce a regular variation of the voltage, a 60 Hz sine wave (standard AC) was observed. Again the spikes were noted, and at identical locations on the peaks of the curve, indicating cyclic (60Hz) interference. At a higher sampling frequency, more peaks occurred per screen width, and the spikes of voltage appeared as before.

Utilizing Dick's program "Sounds9.S16", a voice from TV, Mr. Rogers, was input into the computer via disk. The transition from video to disk was made by recording on a VCR tape, replaying and taking the VCR sound output through the resistor and potentiometer into connector J25 of the IIGS. The external circuitry kept the voltage below the 2.5 volts to protect the computer and monitoring was by means of oscilloscope. The Sounds program menu includes "Load Scale," "Record Sound," "Play Sound," "Display Data," as well as housekeeping options. With "Record Sound" and analog sound input selected, the incoming signal is digitized and then saved as a file. The selection of discrete frequencies provided by the program enabled us to make a subjective judgement of the sound quality.

Ted Meyer briefly reviewed the book "Numerical Recipes—The Art of Scientific Computing" by W. H. Press et al, published in 1986 by Cambridge University Press. It is a collection of numerical algorithms in Pascal and Fortran. An option is available for purchase of diskettes in these languages. Ted demonstrated the ByteWork's desktop and debugging environment by compiling a program written in the C language. The program displayed the image of a bullseye generated by the process of incrementing successive circles of radius differing by a selected increment.

The August meeting was held on the first Monday of the month according to tradition. Eight attendees witnessed a demonstration of the new IIGS System Software Version 5.0 (SSV5) and were entertained by Dick Fitzhugh's problem solving ability by his demonstrating his newly written file rescue program.

The advances in speed and capabilities made by SSV5 have been documented in a variety of places, and the group was very interested in seeing the differences for real. The group ran a variety of tests on the new NDA control panel, comparing its capabilities with the CDA control panel. The ability to summarize the size and number of files in any folder or subdirectory was demonstrated, along with the accelerated transition between ProDOS 8 and GS/OS.

While overviewing SSV5, various quirks or changes in the way things worked were noted and commented on. For example, the "cyclic" scroll on the Control/Open-Apple/Escape CDA menu is gone. (You can no longer hit the up-arrow key at the top of the menu to get to Quit.) When AppleWorks V2.1 is started from the Finder its desktop is smaller since GS/OS and various tools are kept in memory. This makes returning from ProDOS 8 programs to a GS/OS environment faster. If you have 512K RAM or less in your IIGS , or have configured your system with a RAM disk, leaving you with 512K or less, not all of the new system tools will be loaded and your response time will not improve as dramatically.

Bill North demonstrated differences in printed output and color rendering with SSV5 printer drivers, and suggestions were made for further testing. It was noted that the "calculate" icon on the Icon Info menu item produces two dissimilar file sizes. These questions will be investigated and reported on at the next meeting. A variety of new system files in the Fonts, Icons, and System folders were noted and discussed. Technical documentation may soon be forthcoming from Apple.

A short demonstration of a few SSV5 "Easter Eggs" was presented. "Easter Eggs" are little-known or hidden tricks that are sometimes suprising. Holding the space key while booting SSV5 gives you a list

of current Version numbers for system software. Holding Shift and Option down while choosing the Apple menu from the Finder gives an "About the System" instead of "About the Finder" menu item. The NDA control panel has a small "V1.0" block in its window. Clicking on this provides an interesting result.

Dick Fitzhugh's "Rescue" program was demonstrated at the meeting and Dick shared his source code with all the attendees. There is an article about this program elsewhere in this issue of the Journal. A lively discussion of the uses and abuses of Rescue ensued and some suggestions for further changes to it were made. The program and code should be soon be available in the Disk Library.

Responding to one member's question, Bill North noted that when the power and Select button are pressed at the same time, the ImageWriter dumps hex code instead of ASCII or graphics output. He noted that this was extremely useful in debugging printer software. The meeting ended with a free-for-all discussion of programming languages and what someone moving up from AppleSoft should use. As usual, no final conclusion was reached.

A good time was had by all. The next meeting is September 11th at 7pm in WAP's office. A good time could be had by you, too! Please attend!

IIGS SIG

July Meeting

by Gary Hayman

The sign on the door read "Thomas Pyle Intermediate School Sauna Room—Welcome Apple IIGS SIG," or at least it should have. With no air conditioning and very hot July 24 temperatures outdoors, you have to take your hat (and shirt) off to the 40 or so people who braved the blistering weather.

To herald their arrival, Gary Hayman (SIG Chairman) was running some "Alfredo" animated graphics movies. These clever animations concern a character that is always getting into trouble as he moves through a weird underground. Some of his actions are hilarious. Gary converted these adventures for some old DOS 3.3 "SoftDisk" issues and found that the extra speed of the IIGS adds a new dimension.

Since last month's announcement of AppleWorks 3.0, interest has been high in this product. A quick survey was taken of the attendants and it was discovered that most used "Classic" AppleWorks as their prime word processor and only 2 used AppleWorksGS, although others had it. The main complaint concerning AppleWorksGS was its slow speed, but the release of the new System 5.0 should show a big improvement.

Gary demonstrated several of the AppleWorks 3.0 features involving Tabs and their use in entering decimal information. The new AppleWorks allows you to specify a Tab as a decimal, so when you place a column of numbers at this point in the word processor, the decimals will automatically line up—no more counting characters and/or shifting groups of numbers. He showed how "Tab Rulers" can be inserted in various places in your document and how the tabs can be defined as left, center or right-justified or as decimal.

AppleWorks 2.1 (and earlier) has a problem with column-width presentation on the screen and in your reports. In default mode, many of your entries are truncated and individual column widths have to be adjusted so that your screen or your report will show complete information. You have to do this by hand and sometimes it can take time. Gary demonstrated two macros that he created that, with the press of two keys, adjust column widths in your reports or on the screen to the correct amounts. These macros are available on the TCS in the AppleWorks download area, but require you to be using TimeOut UltraMacros installed in your AppleWorks. It was fun to watch what was happening on the screen as these macros raced through the documents making column adjustments.

Our question and answer session provided the opportunity for the group to obtain information that can be of assistance. Many of the questions concerned word processing and graphics.

Toward the end of the meeting, a SIG member (name withheld) passed a 3.5 disk forward and it was booted. Low and behold, System 5.0 (yet to be released) appeared on the screen. Yes, it is faster. Yes it has bells and whistles. Yes, we will discuss it at our next meeting.

Our next IIGS SIG meeting will be held on August 28, the Monday following the regular WAP meeting, at 7:00 in the downstairs meeting room of the Dolley Madison Library, McLean, Virginia. Besides the Journal, announcements and directions can be found on the TCS, usually on both the Meetings Board (Conference 1) and the IIGS Miscellaneous Board (Conference 2); or you can call Gary Hayman, the IIGS SIG chairman at 345-3230. On September 25 (Monday), we will return to the cafeteria at the Thomas Pyle Intermediate School, Bethesda, Maryland for our 7:00 meeting.

WorksIG

Potpourri for 100, please...

by Chris Bastian

Lack of a meeting topic didn't keep the WorksIG group from having a worthwhile session this month. Newcomers and oldtimers alike held a free-wheeling discussion of current problems and concerns with Works software, and set down plans for the next several sessions.

One question raised was how to get parallel vertical lines (from the draw utility) evenly placed in a spreadsheet, to outline data columns. The quick answer is to use the GRID ON command to force the length of each line. It was also pointed out however that the spreadsheet has a BORDER com-

mand option, whereby any cell (or range of cells) can be outlined either vertically, horizontally, or completely boxed, with all lines or even length and thickness. The downside of this option however, is that the border thickness is not changeable, unlike drawn lines.

Also up for discussion was the technique of preparing reports with database data. The database has its own report generator, but with a limited "row and column" output format. To create anything more substantial (say, a mailing list), data must be exported to the word processor, or loaded through a mailmerge command. Using the PREPARE TO MERGE command, one can imbed a database's variables in the body of word processing text. When the PRINT MERGE command is given, the document will print with the data from the first database record loaded into the text. To prepare a mailing list arrangement, it was discovered that the MERGE fields could be copied and pasted as needed. When PRINT MERGE was applied to a multiple set of merge fields, each separate database record would be printed in sequence, provided the MULTIPLE LABELS command was toggled "on" (otherwise, endless repetitions of the first records are generated).

WorksIG has been in contact with Heizer Software, and a joint WORKS-EXCEL SIG meeting featuring some of their spreadsheet template developers will be held in September. Check the ExcelSIG notes in this issue for details. To get on the WorksIG mailing list, please call me at 301/530-1935.

Interested in the activities of any of the Special Interest Groups in Washington Apple Pi? Call the chairman of any of the groups reporting here for more information. If there is no report from the group that you are interested in, check their name in the directory (page 4) and call up the contact person. And while you are tlaking to him or her, ask why no reports from their group were published in the last issue. Go ahead—bug them. They love it. Honest.

Would we lie?

Columbia Slice

More Games

by Tim Childers

The August 8th meeting was all about games. We brought in two Macs and several boxes of our favorite games and demonstrated them. There were only about 10 people in attendance so everyone was able to get right up and play with the games. Ann Knust gave a detailed demo of the game "Global Trespass". This game is based on Hypercard and is very much like "Where in the World is Carmen Santiago?" in that you trot all over the globe searching for clues to a band of nefarious outlaws. The graphics are very simple but the play of the game is fast and easy. You will need a good atlas and set of world maps to figure out all the clues.

Ann MacKay gave out copies of the list of public domain and shareware games available on the WAP TCS bulletin board. If I remember correctly she said it was from the Entertainment section of the Downloads area of the Macintosh Conference. We demoed several of these games and many of them are excellent. Some of the demonstration versions of commercial games are a lot of fun as well, and certainly they are much cheaper. I gave a general overview of the types of games available, adventure games, simulations, arcade games, puzzles, card games and board games.

Next month you should all make an extra effort to come because it will be the celebration of our first anniversary as a Slice of the Pi. We have a big program lined up for you with guest speakers from the main Pi office! The guest speakers are: Bob Shaffer, the Slice coordinator; Sam Knutsen, Vice President for Apple II; and Eric Rall, the Vice President for Macintosh. Eric plans to talk about the Boston MacWorld Expo and Bob Shaffer has promised to talk about Hypercard. Hope to see you there—September 7th, 7:00 to 9:00 pm, at the Howard County Board of Education building on Rt. 108, 3 miles west of Rt. 29.

The tentative topic for October 5th is "Secrets of the ImageWriter". For November 2nd we may do a panel on Desk Accessories for the Apple II and the Mac. And start thinking about Elections &for November. We've had a successful first year but we could do even better. If you have any ideas on what you want the Slice to do or become just jump right in and do it. You don't have to run for an office or take on a lot of responsibility to contribute, just one guest speaker or demonstration of a program you like can do a lot for us all. We are small enough that every single member can make a big difference in how much fun our Slice is.

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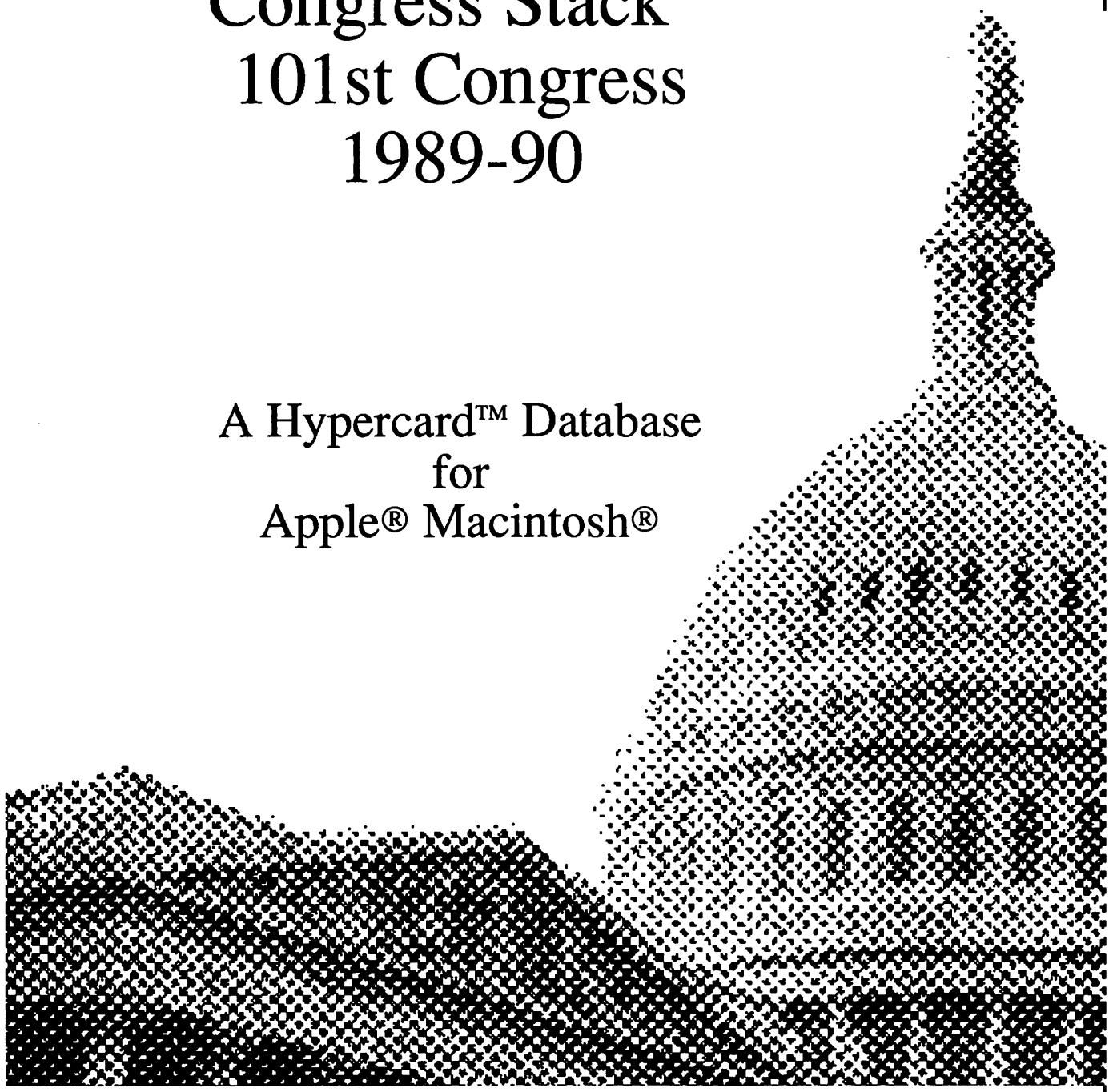

Thanks, Washington Apple Pi!

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Annapolis Slice

by Kay Cave

Meetings are held at the Anne Arundel Community College, Arnold, MD on the second Saturday of each month beginning at 9:30 a.m. (sales), 10 a.m. (program).

During June and August, our meetings were held at the Broadneck Library branch off of College Parkway. In July, a family picnic was held in Mayo and enjoyed by all who attended.

Our bulletin board CRABBS (974-0221) will be getting some new software. A purchase of Mansion to replace Red Ryder Host will enhance and speed up the program. A new 2400 Baud modem (U.S. Robotics) was purchased which has made life much easier for the Sysop, Barry Conner. The old modem will be used as a back-up.

Our MAC SIG meetings are becoming more popular. They meet regularly the third Thursday of each month under the leadership of Bob Peterson, who has been very helpful to all the newcomers and others who attend. The last few meetings have been tutorials based upon the WAP tutorial program and have been well received.

The IIGS SIG, on the other hand, needs more support. Meetings have been sporadic, but excellent programs when held. Craig Contardi has been credited with getting the group together.

Our new Laptop SIG has only a few members and they get together whenever the spirit urges them. Seth Mize has been the leader and looks forward to an ever enlarging group.

Our monthly newsletter, The CrabApple, is sent out during the first week of the month to a mailing list of over 100. Ray Settle is its able Editor.

On July 29, at the Holiday Inn in New Carrollton, our Annapolis Apple Slice was present just a few tables down from WAP. Bill Derouin, Membership Chairman, and Bill Arndt, Treasurer, manned the table for all who were interested in our small "slice of pie."

Coming programs include: September 9—Hard Drives. Bob Peterson and Craig Contardi will demonstrate the different machines and show their function.

October 14—Towson Computer on Education

November 11—Flea Market, the second annual. Don't miss it!

That's all the news from Crabtown this month.

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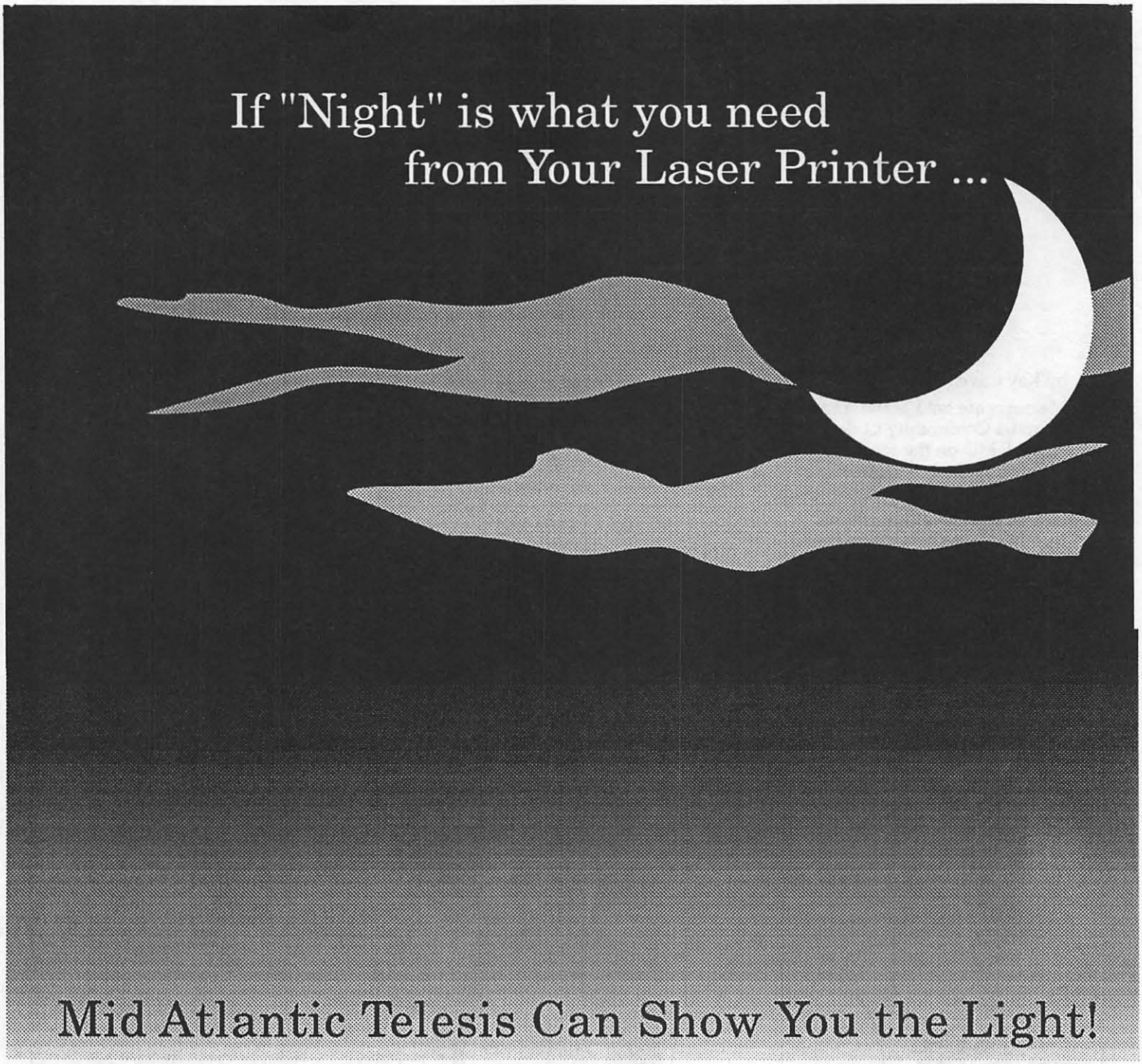

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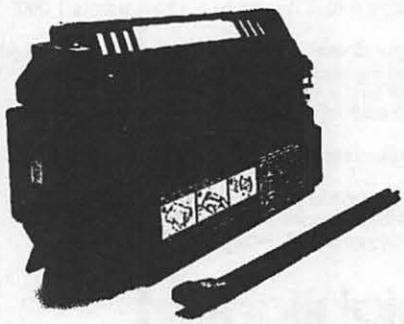

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Adventures in Excel...

by Larry Feldman

This exercise originated in one of those fits of self-education which Excel can still inspire on occasion where you give up working on what you're working on and work on understanding the program instead. To begin with, all that was happening was one of those prolonged struggles with some arcane nuance—in this case the MATCH function. (The idea being that if I could ever get it straight, I'd use it in a macro I was writing.) Pursuant to all this I was wallowing around in the standard reference works on Excel: Cobb's, Excel in Business (which everybody knows about) and the other superb reference book for this program "Command Performance - Microsoft Excel" by Douglas Hergert (which not enough people know about).

Anyway, in Hergert's discussion of MATCH he sets up a worksheet to illustrate the use of the function and it seemed incomplete to me—a piece was missing. That this perceived deficiency was totally irrelevant to the question I was pursuing or Hergert was discussing is beside the point. The genuinely dedicated Excel aficionado is committed to the pursuit of tangents.

Very briefly, the facts: a high school math class of 16 students had been divided by the teacher into 4 teams to compete in solving a series of calculus problems (100 in his model but it could be any fixed number.) Whoever first submitted the correct answer to the current problem won for his/her/its team: a point. This is all graphically represented in Screen Pic 1 which shows Hergert's worksheet more or less faithfully reproduced from the book—courtesy, no doubt, of Microsoft Press.

[In case anyone retains any interest in the original topic which was, you recall, how and where to use the MATCH function, it's all easier to follow if you know that the last names of the student contestants are entered in 4 batches (four to a batch—each a continuous text string) in the range B1:B4 in the Screen Pic. Be advised further that Column D contains a MATCH formula that returns the appropriate number (Team 1 thru 4) when the last name of the student winning that round is entered in Column A. The formula is:
=MATCH("*"&A7&"*",$B$1:$B$4,0)
No, that's not Popeye swearing. Working out the meaning of this formula for yourself, just you and your manual and Doug Cobb, is a genuinely bracing Excel learning experience of which I wouldn't dream of depriving you.

You will note that the worksheet lacks what every self respecting contest requires—a scoreboard. There ought to be an Excel automated spot on the worksheet which keeps a running total of the number of points earned to date by each team. Why bother to use MATCH to determine the team earning a point in every round if you don't then go on to tote up who has how many points? What's more, the formula for such a score board is easy to contrive. Or so I thought.

After a couple of hours in the fruitless contriving of a worksheet formula, I took refuge in Excel's feature of last resort, the macro. No matter what you want to do, you can do it in Excel with a macro. (If Excel can do it at all.)

The problem was easy enough to define; the solution was elusive. Column D contains a list of the winning teams, round by round. All that you need to do is find a way of sorting out the 1's from the 2's and their cousins the 3's and the 4's and then of counting the incidence of each. That's all.

In casting around for a strategy, it originally occurred to me that the COUNT function leans tantalizingly in the right direction. Unfortunately, it never gets anywhere since it "counts" the number of cells which contain numbers but can't tell a 1 from a one billion.

The *Find* command (the one on the

	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				
6	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

Formula menu) seemed promising for a while. From a distance it appeared as if it ought to be possible to have Find locate, one at a time, all the cells in the range containing each of the numbers. From there, surely some way could be crafted to either store or count them but in any event to arrive at an accurate total.

Not even close—*Find* turns out to be both a dry well or a blind alley...your choice. It will cheerfully find any damn thing you tell it to—repeatedly, which in this instance turns out to be excessive. Send it, for example, in search of the number "1" in a selected range, and Find dutifully locates every cell with that number. Then it mindlessly loops around to the top of the range and does it again. And again—for however long you allow it to do it. It apparently cannot be trained to stop by itself. There's never a point at which there's any way of knowing that all of the instances of number "1" have been located but none more than once. Consequently, Find was a bust.

Time, thought I, for a macro. The core of the solution that I ultimately encoded in the macro "Team Count" is to conceive of the range in Column D labeled "Team" as, in Excel's narrow, technical sense, a Database. This "Database" range starts with the cell containing the label "Team" and extends down for the number of cells equal to whatever number of problems will be solved in the contest. Each cell, other than the top one with the label, contains the MATCH formula, which in turn generates the number (1 to 4) of the team winning that round. Although this range is not a database in any usual sense of the word, treating it as one in this case only allows you to call on one of Excel's database powers to solve the problem.

As in, for example, DCOUNT. And, it turns out, DCOUNT can do what COUNT cannot: tell the difference between numbers and tally all the little critters that turn out to be of the same species.

Think about it. And while you are doing that, cross reference your thoughts to Screen Pic 2. Define the stuff in Column D as a Database.

	A	B	C	D	E	F	G	H	I
1	Team 1:	Amar Barnes Caddle Lane				Score			
2	Team 2:	Cain Moody Said Thomas				TEAM 1:	4		
3	Team 3:	Gilbert Larson Price Nelson				TEAM 2:	5		
4	Team 4:	Madison Neal Powell Stone				TEAM 3:	2		
5						TEAM 4:	3		
6	Name	Problem #	Date	Team					
7	Nelson	1	1/5/89	3					
8	Moody	2	1/9/89	2		Criteria Range F9 & F10:			
9	Caddle	3	1/11/89	1		Team			
10	Stone	4	1/13/89	4		4			
11	Amar	5	1/17/89	1		The cell named DCOUNT F12:			
12	Said	6	1/19/89	2		3			
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					

Set up a two-cell Criteria range, one above the other anywhere that suits you and define it as such also. (In this case it's stuck square in the center of the spreadsheet in Pic 2, cells F9 and F 10, just so you can see it. You probably wouldn't actually put it there. No matter.)

Enter the word "Team," which is the field name of this one field 'Database' into the top cell of the criteria range, leaving the other cell blank for the moment. Define the names for the two cells in the Criteria Range as "Criteria1" and "Criteria2" respectively. Finally, pick (and name) a cell, any cell, to hold a DCOUNT formula that refers to the Database range (argument 1 of 3) and the Criteria Range (argument 3 of 3) which you have already defined. Now, you need only a value in the field name argument (argument 2 of 3 which is "Team") to compute: i.e., to get a 1, 2, 3 or 4. The DCOUNT formula will then add up the instances of whichever number you are currently calculating in the database.

All that's left to do is provide a way of moving the answer for each team (the count generated by the DCOUNT formula) following any given iteration of DCOUNT to the right spot on the score board and then feeding the DCOUNT formula the next "Team" value it needs. (If any of this seems a little murky, turn to the crystalline clear macro code in the box for enlightenment.) *[Ed.—actually, we have been contemplating our navels for the last ten minutes, but to no avail.]*

This macro sort of automatically keeps score in the game. It's only "sort of" because you do have to run the macro at any given moment to get the score actually posted; the thing doesn't update itself when new values are entered, as a worksheet formula would. You can't always have everything.

The macro does the whole job, soup to nuts: selects and defines the Database range, sets up and defines the Criteria range ; enters the DCOUNT formula in a convenient location; and then computes whatever calls for computing and totes the values around from cell to cell as required. At the end of its performance, you have an up-to-date score.

There is, it seems to me, an important lesson (the moral of the story) in all this concerning how to get the most out of Excel. Using a database function to solve a standard worksheet problem points up an interesting dimension of Excel that is often glossed over. Excel is typically portrayed as a hell of spreadsheet program with good but not state-of-the-art business graphing capabilities and a 90-pound weakling database "module" (which, as an afterthought, isn't half bad).

Fine. Database-wise, it's not 4th Dimension. Try looking at it, however, from a different perspective. The database capacities of Excel (sophisticated searches, sorts and various analytic powers but only rudimentary data entry and

report capacities) are additional tO, but not separate from, its powers as a spreadsheet. By incorporating a series of features usually associated with database software into a spreadsheet framework, Excel offers you an auxiliary set of tools for manipulating data.

Actually, then, there really is no database "module." You can, at any time, simply choose to define a worksheet or part thereof as a 'database' and then in the privacy of your own home perform whatever manner of database bestialities you desire on it. When you're done, you can select some other portion of the worksheet and do it again. So, it pays for folks who think of themselves as spreadsheeters with no use for a "database" to acquaint themselves nonetheless with Excel's database features.

A final note: there is, of course, a much simpler solution to the "score board" problem than the one I have presented that uses just plain old pedestrian worksheet formulas, but it didn't occur to me until after I had already completed this opus. So I went ahead with the macro article on the theory that next month is plenty of time to show how I should have solved the problem. Since this is a game any number can play, I'd be delighted to hear from any of you who would like to propose another and perhaps even superior solution.

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 eves 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.

My name is Macro Code

Before grappling with my macro code, a few words in the way of general orientation. The overall style of the macro is the one recommended by Douglas Hergert in his book "Microsoft Excel With Macros." Specifically, note the 3-column format starting in the upper left corner of the macro sheet with any named cells in Column A, the actual code in Column B, and notes explaining the code (in effect, documentation) in Column C. There is an extensive use of range names. Wherever there is a cell reference in the code to a location on the macro sheet itself, a name is utilized and shown in Column A. Similarly for references on the worksheeT, except that in that case, the names are defined before hand from (or on) the worksheet. The use of named cells on the macro sheet may seem like more trouble than it's worth in this particular instance, in that there are only two of them. But if you get in the habit of writing macros this way, you will have code that even you can decipher in six months' time.

Column C

B2: Turns off the Macintosh's screen update while the macro is running and thereby dramatically improves the program performance. In this case, running time (on my one-meg Mac Plus) goes from 18 to 12 seconds, give or take a second or two either way.

B3: Creates a variable named "Field" which Excel holds in memory and assigns it an initial value of "1". Watch this one: it's the key to controlling the hoped-for program outcomes.

B4: Selects a one-column range starting with the field name "Team," extending thru the 50 possible values (there will be a total of 50 math problems).

B5: Chooses the Set Database command from the Data menu, making the range selected in B4 an Excel "Database."

	A	B
1		TmCount (Option-Com-a)
2		=ECHO(TRUE)
3		=SET.NAME("Field",1)
4		=SELECT("R6C4:R56C4")
5		=SET.DATABASE()
6		=SELECT("R1C9:R2C9")
7		=SET.CRITERIA()
8		=SELECT(!FieldName)
9		=COPY()
10		=SELECT(!Criteria1)
11		=PASTE.SPECIAL(3,1)
12		=SELECT(!DCOUNT)
13		=FORMULA("=DCOUNT(Database,""Team"",Criteria)")
14	loop	=SELECT(!Criteria2)
15		=FORMULA(Field)
16		=SELECT(!DCOUNT)
17		=COPY()
18		=SELECT(!Score)
19		=SELECT(OFFSET(!Score,Field,1))
20		=PASTE.SPECIAL(3,1)
21		=SET.NAME("Field",Field+1)
22		=IF(Field>4,GOTO(end),GOTO(loop))
23	end	=CANCEL.COPY()
24		=RETURN()

B6: Selects two pre-chosen cells as a Criteria Range.

B7: Chooses the Set Criteria command from the Data menu.

B8: Selects the cell that already contains the label "Team" which will act here as the one field name of the ersatz "Database."

B9: Copies the contents of the cell named "Fieldname"—i.e. the word "Team."

B10: Selects the top cell in the criteria range, named "Criteria1."

B11: Pastes in the field name. Paste Special is employed here rather than just a plain vanilla Paste because—well, it's easier that way. The field name has formatting and lines & arrows and other visual noise that are better left behind.

B12: Selects the worksheet cell named "DCOUNT," which has been chosen and named beforehand to be the holding cell for the DCOUNT formula.

B13: Enters the DCOUNT formula in the cell selected in B12 above. Linger over this line of code for a few moments (after all, I did for several hours); it invokes some of Excel's more obscure rules to accomplish a not-so-uncommon end. The object of the exercise is to enter a DCOUNT function into a predetermined cell from within a macro program. The SELECT function immediately preceding selects the proper cell for this purpose. Now, in order to get the FORMULA function to enter a (worksheet) function you have to treat the whole dingus, at least syntactically, as a formula! That is, it too must be preceded by its own equal sign. Furthermore, in these circumstances (i.e., when you want the argument of FORMULA to itself be a formula or function that will calculate only once it has arrived on the work sheet) you must treat the formula as a text string and enclose it in quotes. Don't ask why; just do it. If you don't, Excel calculates the formula on the macro sheet and enters the resulting value on to the worksheet. Moreover, since the normal syntax of the FORMULA function requires the field name (i.e.,the second) argument to itself be enclosed in quotes, the only way to accomplish this that Excel will accept is to enclose the quotes in quotes as done here.

If it makes any of you feel better, I did not figure all this out by myself. Ultimately, I had to turn for assistance to one of the Pi's senior Excel gurus, Tom Cavanaugh, who has the unfair advantage of knowing what he's doing. If there are those among you who share my opinion that some of this stuff is unnecessarily esoteric, write Bill Gates a letter.

B14: Selects cell number two in the Criteria range, named "Criteria2."

B15: Enters the numeric value currently resident in the memory variable, "Field" in the previously-selected work sheet cell named "Criteria2". Remember, a little later on, the macro will change this value on each program cycle.

B16: Reselects the work sheet cell named "DCOUNT." We are finally at the threshold of doing something useful, macro-wise. Now that the DCOUNT formula has been fed a value for its second argument (i.e., the numeric value in the variable "Field" has been entered in the second cell of the Criteria Range) it (the DCOUNT formula) will generate a value that will represent the number of times the integer 1,2,3, or 4 occurs in the range. That value is the number of occurrences of each team number.

B17: Copies said value.

B18: Selects a work sheet cell named "score" which is going to be the 'anchor' in the computational process of selecting the proper cell on the scoreboard in which to deposit the outcome of DCOUNT's labors. More of this action on the next line.

B19: Selects the scoreboard cell (i.e., one from the four in the worksheet range D2:D6) appropriate for each iteration of the DCOUNT formula.) The cell named "Score" is just an anchor from which the OFFSET function can count off the number of rows and columns supplied by those arguments to arrive at the desired cell. In this case, using "Score" as a starting point, you want the cell that is one column over and the same number of rows down as the current entry in the second cell of the criteria range. Dynamic selection. No hands, Ma!

B20: Pastes the value computed by DCOUNT into the correct scoreboard cell. This time the reason for the use of Paste Special is reasonably self-evident. The "Special" on the "Paste" lets you transport the value that the formula calculates, leaving the formula behind.

B21: Increments the memory variable which is now doing double duty as a counter. Thus the memory variable starts with the initial assigned value of "1" (B3 above) and is increased by one on each pass.

B22: Tests the value of the memory variable and compares it to the fixed ceiling of iterations (four). There are four scoreboard cells. Hence there need to be four DCOUNT iterations and no more—the no more being as important as the four. This accomplished, the formula determines whether the program should be sent back to (the cell named) "loop" to begin again and complete the score or go to the cell named "end. "And end.

B23: Tidies up.

B24: Ends it all.

Insights into *Insight*

by Cindy Carter

Insight, by Layered, offers an accounting solution for the small to medium size business. Written for the Macintosh Computer, it is not a translation from the MS/DOS world. Modules included are General Ledger, Accounts Receivable, Accounts Payable, Inventory, Time/Billing, Payroll, Forms Design, and Export. These modules can be run as standalones or integrated in a single user environment. An exciting feature has been developed by Insight to allow importing data from a database into Accounts Receivable today and into General Ledger and Accounts Payable in the future. This way an application could be developed that would update a database and then import the necessary information into the Accounts Receivable module. This review will not include Time/Billing , Payroll or Forms Design.

Small businesses without heavy inventory requirements should seriously consider Insight. It is a business package that is quite easy to learn. Don't let its Mac look and intuitive operation fool you, however; as I have stressed earlier, businesses need to work with an accountant or accounting software specialist when computerization is contemplated.

All modules operate in a similar fashion. Those piles of documents for identification of vendors, clients, etc. can be removed from your desk—that information is available at your finger tips through the find menus. The palette selections are viewed on the screen and repeated in the pull-down menus. One of Insight's nicest and unusual features is in the data backup option. Most packages require you to back up all modules. Insight allows you to back up only those modules you have been working in at that time.

General Ledger

Insight General Ledger is designed to provide the functionality needed to run a business. You can start with the basic accounting functions and later expand to use additional capabilities as your business prospers. Insight embraces multiple companies, divisions, departments, and profit centers.

Business setup lets you define your company's structure and accounting cycles. You define divisions, departments, and/or profit centers, source journal identification, fiscal year information, net profit account number and retained earnings account number. Through the use of a password, a business can really control access to the module. Users can be given or denied access to any feature or option listed on an Insight Menu.

Insight accepts eight types of accounts: current assets, fixed assets, current liability, long term liabilities, income, cost of sales, equity, and expense. Other details would include budget figures, last year's information, division, and whether the detail information should be kept when a month is closed.

Entries into journals may be deleted or changed before posting. Once a journal is balanced, it can be printed to proof—then if there are no changes you can post. Entry descriptions for each entry can be entered and saved as notes in the Ledger Card. Insight also supports reversing, recurring, and amortization entries.

Insight General Ledger comes with standard financial statements or allows custom formats. You can indicate what accounts should be added, printed, or not printed. Custom reports can be created using the various accounts. Financial statements can be printed for a single division or consolidated. Insight provides twelve financial ratios in areas of liquidity, profitability, and asset management. Report information can be transferred into Excel, MacWrite, Microsoft File, Microsoft Word, plus others.

As with most accounting packages, once a period in closed, it cannot be reopened. You can run all periods open until the end of the year. They would have to be closed before the year-end processes could be performed.

Insight...is designed to provide the functionality needed to run a business.

Accounts Receivable

Insight Accounts Receivable provides complete billing, sales analysis, and product tracking capabilities, enabling you to control and speed collections, report and analyze sales, and forecast receipts. This module allows customization through the questions asked in setup to reflect the way you do business.

Before beginning business, you will need to set up divisions, bank account information, territory and sales representatives depending on how you have your business setup. A lot of useful and pertinent information can be entered for each customer. Insight also supports

multiple "ship to" addresses. A ledger card is automatically created for each new customer. This card shows the detail for each transaction and whether it has been posted.

Insight gives you a choice of three types of invoices: shipping, service, and standard using preprinted forms or plain paper. Before printing, updating, and posting the invoices you can view them on the screen. Each invoice amount can be distributed to as many accounts as necessary. The use of "batch total option" gives you a nice error-checking feature. To post the sales journal you are asked to print first, then you can edit your entries to make any necessary changes before posting. Multiple sales journals cannot be open at the same time. When recording incoming checks, you can indicate full or partial payments and for what invoice. The check information is also added to the deposit slip feature.

Accounts Receivable produces the usual reports. The expert reports provide information in a format useful to management. They are presented in a graphic format that lets you see the big picture and zoom in on details.

Insight Accounts Receivable can import customer, item, and transaction information from any application that can produce text files on the Macintosh. This enables you to import these items from your database, spreadsheet, word processor or other Macintosh application.

Accounts Payable

Insight Accounts Payable provides the tools you need to manage payments, write checks, accurately forecast cash needs and tightly control expenses. It supports either cash or accrual methods of accounting.

The business setup lets you establish what Insight features you will use. The following choices are available: divisions, passwords, multiple bank accounts, bank reconciliation, service charges, recurring journal, tax ID number, cash or accrual method, general ledger distribution, journal ID, purchase discounts, 1099 vendors, months of history and aging parameters. Invoices from vendors can be expensed to the predefined code or changed to as many as you need. Recurring purchases, such as rent, can be entered into a special journal.

When it is time to pay the invoices a payment selection screen allows you to choose what invoices should be included in each check. Partial payment on any invoice is allowed. Checks covering these choices can be viewed before printing and being posted to the vendor records. Payment scheduling is an optional feature that you can use to process payments if you selectively determine what to pay without regard to payment terms.

Insight has three options for the recording the issuing of checks. The

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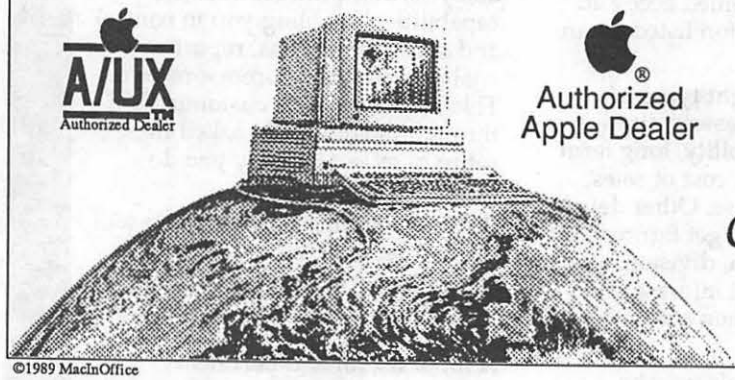

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usual way is that a check is issued is through the system. Manual checks written for invoices already in the system is another option. Then, you have a UPS delivery and write a manual check. Through a direct disbursement option you are able to record the expense and manual check in one step without entering the information into Accounts Payable first. The check register shows the checks issued and is printed out before posting takes place. Accounts Payable produces many detailed reports.

In addition Insight provides management views of A/P and cash needs to aid you in managing your cash flow. These expert reports are presented in graphic format to let you see the big picture and allow you to zoom in on details. These reports are: Aging Categories, History Analysis, and Cash Out Projection. Insight supports bank reconciliations to complete your accounting needs.

Inventory

Insight Inventory offers complete movement-tracking and flexible valuation methods to provide the tools you need to better manage and increase control over your inventory.

The business setup asks you to indicate the following: multiple warehouses, multiple divisions, use of passwords, general ledger distribution, months of transaction detail, decimal placement, and source code identification. You then proceed to set up the general ledger accounts to which you post inventory transactions. Division setup is simple and straight forward. Evaluation methods include LIFO FIFO, and Average. The item card is at the heart of your inventory module. It contains information about finished goods or raw materials.

Unfortunately, the Inventory Module doesn't interface with the Accounts Payable Module. In order to increase the item count for purchases, entry must be made through inventory. Items withdrawn from Inventory can be accomplished in two ways: through the Accounts Receivable Module or through the Inventory withdrawals journal. The item cards in Inventory are shared with Accounts Receivable. As invoices are created, the item cards in Inventory are automatically updated

Insight's Inventory Module is adequate if your business doesn't require immediate updates information on items. Without integration with Accounts Payable and availability of Purchase Order and Sales Order modules, your inventory control depends on a lot of discipline, luck and work on your part.

Export

Most fields from Insight's modules can be exported to spreadsheets and word processors.

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Anti–Viral Strategies* 25	Introduction to Illustrator 88 26	Accounting Solutions Demo — FREE! 27	Mac-MS/DOS Connectivity Options 28	Hard Disk Management 29

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Summary

If your business requires a good basic accounting package that is quite user-friendly, take a look at Insight. On a limited budget, buy a module at a time and gradually computerize your accounting. An accounting software specialist or accountant can help you decide which modules would be the most beneficial to your business. Companies that require up to the minute inventory control should carefully study Insight's features before deciding to purchase the program. With the import feature I foresee more applications being developed to address such needs as Purchase and Sales Orders.

Insight is sold through local discount stores as well as several mail order houses. Prices range from $400-$695 per modules, except that Forms Design and Export run about one quarter that amount. Training is available through Qualified Installers in the area. Support can be purchased from Layered or your local Qualified Installer. Limited free support is offered at the time of purchase from Layered.

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MasterJuggler Revisited

by Phil Noguchi

In the last column we saw how the MasterJuggler™ dialog box is used to view and mount extra FONTs, DAs, FKEYs and SOUNDs. I forgot to mention that for FKEYs and SOUNDs, one can have up to 32,000 or so of them in all, while FONTs are perhaps limited to around 16,000. *[Ed.—really crippling restrictions, we understand, but we never promised you the moon.]* DAs can go up to at least 600 according to the MasterJuggler Manual. In reality, the number you can use is functionally limited by memory and by resource number conflicts. A full discussion of number conflicts and how MasterJuggler resolves them will be deferred until later issues.

The Lists of MasterJuggler

Whenever something is entered into a computer, be it data or application, it is critical to be able to retrieve or use it. It's relatively easy to do that with the Finder if you only have a few applications, but for those of us with hard disks and strained budgets, trying to keep track of all the stuff we use is a real mess—especially if you have MasterJuggler and add extra things far beyond the limits Apple had envisioned. Any decent program should be able to make lists of things.... Enter the Lists of MasterJuggler, which include the DA, FKey, Sound, Font and Application Lists...

One can invoke and access these menu lists by using the hierarchical menu of MasterJuggler under the Apple menu as shown in the left figure (if you don't like hierarchical menus, by holding the shift key down and clicking on the Apple menu you get the menu in the middle; if you prefer popup menus, Shift-Command-click will pop-up the menu as in the right figure). And for those who hate mice, you can access a list directly without a menu by using a HotKey, such as Control-Command-d for the DA list. HotKeys are the MasterJuggler equivalent to QuicKeys by CE Software, and can be set by using the Options page on the MasterJuggler dialog. Multiple ways of invoking and accessing features is key to MasterJuggler.

DA and FKEY List

FKEYs, short for Function Keys, are little snips of code that perform a limited function, invoked by a pressing the shift, command and a number key simultaneously. For example, Shift-Command-1 ejects the disk in the internal floppy drive. There are four standard FKEYs 1 to 4, which leaves 5 thru 9 and 0 as the remaining slots for FKEYs—not nearly enough for utility junkies. Here is where beta testing can really pay off. I use some FKEYs a lot, and some a little but certainly more than 10. Carlos Weber had written an FKEY manager that was pretty good but had to be rewritten every time Apple upgraded the System Software. Paul Cozza, MasterJuggler's creator, was not especially enthused over FKEYs, but during testing of MasterJuggler I mentioned that it would be "nice" to be able to access more than 10 FKEYs. After a day or so, he came back with the solution that by renumbering FKEY resources up to 32,000, one could eliminate resource number conflicts, and to access them, one could use a list just as you would the DA list:

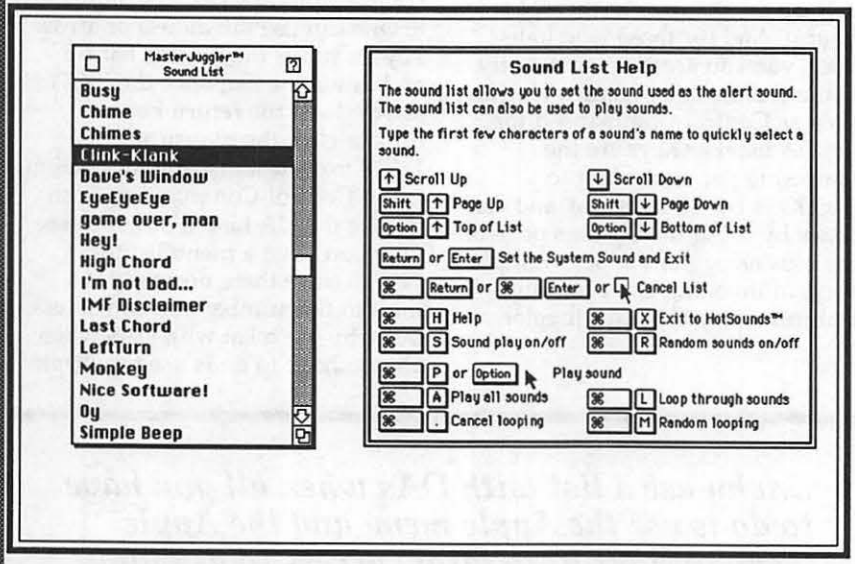
I have a list of 16 or so FKEYs, some of which are used infrequently, but are always available on my system by using the HotKey combination of Control-Command-8. One can use the mouse or arrow keys to move the inverse bar up and down the list; once the FKEY is selected, hit the return key or double-click the mouse and the FKEY executes. In a similar fashion, using Control-Command-d, I can invoke the DA List. It's easy to see why you need a menu list for FKEYs since there normally is a limit to the number you can access, but why use a list with DAs when all you have to do is use the Apple menu and the Apple menu will scroll to allow access to as many DAs as the mind can contemplate? Well, sometimes even the most dedicated mouse users use the keyboard. You can invoke the list, move the cursor and select the DA, all without moving your hands from the keyboard to the mouse.

...why use a list with DAs when all you have to do is use the Apple menu and the Apple menu will scroll to allow access to as many DAs as the mind can contemplate?

Sound List

Sound capability is another feature that makes using the Mac so enjoyable. In the old days, the best you could do was the "beep" if you made a mistake, or occasionally an eerie, almost understandable voice using MacIntalk. Today, sounds from movies, popular songs and other sources are available in infinite variety. Just like invoking FKEYs, one can create a list of available sounds; on my system, Control-Command-s gives the list on the left at the top of the next page:

With any of the lists, a help dialog is available by clicking on the little ? in the box in the upper right corner; for the keyboardist, Command-h will do the same. For the Sound List, this reveals a gold mine of things you can do with this simple list as shown in the figure on the right. In addition to having a number of different ways to move up and down the list, you can sample a sound by clicking on it with the Option key down; you can play all the sounds in the list in order by pressing Command-a or in random order by Command-m and so on.



Instead of having to use the Control Panel to set the system beep sound, just scroll the cursor up and down the Sound List to the sound you want, sample it to see if you like it and then hit Return; voila, a new system beep! What if you can't decide which one to use? Press Command-r to turn on random system sounds, hit return, and now every time the Mac beeps, it will play a different system beep. What if I want a certain sound to play only at a given time, like "Nice software!" when I insert a floppy disk? You can do that with HotSounds, which will be discussed in the next column on MasterJuggler™ Utilities.

FONT List

Another powerful attraction of the Mac is the wide variety of font typefaces available. On my machine, Control-Command-f displays fonts as they appear in that font: the name Chicago is in Chicago font and so forth. You can also view the fonts with different styles, such as italic in the middle figure by hitting Command-i or Command-o for outline in the right figure.

Originally, the only output device available for the Mac was the ImageWriter, which uses QuickDraw to print. At first, all fonts were designed for that device. When the Apple LaserWriter was introduced with its PostScript interpreter, QuickDraw fonts didn't print nearly as nicely as did PostScript fonts. By hitting Command-t while the Font List is visible, the PostScript font names are greyed out; press Command-t again and the QuickDraw font names are grayed out. This is useful for deciding which font to use for the final formatting of a manuscript since the best spacing and appearance results when a PostScript font is used on a LaserWriter and vice versa.

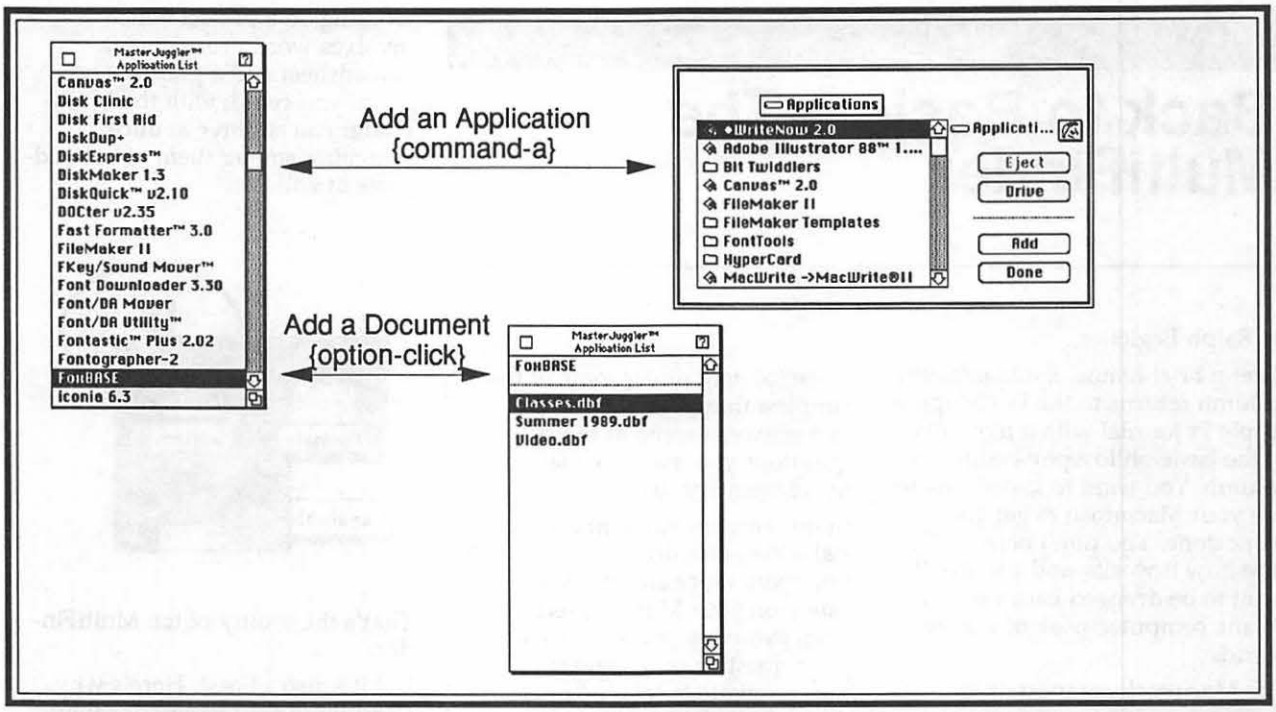
What if you want a printed preview of a particular font without having to print an entire page, or perhaps a catalog of available Postscript fonts? That's available in FontShow, another goody, to be discussed in the next issue.

There is an inverse cursor bar available in the Font List. Placing the cursor over a font and hitting the return key, resets the default font for many applications. A good use for this is when you are printing documentation prepared with TeachText™, the utility from Apple. By setting the default to, say, Times, one can print the documentation on a LaserWriter with proper spacing and appearance.

Application List

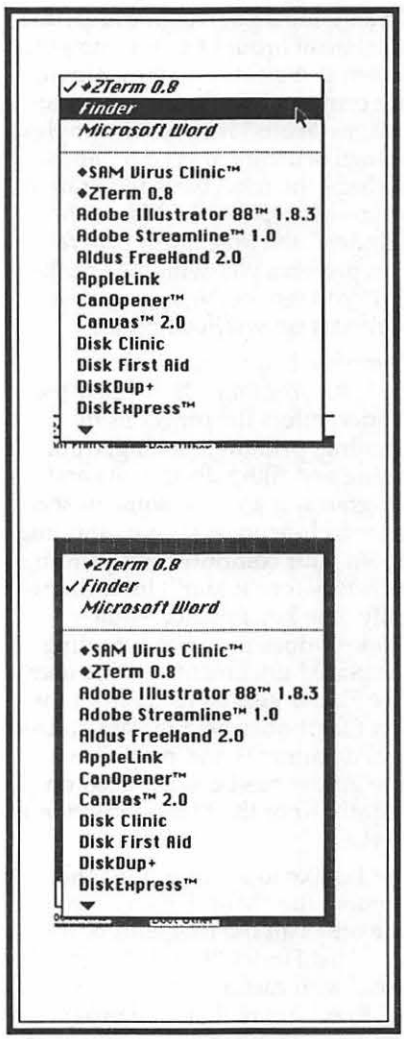
An insidious side to the Macintosh is the ease of accumulating software applications. Trying to get to all of them soon becomes a pain in the posterior. Since MasterJuggler provides a way to easily access all the extra stuff like DAs you put in, it seems logical to have a way to access all those applications:

The figure on the left at the top of the next page is the Application list, in this case invoked by either a Hot Key or by the hierarchical menu. When calaled up in this manner, the menu stays on the screen until you hit the return key when the cursor is over the application you want, at which point the List disappears and the application is launched. To add applications to the list, Command-a will open a standard file list; you then select an application and click on the add button, or double click on the application. One can also add documents to be associated with a particular application by clicking on an application in the Application List with the option key pressed, or by using Command-s to switch to the document page. In the above example, one could now hit return and Foxbase would be opened with the document Classes.dbf as the active document. Pretty snazzy, but what if you don't want to take so many steps to get to a document, i.e., Command-a (scroll to the application, Command-s, scroll to the document then launch)? The Application List can also be popped-up by clicking with a specified HotKey.



When invoked as a popup, the Application List has an attached hierarchical menu wherever an application has a document attached to it. This is a rapid way to get to a document, similar in function to OnCue™. Suppose you are using MultiFinder:

In the next figure, popping up the Application list now reveals two areas; the bottom figure lists available applications while the top lists currently running applications. By choosing an application like the Finder in the top area, one is switched instantly to that application, as shown in the bottom figure. But, what's this? We switched, but what happened to the ZTerm window? Another feature called vanishing windows. Whenever the option for vanishing windows is on (Command-t), the upper area is in italics, and the windows of the application you switch from vanish, and the windows of the application you switch to, become visible—a clever solution to an aggravating problem with MultiFinder, and one that precedes Apple's own window set aside feature that will be in System 7.0 (or possibly 6.04).



Coming attractions...

We have covered how MasterJuggler adds resources to the system, and how it can access them. The next installment will start on some advanced features of MasterJuggler that allow you to use resources to fit your needs, such as assigning specific sounds to an event like system shutdown, also the beginning of resource number conflicts—what they are and how to resolve them.

[The author, a pathologist at NIH, shares an unusual distinction: he, and his wife and children, all have qualified as Black Belts in karate. This, as you might imagine, makes it a delicate task to suggest the imminence of deadlines for copy for the Journal. Fortunately, he is also a reasonable man, which eases our lives more than somewhat.]

MacNovice

Back to Basics: The MultiFinder

by Ralph Begleiter

After a brief hiatus, the MacNovice Column returns to the Washington Apple Pi Journal with a reminder of the basic philosophy behind the column: You want to know how to use your Macintosh to get your work done. You don't necessarily care how it works, and you don't want to be dragged back into the arcane computerspeak of the IBM world.

The Macintosh computer's ease-of-use has brought into the computer world many people who have no desire to know how it works, but who have a strong desire to make it work for them. These new computer users now have unprecedented power on their desktops. They may be sophisticated users of word processors, spreadsheets, and even graphics programs on other computers, but now they're taking advantage of the simplicity of the Macintosh system. They want to know how to make it work for them—quickly and simply—without having to become involved in the intricacies of the computer system.

Because the Mac community is rapidly growing, there are always "MacNovices" who need help getting started with the most basic ideas of how to use their computers. Even so-called "power users" often appreciate a refresher in Macintosh basics.

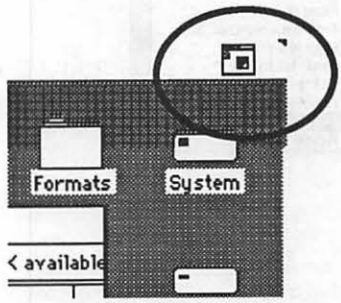
So, the MacNovice Column is a forum for "the rest of us," as Apple once said about the Macintosh itself. A place to recall the basics. A place for help doing some of the simplest things. A place to ask—and answer—some of those questions you may have felt were too elementary to ask.

In this column you'll find a tutorial-style potpourri of ideas to help you work more efficiently and safely on your Mac. I collect ideas from everyday users, so if you've got a question or a suggestion, don't hesitate to let me know through the WAP office.

Among the most creative ideas the Macintosh brought to the computer screen is the concept of manipulating computer work using easy-to-fathom "icons" instead of complex strings of arcane text commands. Perhaps the most basic illustration of this concept on the Mac is the "Finder," the Macintosh program that presents you with the "desktop" you see on the screen when you start up your computer.

There are two versions of this desktop program. One, called the Finder, offers the functions of opening, printing, naming, duplicating and filing documents and programs. It also has some miscellaneous functions, such as shutting down your computer and printing directory (or "folder") lists. (Ironically, one key function—the Finder—does not offer is finding misplaced documents for the user! The Finder gets its name from the fact that it does help the Macintosh find documents and programs.) The Finder has been changed only slightly since the Mac's inception in 1984.

But I'd like to focus on the other version, the "MultiFinder." This one offers all the functions of the standard Finder,"but it also enables users with memory-heavy computers to run more than one program at a time. In other words, if you're working on a project which involves word processing, a spreadsheet and a graphics program, you could, with the MultiFinder run all three at once, switching among them to cut-and-paste at will.



That's the beauty of the MultiFinder.

But it's also a beast. Here's why. (And these may be reasons why you'd just as soon stick with the standard Finder than operate under MultiFinder.)

• MultiFinder needs a lot of memory to operate usefully. True, you can operate under MultiFinder with just one megabyte of memory. But there aren't many programs you can run in that small amount of memory. Two megabytes is almost a requirement to do any useful work with MultiFinder. And if you use some of the most advanced Macintosh programs, such as FullWrite, Excel or WingZ, Canvas or MacDraw II, you'll need more than two megabytes to operate smoothly.

• MultiFinder has some strange quirks. It's not always possible to open new documents from MultiFinder if the program that created those documents is already running. There are some programs which still don't operate well under MultiFinder. (They "quit unexpectedly," as the MultiFinder alert message will inform you—inexplicably, too!)

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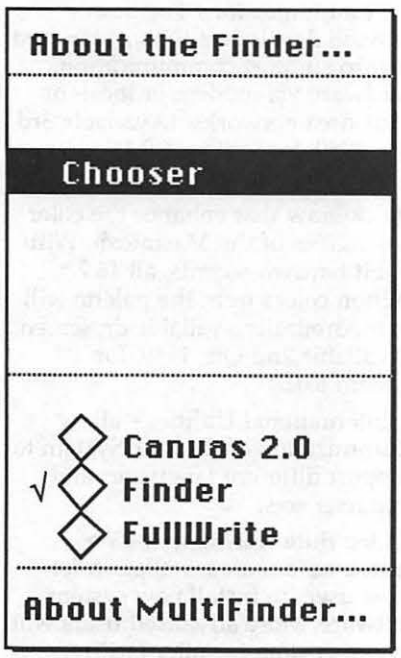
And because MultiFinder itself remains running when you open other programs and documents, you're often faced with a confusing screen. The folders and windows on the desktop are visible sometimes, or they may be hidden behind other documents you have open in other programs. Even switching to the Finder window doesn't bring all of its windows and icons to the forefront of your screen, if they have been so obscured.

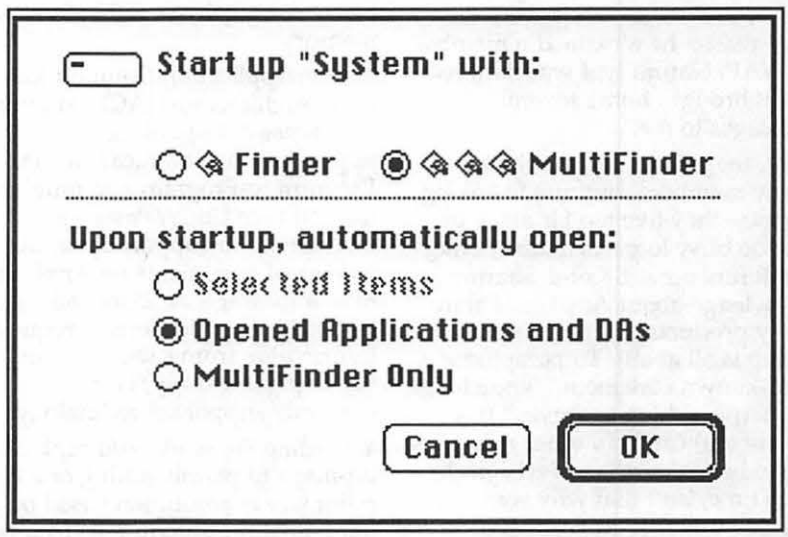
• MultiFinder's operations can be a bit hard to decipher. For instance, there's that tiny icon in the upper right hand corner of your screen. It's so small that it's hard to distinguish which program you're really looking at. Unless you're familiar with the menu bars of your programs, there's no quick and easy way of knowing which program you're actually using at any moment. (Sure, you can choose the menu and see which application (program) is "checked" in the list at the bottom. But why should you have to do that?)



Then there's the "memory management" function of the MultiFinder. It looks interesting, but what does it mean when you select "About the Finder..." when you are in the Finder window? (The Apple documentation explains it, but it's still hard to understand whether you're running out of memory for any particular program. For instance, if the "System" bar graph is completely "full," does that mean you're about to "crash?")

And what about memory management for each of the applications you use? (Raising or lowering the amount of memory your Mac allocates to each program when it's run.) That function does not take place in the memory management window! You have to remember to select the program when you areon the desktop and choose "Get Info" from the File menu!

And the "Set Startup" command under the "Special" menu is one of those arrangements which only becomes obvious after you've used it a few times. It's not intuitively clear how to use it, or how to change your choices once they're made.



• Finally, the MultiFinder's utility functions imply to the Macintosh user that it's the program to use for most of the Mac's housekeeping jobs. But over the years, Apple has added so many doodads to the housekeeping department that MultiFinder has become out of date. Now, to change printers, you must select something called the "Chooser" from the menu. To adjust the clock or the calendar of your Mac (as well as a wide variety of other housekeeping chores) you must select the "Control Panel" from the menu. To add or remove hard disk drive "partitions" from your desktop (in computerese, it's called "mounting" a hard disk partition), you can't use MultiFinder. You must use a special utility usually included with the software accompanying your hard disk drive. And, of course, to add or delete fonts and desk accessories, you must run yet another separate program. All these miscellaneous housekeeping functions really ought to be included in the basic Macintosh program, whether it's called MultiFinder or something else.

As a matter of fact, Apple is holding out hope that these housekeeping chores will be centralized in a future version of the Mac's basic System software, and perhaps even in the software which is permanently installed on the chips inside your computer. Some of these improvements could be available to consumers in 1990, when Apple releases its so-called "System 7.0." [Ed.—for *a discussion of these proposed changes, see the August issue of the Journal.]*

In the meantime, stay tuned for another edition of "MacNovice," in which we'll explore some of the MultiFinder's quirks and functions, and help you make your way through them to use your Mac most efficiently.

MACINTOSH

Are We Having Fun Yet?

by Lynn R. Trusal

With the turmoil of the past year, I often asked myself if I wanted to continue doing this column; my answer recently arrived in the mail. It was a letter from a WAP member who told me that he not only enjoyed "Bits and Bytes"—that he actually got useful information from it. He even went so far as to say that he had grown dependent on my articles and they were the only reason he remained a member of WAP. Naturally, I was flattered but it brought home several messages to me.

First, the journal is the only reason many members continue to belong because they live too far away or are too busy to participate in other WAP functions. Second, sharing knowledge about Apple and third-party products is what a user group is all about. To paraphrase a well-known statement, "knowledge is a terrible thing to waste." If we (members) can help other members make better purchase decisions or save time, isn't that why we banded together 10 years ago? Third, I write "Bits and Bytes" for the membership and as long as it continues to provide useful information to members I will continue to write it as long as I am able!

Finally, if you regularly benefit from information in the Journal, don't be afraid to let us know. As I mentioned before, regular Journal contributors would like to know if they provide useful information. My telephone number is 301-845-2651, so give me a call. Thanks for your support and kind comments over the past four years.

System Software 7.0 Details

Apple has released details of System software version 7.0 to be release later this year.

1. Virtual Memory—permits use of hard disk space as RAM but requires the 68851 Page Memory Management Unit (PMMU) in a Mac II. The PMMU is built into the 68030 CPU found in the Mac IIx and cx. This PPMU will also be necessary for true multi-tasking.

2. 32-Bit Addressing—permits expansion of physical RAM to 128 MB and 4 gigabytes (GB) of virtual memory.

3. InterApplication Communications Architecture (IAC)—supports four types of application-to-application communications. (a) Program-to-Program communication (b) Live Copy/Paste—a mechanism to support dynamic linking of documents (c) AppleEvents—a message standard that can be used by applications to request information from each other and (d) Clipboard Copy/Paste—currently supported technology.

4. Outline Fonts—would replace bit-maps to permit scaling of any point size or resolution based on a mathematical description. This will improve WYSIWYG and improve the quality of print from non-PostScript printers.

5. New Print Architecture—greater support for a wider variety of output devices including printer, fax modems, film recorders and plotters. Background printing will be available on all printers and improved color and half-toning will be possible.

6. Layout Manager—provide typographic quality text layout for all applications including kerning, ligatures and contextual forms.

7. Database Access—permit integration of data from host computer databases into Macintosh applications. Macs will have standard access to local area and enterprise-wide databases from large computing environments.

8. New Finder—more intuitive means of system management including integrated system utilities (replace DA/Font Mover), help available for any desktop icon or menu item, integrated find, aliases (multiple icons for a single file), stationery (custom file displays), custom views (customize desktop windows), configurable Apple menu (replace DAs ?) and extensible (add new capabilities such as mail and backup at a later date).

Additional Software Under Development

1. File System Enhancements—include the File System Manager to permit developers to give users access to non-Macintosh files such as MS-DOS, OS/2, Unix and ProDos as if they were Macintosh files.

2. New Sound Capabilities—make it easier for developers to use sound features including a MIDI manager, sound file compression and sound sequence manager for sound synchronization with multimedia.

3. Communications Toolbox—provide developers with a standard way to support communications hardware via modem or local- or wide-area networks. (Available 3rd Qtr, 1989, for System 6.0.3)

4. 32-bit QuickDraw—extensions to QuickDraw that enhance the color capabilities of the Macintosh. With 24-bit hardware cards, all 16.7 million colors from the palette will be theoretically available on screen. (Available 2nd Qtr, 1989, for System 6.0.3)

5. International Utilities—allow customization of the Mac System to support different languages and character sets.

6. One Button Installer—One button automatic installation for most users to install new system software. More advanced users will have a custom installer facility.

(Source—*Apple System Software Directions Overview*, May 1989)

System Software 7.0 will run on all Macs from the Plus on with a minimum of 2 MB of RAM and Apple will continue to offer support for System 6.0 and 7.0 at the same time but encourage

migration to 7.0. As you can see, Apple is not resting on its laurels but questions remain: will System Software 7.0 ship on schedule, function as described and be truly functional on a Mac Plus? Even System 7.0 does not offer true multitasking which will undoubtedly come in version 8.0?

The handwriting is on the wall—the Mac Plus is inevitably becoming more obsolete and it will eventually be dropped. It is unrealistic for Mac Plus owners to expect newer and newer system software upgrades to function in 1 MB of RAM and be fast enough using the original 68000 CPU.

Apple to Sell Stake In Adobe

Apple Computer has announced plans to sell its 16.4% ownership of Adobe Systems which it purchased 5 years ago for $2.5 million. Adobe stock has been as high as $29 per share this year and Apple's 3.4 million shares are worth about $91 million dollars today. This is an appreciation of 3,500% over the 5 years or 700% per year. Not bad! The stock will be purchased by Morgan Stanley and Co. and Hambrecht & Quist for resale to the public. Adobe has also said that they will repurchase some of Apple's stock.

Apple's stated reason for the sale is the large run-up in Adobe stock since it was first purchased and the fact that it is becoming a competitor of Adobe's with its recently announced outline font technology and 32-bit QuickDraw. Remember that Apple did not embrace Display PostScript like NeXT, Inc. and other companies did. Now Adobe is releasing its Type Manager for the Mac this fall that will offer hard copy PostScript, Display PostScript and high quality type but not graphic or image support. This appears to be Adobe's attempt to take back the high ground from Apple its announced outline font technology.

Apple is apparently going to develop its own PostScript compatible laser printer technology so that it will no longer have to pay royalties to Adobe. When this happens, will the cost of Apple laser printer go down?

Although Apple will continue to support PostScript in its laser printers for some time, it wants to become less dependent on Adobe as Adobe has become on it. In 1986, Apple accounted for 84% of Adobe's total revenue compared to just 29% during the first half of the current fiscal year.

(Source—*USA Today, Investors Daily*, July 6, 1989 and *PC Publishing*, July 1989).

A Great Offer from Microsoft

I've been picking on Microsoft recently so I will give it some credit. Microsoft distributes free a publication called "One-to-One with Microsoft" to registered users of any of their products for the Macintosh. It often contains useful information but that is not the

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330 Meg (CDC 10ms) $2545

External for only $150 More

Specials

DataCopy 730GS $1395
Top Rated (64) Grey Scale Scanner, with MacImage Software, & Cables.

DataCopy AccuText $775
Intelligent Character Recognition Software that MacWeek Called "Brilliant".

E-Machines T16 .....$2950
Top Rated 16" Color Display with Mac II Interface board.

RasterOps Clearview/SE $1750
2X Accelerator & 72 dpi 1024x768 display, includes monitor.

Relisys Standalone Fax $1395
Complete with Mac Interface, and BackFax, usable as 200dpi scanner, as fax modem, and as a normal fax.

Orchid Mac Sprint II $295
Mac II Accelerator.

reason for my compliment.

In the Summer 1989 issue, they offer a program called DocuComp for the grand total of $10 plus $2.50 for shipping and handling. Basically DocuComp is a $159 software program that allows you to compare different versions of the same document and tell what is different between the two versions. You might say so what, but I know that I could have used it many times at work. I can hear attorneys salivating even as I type! Imagine the wife's attorney checking the divorce settlement with DocuComp that was prepared by the husband's lawyer and discovering the car was deleted from her document. Litigation will never be the same again!

DocuComp reads and compares two versions of a document and the same text passage from both appears in separate windows on the screen. Moving the cursor in one window automatically moves it in the corresponding text in the other window. Changes between versions can be displayed with underlining, italics, outline, strikethrough or bold. DocuComp is then able to print or save a composite (red-lined) document with every change marked and provide a detailed list of the changes.

DocuComp works with Word 3.0 or later and one of the compared documents can be originally prepared on another word processor. The offer states that it expired on June 30, 1989 and I thought that must be the Catch 22 since I received it on July 7, 1989, but Microsoft says it will be good until the end of the year (Dec. 30, 1989).

This may be another attempt by Microsoft to retain its share of the Macintosh word processing market by offering inducements to stay with Word. Remember that Word 4.0 came with SuperPaint 1.1, Word Finder thesaurus and the AutoMac macro creator. Any way you look at it, it's a good deal for a useful program. Way to go Microsoft!

Gee, Bill maybe I'll stick with Word 4.0 after all.

Real Bits

1. Carnegie Mellon University is the first major university to offer a masters' degree in network management. The curriculum includes courses in business administration, public policy, computer science and engineering. It just goes to show that computer LAN's are only becoming more prevalent and more complicated. As mainframe sales drop, PC-based networks are often replacing them and more and more knowledgeable people will be needed to keep them up and running. (Source—*Business Week*, June 5, 1989)

2. Nintendo has created the largest show booth in the history of trade shows. It was 50,400 sq. ft. and cost $1.5 million for the Consumer Electronics Show in Chicago. During the five-day show, Nintendo expected to generate business worth $7.5 million. The exhibit booth took 21 tractor trailer trucks and 7 days to drive to Chicago from Oregon. Constructing the booth required 70 people working 24 hrs a day for 7 days to put it up. And you thought it was difficult to put up the WAP booth at MacWorld!

3. Compaq has moved ahead of both Apple and Olivetti & Co. for the second place in the European PC market. It was previously in fourth place. (Source—Investors Daily June 6, 1989)

4. I have written how many Apple execs have jumped ship for other companies but one has returned. Joseph A. Graziano has returned to Apple from Sun Microsystems to become the new chief financial officer (CFO) and also senior vice president. This position was headed by Debi Coleman, who voluntarily stepped down as CFO. Graziano was Apple's CFO from 1981 to 1985. (Source—*Investors Daily*, June 1989)

5. Steve Jobs has found another investor to bankroll NeXT, Inc.: Canon Inc., which will invest $100 million dollars in return for a 16.7% stake in the company. Till now, Steve Jobs (70%) , NeXT employees (20%) H. Ross Perot (12.5%) and

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two universities (1%) owned all of NeXT's stock, which is held as a private company. Steve is parting with some of his holdings in return for the $100 million investment. He now owns only 50% of the company. (I would have thought he would have retained 51%, considering what happened to him at Apple...) NeXT now has a book value of about $600 million, which would make Steve worth about $300 million. Not a bad return for someone who only put $7 million into the company to found it. Remember that Canon is the maker of the erasable optical disk used for storage in the NeXT computer.

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Steve must still have his touch because he got Canon to offer him the optical disks for under $1,000 when they sell for over $6,000 to other manufactures. Canon also get the rights to sell the NeXT computer in Asia, perhaps to Beijing University students? It will be hard for the Chinese government to rewrite history if it's stored on a WORM drive! (Source—*Business Week*, June 26, 1989 and MacWeek, June 20, 1989)

6. A new company called Netframe Systems (Sunnyvale, CA) is working to develop a new file server that will run operating systems for Macintosh, IBM and Unix within a single box. The article did not say if IBM meant MS-DOS, OS/2 or both. The founder is talking with Sybase, Informix and Oracle about developing database applications for the server. In addition, Apple, Xerox and Olivetti have invested in the company for obvious reasons. (Source—*Business Week*, Special 1989 Bonus Issue, June 1989).

7. Recommendations from Aldus for scanning resolutions depending on output device and type of object scanned: use 75 dpi for gray scale and photographs and 300 dpi for line-art when printing to a laser printer. If you output to a Linotronic at 1200 dpi or higher use 150 dpi for photos and gray scale images and 300 dpi for line art. (Source—*Aldus Master Pages*, May/June 1989).

8. Seven U.S. computer firms are banding together to get the U.S. back into the hunt for production of DRAM chips; a market that was largely abandoned to the Japanese. The firms will pool their money to build a DRAM manufacturing facility. They include IBM, HP, DEC, Intel, Advanced Micro Devices, National Semiconductor and LSI Logic. Why not Apple ? Today only TI, Motorola and Micron Technology still manufacture DRAM's for the U.S. market, while IBM makes DRAM chips for themselves. Japanese dominance is shown by their 73% market share of the $6.4 billion DRAM worldwide market. (Source—Investors Daily, June 21, 1989).

9. So Bill Gates says Word 4.0 is "bug free and much improved." Well Bill, that's a true and false statement! The major bug I found involves typing at the bottom of a page. In Page View, I often find that when I get to the bottom of a page and continue typing, Word starts to shutter and shake and the words don't always end up on the top of the next page. They sometimes go into the "Microsoft Twilight Zone." I also don't like the way Word 4.0 prevents you from viewing parts of two pages when in Page View mode. It jerkily jumps from the bottom of one page to the top of the next page but in doing so prevents the user from reading a continuation of a paragraph. Also why can't I see page numbers in normal viewing mode. Why only in Page View or Print Preview? And then again, why is Word slower at many functions like bringing up the Help menu or spell checking? Why, Bill? I will give you credit for the column feature if you spend enough time to learn to use it properly but tabs are still troublesome and I still find an occasional Word Temp file left in the system folder after quitting Word.

10. Cricket Software has been purchased by Computer Associates, which also purchased Cullinet and the rights to Harvard Total Project Manager from Software Publishing. Both the original founders of Cricket have moved on to start new companies but perhaps should have done so sooner. Cricket was considered one of the most desirable takeover software houses and for a long time resisted being sold but then experienced some hard times. The moral may be to get out when the going is good. The sale price was rumored to be only $4.5 million when an offer of $12 million was previously turned down in better days. After all, the fun is in forming a successful company—take your bows and move on. Steve Job is one of a long list of founders that didn't remember this and paid the price. Will he have the last laugh?

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

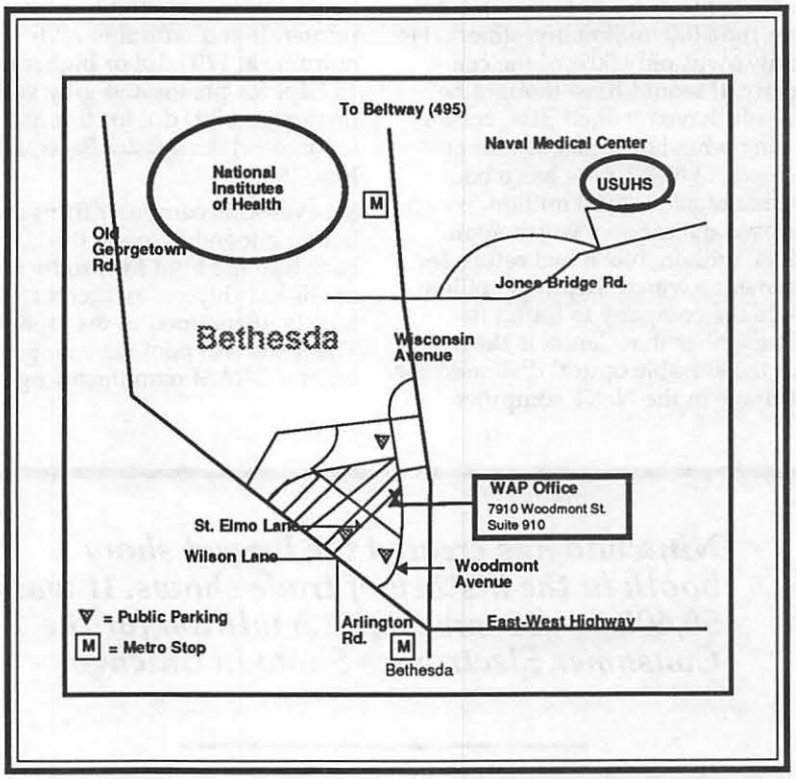
You Know Who We Are...But How in the World Do You Find Us?

Responding to plaintive murmurs of distress, punctuated by the odd scream of rage, from people who have been circling Bethesda for what seems to them forever, we present herewith a map of our whereabouts.

The map is insufficiently detailed to show precisely where the USUHS buildings are located, but people of reasonable inventiveness can find it fairly easily, once they have made their way to the general vicinity.

Access for automobiles coming from Jones Bridge Road is well marked; those on foot from the NIH metro stop should have no trouble locating our meeting place.

If all else fails, follow anyone you see who is wearing a plastic pocket protector holding at least four colored pens.



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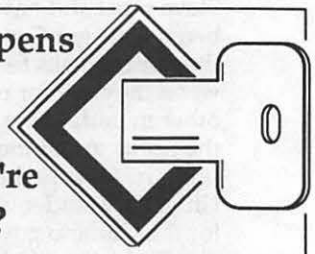

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John Wiegley after2:15 (703) 437-1808

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Jaxon Brown (301) 350-3283

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APPLE SSC
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Bob Martz (301) 795-5689
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Apple Works Data Base
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Alan Levy (703) 578-4621

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dBase II
John Staples (703) 255-6955

dBase II&III,Data Perfect
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Barry Fox (717) 652-2899

Dvorak Keyboard
Ginny Spevak (202) 362-3887

Hard Disk

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Corvus Omninet
Tom Vier (BBS) (301) 986-8085

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Leon Raesly (301) 220-0717

Sider
Jaxon Brown (301) 350-3283
Otis Greever (615) 638-1525

Languages

Applesoft
Louis Biggie (301) 967-3977
PeterCombes (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 Ewin (703) 391-0295

Operating Systems

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

CP/M
ArtWilson (301) 774-8043

ProDOS
John Love (703) 569-2294
John Wiegley after 2:15 (703) 437-1808

ProDOS 8 and 16
Barry Fox (717) 652-2899

RWTS, Disk structure
John Wiegley after 2:15 (703) 437-1808

Print Shop
Thomas O'Hagan (301) 593-9683

Spreadsheets

General
Walt Francis (202) 966-5742

MagicCalc/SuperCalc2.0
Leon Raesly (301) 220-0717
Terry Prudden (301) 933-3065

Telecommunications
Allan Levy (301) 340-7839

TimeOut Series
Morgan Jopling (301) 261-3886

Utilities:ProSel
Barry Fox (717) 652-2899

Word Processors

General
Walt Francis (202) 966-5742

Apple Writer 11
Dianne Lorenz (301) 530-7881
Leon Raesly (301) 220-0717

Letter & Simply Perf
Leon Raesly (301) 220-0717

Mouse Write
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ScreenWriter 11
PeterCombes (301) 251-6269
Gene Carter (202) 363-2342

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Jon Vaupel (301) 593-3316

Word Perfect
James Edwards (301) 585-3002
Henry Donahoe (202) 298-9107

Word Star
Art Wilson (301) 774-8043
Michael Osborne (301) 894-8903

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//e Upgrade
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Rich Sanders (703) 450-4371

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Barry Fox (717) 652-2899

Multiscribe GS
Ray Settle (301) 647-9192

Telecommunications
Dale Smith (301) 762-5158
Allan Levy (301) 340-7839
Bob Sherman (305) 944-2111

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Barry Fox (717) 652-2899

VIP-Pro/Multibe
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 (301) 831-9166
Ray Settles (301) 647-9192
Kevin Condon (301) 652-0303
Gary Hayman (301) 345-3230
Lee Raesly (301) 220-0717
Harvey Kaye (301) 493-6875
Allan Levy (301) 340-7839

VIRGINIA
Kenneth De Vito (703) 960-0786
David Page (703) 471-7819
Lou Pastura (703) 560-1477

WAP HOTLINE

CALENDAR AND SIG NEWS

SEPTEMBER

4 Monday
Holiday: office closed

5 Tuesday
Writers' Deadline—October Issue

6 Wednesday
Ad Space Reservations deadline—October 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
2:00 PM Music SIG ..... Call

11 Monday
Editorial Deadline—October issue

13 Wednesday
Ad Copy Deadline—October issue
7:30 PM Board of Directors Meeting ..... office

14 Thursday
7:30 PM Database SIG/4D ... Computer Factory
7:30 PM NEXT SIG ..... NIH
8:00 PM StockSIG ..... office

20 Wednesday
7:00 PM WorksSIG ..... office
7:30 PM Excel SIG ..... office
7:30 PM Fed SIG ..... Call
7:30 PM HyperTalk SubSIG ..... Arlington

23 Saturday
8:00 AM AppleWorks SIG ..... UHUHS
9:00 AM WAP General Meeting ..... UHUHS
noon AppleWorks SIG ..... UHUHS
noon HyperCard SIG ..... UHUHS
noon Telecomm SIG ..... UHUHS

25 Monday
7:00 PM Apple IIgs SIG ..... Bethesda

27 Wednesday
7:30 PM Apple III SIG ..... office
7:30 PM AVSIG ..... office

28 Thursday
7:30 PM Business SIG ..... office

Meeting topics, September 23

Apple II: 9:30 AM (Auditorium)

Speakers on AppleWorks 3.0, TimeOut, Beagle Buddies, and the Floating Point Engine from Innovative Systems.

Macintosh: 11:00 AM (Auditorium)

Daniel Cheifetz, President of Odesta, will be presenting the "Odesta View of Data Management." Plus a surprise presentation (we think...).

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. (September meeting at Thomas Pyle Intermediate School, September 25.)

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) Normally the 4th Wednesday; office, 7:30 PM. A sharing meeting; artists bring projects and problems to share and discuss.

Columbia Slice 1st Thursday; at the Howard County Board of Education bldg., Route 108, Columbia, MD, 7:00 PM. September is the First Annivesary meeting; on the program are three WAP board members discussing the MacWorld Expo and a IIgs demo. Door prizes will be given out.

September

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

Database SIG/4D 2nd Wednesday; Computer Factory, Silver Spring, 7:30 PM. May be subject to change; call Eric Gutsche to confirm, (703) 379–1265.

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

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

Fed SIG (Federal) 3rd Wednesday; alternates between Falcon Training Center, 1745 Jefferson Davis Hwy Suite 502, Crystal City, and Apple Fed. Sys. Office, 1892 Preston White Dr., Reston, 7:30 PM.

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.

October

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*				

OCTOBER

2 Monday
7:30 PM PI-SIG ..... office

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25 Wednesday
7:30 PM Apple III SIG ..... office
7:30 PM AV SIG ..... office

26 Thursday
7:30 PM Business SIG ..... office

28 Saturday
8:00 AM AppleWorks SIG ..... USUHS
9:00 AM WAP General Meeting ..... USUHS
noon AppleWorks SIG ..... USUHS
noon HyperCard SIG ..... USUHS
noon Telecomm SIG ..... USUHS

30 Monday
7:00 PM Apple IIgs SIG ..... McLean

WATCH OUT!

November is going to be somewhat complicated, what with Thanksgiving and all. The monthly meeting will be held one week earlier, on November 18, and all of the Journal deadlines will have been advanced accordingly—i.e., everything moves up one week. Watch this space for SIG upheavals.

CALENDAR AND SIG NEWS

WAP HOTLINE

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 dayonly (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 Baldridge (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 Baldridge (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 & Graphics
General
David Morganstein (301) 972-4263
Bob Pulgino (301) 474-0634
Tom Cavanaugh (703) 750-9449

Excel
David Morganstein (301) 972-4263
Mark Pankin (703) 524-0937
Jim Graham (703) 370-5737
Dick & Nancy Byrd (703) 978-3440
Bob Pulgino (301) 474-0634
Tom Cavanaugh (703) 750-9449

MultiPlan
John Boblitz (301) 356-9384
John Love (703) 569-2294

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) 750-9449

WriteNow
Bill Baldridge (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

Stock Market
Robert Wood (703) 893-9591

Volunteer on the Hotline

Call us 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

Math Rabbit

Math Rabbit

Macintosh program

The Learning Company
6493 Kaiser Drive
Fremont, CA 94555
(415) 792-2102
(800) 852-2255

$59.95 list, although mail order houses have it for about 20% less.

by Martin Milrod

There are many educational games designed for the Macintosh for young children. Some of the best of them are produced by a company called The Learning Company. Last year I bought one of their products, Reader Rabbit, for some very young members of my family; they were enchanted with it, and my Mac gets used for that game whenever they visit.

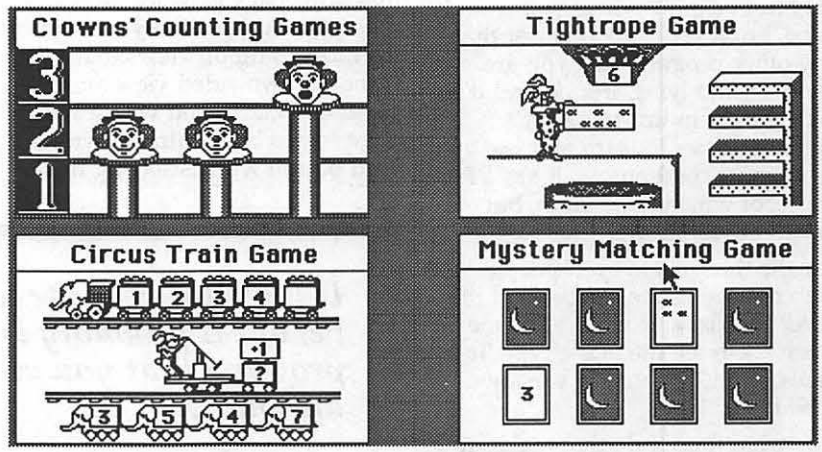
Now an excellent companion game — Math Rabbit has been released. It consists of four game-types: Clowns' Counting Games, Tightrope Game, Circus Train Game and the Mystery Matching Game, each of which can be played at different educational levels.

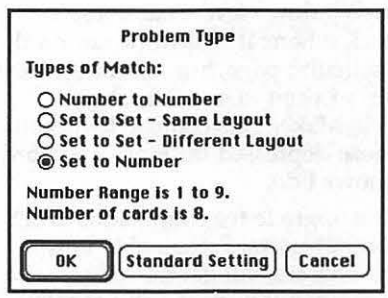
Ranging from simple counting exercises, to matching sets of objects, some of the games also emphasize addition and subtraction.

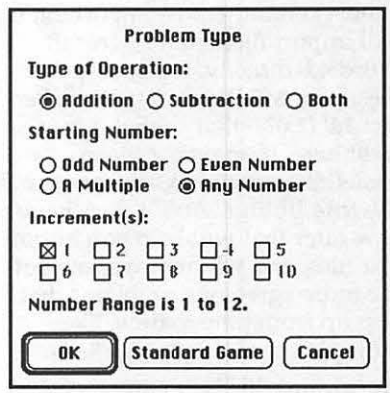
The games emphasize eye-hand coordination, numerical concepts and simple arithmetical functions. Appropriate music, cartoon figures dancing, and speech reinforcement reward correct answers. Simply put, Math Rabbit is charming and I admit to playing the games "in order to write this review" — hrumpph.*[Ed.—rumor has it that our reviewer has no other program on his Macintosh for the past two weeks.]*

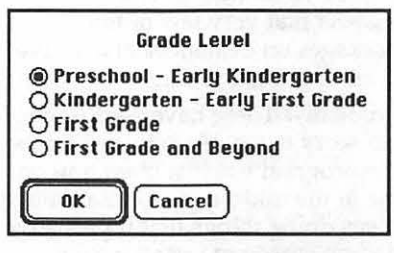
Here are some examples of the program's ability to *tailor* a game to a youngster.

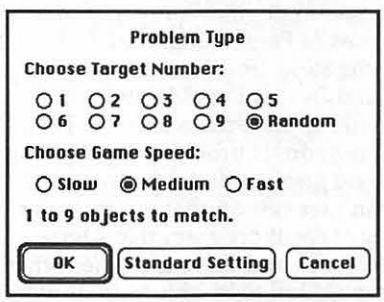
Help files are always available, and the graphics are understandable while being completely engrossing. It runs on any Mac Plus or higher machine, although











you do need System Version 6.0+. Unlike Reader Rabbit, Math Rabbit is not copy-protected...thank heavens. I simply recommend that you get this program for any child 4 - 7 years of age.

(If you use MacConnection (800-MAC-LISA,) and give them your WAP membership number, you don't even pay the customary $3 shipping and handling charge.).

Software Review

PageMaker 3.02

by Frank Potter

You asked for it—you got it. The newest PageMaker program takes more steps in the right direction. It may not be quite where you want it to be, but it probably is closer than any other program that you are likely to find lying around and it is still, at least in this reviewer's opinion, easier to learn and use by far than its competitors. It has a few warts, of which more anon, but mostly it works well.

For the three eagle-eyed people who noticed in the last issue of the WAP Journal and who called me gleefully to tell me of the typo, it really wasn't created in version 3.09. I lied.

So—what does it do that makes it worth mentioning? First, and almost certainly most important, it will import files from Microsoft Word 4.0 directly. It also imports files from MS Works 2.0, WordPerfect 1.0 (1.0?—that's what it says right here, so maybe it means something special to someone), and Xywrite III Plus. And it does have a new filter that will help you import text files, and will remove some of the more egregious problems that pop up from time to time, like multiple spaces in place of tabs.

It also, and this is not an insignificant addition, allows the user to specify fractional point sizes for type. Well, half-point size increments, anyway. This can be of enormous value when one tries to make things even out at the bottom of a busy page. Now you just type in the increments in the "Type Specifications" box, and you are off to the races.

Other features of the program that the new version claims to have incorporated include new Aldus Printer Description files (APDs), faster and smoother handling of material that you type in yourself within PageMaker, and a new filter installer that you can use to add or delete import filters. And here is a particularly nice change—if you hold down the Option key while selecting a page view, it will select that same page view for all pages in the file. At least it says so. One of the most common views that I use is the full two-sided view and pasteboard, accessed with a two-page screen by holding down the Shift button while selecting the Fit-In-Window view. That doesn't hack it here: it will work fine on the particular page, but not for the next ones I want to see. Probably PageMaker gets confused with all those depressed buttons—the Lord knows I do.

It may not be quite where you want it to be, but it probably is closer than any other program that you are likely to find lying around...

The upgrade fee from Aldus is $25 for 3.01 users. Presumably new purchasers will get the new version, although it will probably require some negotiating since I suspect that very few of the packages on dealers' shelves have been upgraded so far.

Problems? There have been a few, I am sorry to say. A couple of times the program has just plain quit on me in the middle of work, although I was doing things that it probably had no reason to expect a sane person to do, like running two copies of PageMaker (3.01 and 3.02) at the same time in order to have two different PageMaker documents on the screen at once. This, I might add, is probably my biggest single gripe with the program: it won't let you do that. Every other page layout program that I have seen will, and there are times when I would kill to be able to do it here. And twice it has locked up and refused to let me reopen a fairly large and complex file that I had spent considerable time in creating. Told me, insolently, that "This is not a PageMaker file," and ignored me thereafter. I haven't had that happen to me in PageMaker since the early days of version 1.11 and I will be quite honest and say that it was for that reason that I abandoned the program for Ready,Set,Go! for a couple of years. I didn't have the time to talk to the techies in Seattle and it may be that there is an easy fix, like giving it more RAM, but it can be a non-trivial problem, so watch out.

PageMaker is one of those programs that you wish were just a little more easy to use than it is. Its virtue and it is by no means inconsiderable, is that it will let you place text and graphics just about any place on the printed page that you wish. It handles pasted bitmaps from MacPaint all right—it handles PICT files very well and it also works well with encapsulated PostScript files. For routine small jobs, such as this Journal, it seems to be about the best on the block. I don't know whether I would use it for an enormous job, like publishing a book, but with any luck, I will never need to know the answer to that question.

PageMaker 3.02
Aldus Corporation
411 First Ave. South,
Seattle, WA 98104
(206) 622-5500
Not copy-protected.

SmartArt I

by Frank Potter

The ability to manipulate text on a page to produce special effects has taken a giant leap forward with the introduction of Smart Art I. This is an elegant and easily manageable Desk Accessory that permits the user to create text effects that will certainly impress and may even startle the reader. Readers of the Journal will be familiar with several of its effects—those used to create the covers on the July and August issues.

Smart Art takes the state of the art to a new level. The program has fifteen different effects on any text that you can place in a word processing or page layout program. Since it is a DA, you can get at it from within just about any programs that you have running at the time, and you don't need to be an expert (or even particularly competent at things Macintosh) to run it.

The interface is clean and simple: no buttons to push, no toolboxes to open. You simply locate and open the folder of effects that accompany the program, select one and begin to adapt the example on screen to your requirements. The program shows the font then in use for the text and invites you to change the text, the font (to any that your LaserWriter can access in the System Folder), the size, the shading or any other relevant element. Then you select "Re-image," and the program will briefly exchange information with the printer and display your new image on the screen at 72 dots per inch.

The program needs a 300 dpi printer to work, and it must be able to handle PostScript (although it will create EPS files for you). You simply copy the image and preview to the clipboard and paste it into the underlying word processor or page layout program (or any other program that accepts PICT files from the clipboard). The program's basic file format is encapsulated PostScript (EPS), and it can save and revise files that it has once created, or that have been created in any other program that can produce EPS files.

Many of the effects that Smart Art can create can be created or approximated in other PostScript graphics programs, such as Illustrator and Freehand. But it can do in minutes what it might take hours to do elsewhere, and only after a considerable amount of trial and error.

The documentation is simple and clear. It will tell you want you can do and what you can't do, although the latter is not extensive. Right now, you can't mix different effects, like buttons and shadows although I understand that this may be possible quite soon. The registration card that comes with the program promises free updates and customer support for 90 days. There is an online help program that will take you through any rough spots, where looking up the documents would be a bother.

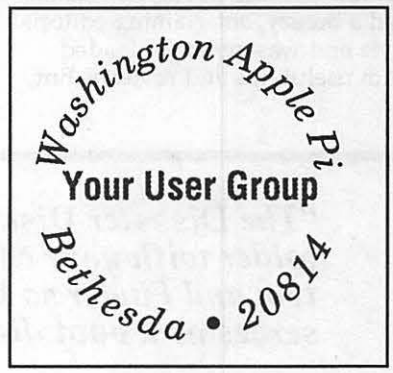
Two newpackages are apparently now out from Emerald City, according to MacWeek. One of them allows manipulation of objects like boxes and stars and such, and the other is a headline–creation package. At this point, this is about all I know about them, but the elegance of SmartArt I leads me to be very interested, so you can be sure that I will keep you posted as I learn more.

Liked most: ease of use; seamless interface with other programs.

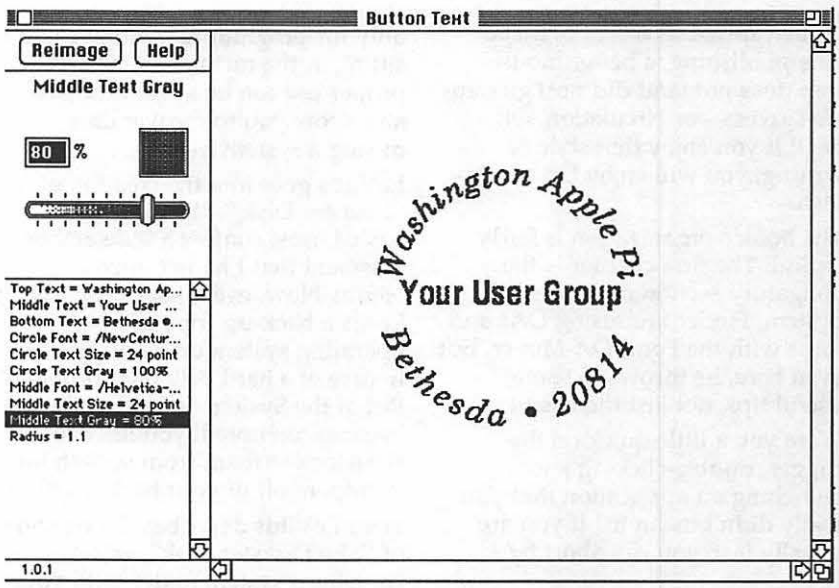
Liked least: Need to search for Smart Effects file each time you bring up the Desk Accessory.

Price: $149 list; ±$85 mail order (Mac Connection).

SmartArt I
Emerald City Software
800 Menlo Ave., Suite 102
Box 2103
Menlo Park, CA 94025
(800) 223-0417; (415) 324-8080
Not copy-protected



This...was produced by this...



Calling Dr. Mac...

by Robb Wolov

Looking back over the last few installments of this column, it seems that I have gotten away from passing on power tips. Fortunately, I can rectify that oversight and at the same time recommend some entertaining reading.

The Inside Word on Using the Macintosh

Dr. Macintosh, Tips, Techniques and Advice on Mastering the Macintosh, a new book by Bob LeVitus, is a must-have if you are new to the Mac—or if you are an old timer.

LeVitus was chief editor of the now defunct Macazine. His publication had a breezy, entertaining editorial style and was generally loaded with useful tips and reviews. But, in the capricious world of magazine publishing, a better mousetrap does not (and did not) guarantee success—or circulation. Oh, well! If you enjoy that style of writing, you will enjoy Dr. Macintosh.

The book's organization is fairly logical. The first chapter is the obligatory section on basics—the System, Finder and using DAs and fonts with the Font/DA Mover. But even here, he throws in some useful tips, not just the basics.

Were you a little quick on the trigger, double-clicking and launching an application that you really didn't mean to? If you are equally fast, you can abort by hitting the Command and period keys.

Want to erase a floppy quickly? Hold down the Option , Command and Tab keys when you insert the disk. The Mac will cut directly to the dialog box warning you that you will destroy all information on the disk, bypassing bringing the disk's icon up on the screen and requiring you to select *erase* from the Special menu of the Finder.

The second chapter, up front where you need it, is the most comprehensive and clearly written chapter on system and disk crash recovery I have seen. Here, LeVitus even lets you in on the secrets of the Programmer's Switch. You know, that little piece of plastic that the Apple owner's manual warns is only for programmers—that's still sitting in the carton somewhere. It's proper use can be a real time saver and allow you to recover data during a system freeze.

LeVitus goes into the creation of a "Disaster Disk." This tip was so basic I must confess a little embarrassment that I hadn't done it before. Now, every sane Mac user keeps a back-up copy of his operating system on a floppy disk in case of a hard disk boot problem. But, if the System or Finder files become corrupted, you have to recustomize them from scratch (or pull them off of your back-up files).

Here LeVitus describes the creation of "The Disaster Disk", which contains a system folder with your currently working System and Finder so that the disk also serves as a boot disk. On this disk you should also copy any initialization software that came with any hard disks in your system. Copy the file Disk First Aid from the Apple Utilities disk onto your Disaster Disk. Single click on Disk First Aid's icon and choose Set Startup from the Special menu. Now, if you ever have to boot from this disk, it will automatically open to Disk First Aid. You can now use the remaining space to copy your favorite file recovery programs as SUM (Symantec Utilities for Macintosh) or 1st Aid Kit.

The Disaster Disk becomes a pretty comprehensive safety tool. It is also a more logical repository for some files that you may have kept on your hard disk—space saved is space saved.

LeVitus is fairly opinionated as to his favorite programs, utilities and hardware. The book is loaded with comparisons of competing brands. I find this editorial style refreshing compared to the bland, noncommittal attitude of most such books. For example, in the section on selecting hard disks, he comes right out and says that Apple's hard disks are good, but over priced and that in his opinion factory-direct mail ordered Jasmine drives are preferable. This will no doubt infuriate local dealers. However, in fairness, he does state that if you take up a dealer's time to demonstrate and guide your purchase of a piece of software or hardware, you should purchase from that dealer.

It's a good read for these waning days of summer and a handy compilation of tips for all year round.

"The Disaster Disk"... contains a system folder with your currently working System and Finder so that the disk also serves as a boot disk.

Personal Laser Printer Update

For those folks using the General Computer Corporation's (GCC) Personal LaserPrinter (PLP), there has been a significant upgrade to the fonts and software that drive this beast. Announced as the PLP 2.2 software update, the new software adds better compatibility under Multifinder, improved utility with GCC's WriteMove printer, improved font storage and

32 Bit QuickDraw compatibility.

A new font compression routine saves approximately 500K of hard disk storage. The additional PLP Plus fonts have not yet been modified, but GCC says that they are also targeted for future revision. The new PLP driver will read the old uncompressed fonts, but why would you bother? The new GCC Print Manager works more smoothly under Multifinder. It will no longer keep the printer driver open while it's in use, but still requires about 800k to run.

The Print Manager is now compatible with both the PLP and WriteMove printers. In addition, the package includes a totally rewritten manual for the printer which even tells you how to do envelopes. (A first for the industry?) Unlike previous driver updates this one will not be available on the commercial bulletin boards. Because there are so many disks involved, GCC did not feel it was an efficient channel of distribution.

The shrink-wrapped package can be purchased directly from GCC or from your dealer for $29.00. Dealers may opt to distribute software free to their customers.

As an aside, GCC as confirmed that the PLP is System 7 compatible. Only a new driver will be required to start printing the new format outline fonts when these are released by Apple or third parties. After all, that's what the PLP uses now, outline fonts supplied by Bitstream, one of the announced suppliers of System 7 fonts. (However, the current fonts are not the same format as System 7 fonts to come.)

There is the possibility that we will see outline fonts before System 7 in some interim version of System 6. Currently, the outline font inits are making the beta rounds. Currently there are three inits altogether, which are added to your system folder, just as the 32-bit QuickDraw init can be added as a "patch init" now.

Poor Man's Desktop Publishing

First of all, I am not a desktop publisher. I have a certain artistic curiosity about the compositional aspects of the field, but I frankly have very little personal need for this part of the technology. I'll help my wife paste together maybe one or two posters or single page notices every three or four months. I'm sure such programs as PageMaker, Ready, Set, Go or LectraSet are wonderful for those folks that actually massage these programs to their fullest. But, I can't justify the expense for my own needs. Frankly, Word 4.0 with its graphic wrap-around feature makes a fairly good poor man's page make-up program.

Word 4.0, with its graphic wrap-around feature, makes a fairly good poor man's page make-up program.

As I mentioned last month, one of the benefits of System 7's new font scheme with be the incorporation of a layout manager which will do "kerning" (the variable spacing of letters to improve appearance or readability). But, until such time, there is work-around at least for titles and headlines.

My thanks to Andrew Burns for this tip for kerning in MS Word. He notes that the character spacing option isn't a workable solution for kerning because you can't condense spacing by more than 1.75 points (a point in printer's parlance is 1/72 of an inch). You can however expand spacing to 14 points, which seems rather odd! Although Microsoft doesn't mention kerning anywhere in their manuals, rudimentary kerning does exist. It takes the form of the Displace formula command.

Using this formula command, you can offset any character in whole points. This isn't useful in small text sizes, but works well for headlines.

To kern two characters:

1. Place the cursor between the two characters you want to kern.

2. Type dba1()ype option-command-backslash (\) then type the letter D (formula code for DISPLACE).

3. Type dba1()ype option-command-backslash again, then type the letters BA (formula code for BACKWdba1()ARDS).

4. Now type the number of points to kern (in whole points).

5. Follow this by both the open and close parentheses.

The code you'll see should look like this: \d\ba3()

Where:

\d = DISPLACE (formula command)

\ba = BACKWdba1()ARDS (formula command)

3 = Number of points to kern

() = Closing formula command

No, this is not the simplest or most elegant way to do things. But then we did say this was a work-around. As you can see though, the results can be quite nice.

Normal	With Displace
AWAY	AWAY
Today	Today
ONLY	ONLY
Water	Water
Yes	Yes

But I Don't Understand...

by David Morganstein & Martin Milrod

I have a MacPlus with a Radius Accelerator Board and have just bought Apple's CD Player. I am unable to open the CD player—my Mac crashes every time. How come?

Dana J. Schwartz, the WAPACROSTIC author, posed this question to us and we were stumped. Dana—as he had promised—let us know what the problem was. The villain in this, and in many other cases of which we were aware, was the Radius Accelerator board and its software. Dana had been using Version 1.8 of Radius' software which caused the crashes. Radius sent him Version 2.0+. We suspect that this latest version may be tailored for the MacPlus only.

The problem Dana had is mirrored by all of us who have had an existing set-up of hardware/software find an incompatible "later" or new version of something, a System/Finder or—in Dana's case an init for a hardware peripheral. The lesson learned, and the caution issued, is to be alert to version updates and incompatibilities among various INITs, cdevs and other hardware/software combinations. That is why we urge you to indicate the version number on each of your applications and utilities.

I have 3 Macs in my office, tied together in a LAN all hooked into one LaserWriterIINT. From time to time, we find that our Chooser selection gets "undone" somehow; that is, it no longer shows the LW as being selec ted for printing. What's happening ?

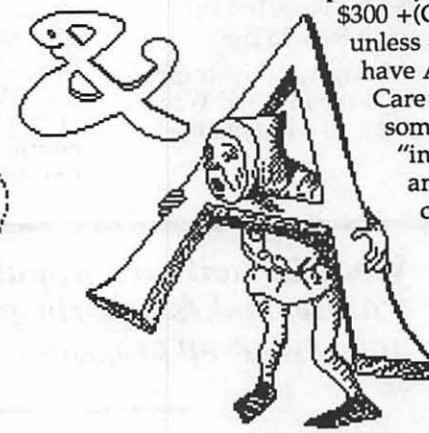
First of all, check all connections making sure that they are tight and correct.

What is probably happening is that one or more of your Macs is using a LW Prep and LaserWriter print driver different that that which initialized your LaserWriter. In other words, all Macs on your LAN must have the same LW printer driver versions or you have to re-initialize your printer each time. One of the symptoms of this conditions in the Chooser "unchoosing" its pre-set printer selection.

While Apple's printer driver version 5.2 is common to most Macs, those of us using the newer System Version 6.0.3 may wish to use LW printer version 6.0. This newer version has better greyscale capabilities and is somewhat faster. Unfortunately, certain types of files (TIFF) and programs will not deal well with LW printer Version 6.0; notable among these is SuperPaint 2.0. Owners of that software have to write to Silicon Beach, sending in their original disk and Silicon Beach will then send them SuperPaint 2.0a. (What a tacky, unclassy way for a major software firm to deal with a problem—no notices, no information to registered owners!)

My screen starts to waver and jitter when I turn on my Mac. Is this a problem or should I just ignore it?

Get thee to your authorized Apple Dealer as fast as possible! This is one of the symptoms of a power-supply failure and fixing it will probably cost $300 +(Gulp!) unless you have AppleCare or some other "insurance" contract.



Apple is notorious for having had major power supply problems in their earlier Macs, particularly in a weak "flyback switch." They have consistently refused to do anything about this, (although later Macs have been improved,) and any reasonably inexpensive solution is defeated by the fact that their dealers replace components, generally, rather than fix the problem. They will replace your entire power supply rather than fix a bad chip or flyback switch, for instance.

For this—and Apple's verrry limited 90-day warranty period, let's all (together, chorus,) give a great big BOOO! and thumbs down to Apple Computer Inc. We consider loyalty to be a two-way street and Apple has tended to overlook its large and, up until now, dedicated group of individual (not business) owners of their products.

Coming Events— Past & Future

by Eric Rall

As I write this, the Boston MacWorld Expo is only days away. MacWorld Expo is prime hunting grounds for scheduling speakers. Look towards this space next month for the fruits of my labor at Boston.

We are fortunate to have an embarrassment of riches. WAP has earned a reputation as being an important group at which to present Macintosh products. There are quite a few people that want the opportunity to speak to you.

In response to this intense interest we are trying something new. To supplement our regular monthly meetings, we have scheduled to special events. So without further ado, here is the upcoming schedule.

Tuesday, September 12, PEPCO Auditorium, 7:00 PM

Bill Campbell, CEO of Claris will be speaking to WAP. For those of you that have never had a chance to hear Bill, don't miss this opportunity. Bill is a dynamic speaker and speaks to his audience rather than recite a canned speech. Perhaps it was those years he spent as a Columbia University football coach, but Bill is an entertaining and animated speaker.

Claris has promised to raffle off both Macintosh and Apple II software. I know that interests some of you that's why I mention it.

This is a special meeting so mark your calendars for September 17, a Tuesday night.

Saturday, September 23, USUHS, 9:30 AM

This is our regular monthly meeting. The Macintosh question and answer session starts at 9:30 in the cafeteria. Bring your best questions for Marty Milrod, Bob Marder and anyone else I can get to stand in front of you to field questions. If you have any problems or perhaps even have some answers to something that perplexed you, this is the place to come and share it with the rest of us.

After the Q & A, we move into the auditorium for the Macintosh presentations. Usually the program gets underway about 11:00 AM for the late risers out there. Daniel Cheifetz, President of Odesta will be presenting the "Odesta View of Data Management." I presume this includes a demonstration of Double Helix III. For you icon junkies out there, Double Helix I, II and II are icon based database programs. Daniel has promised to bring a copy of Double Helix III to raffle off.

There will be another presentation, but I haven't worked out all the arrangements. You're just going to trust me on this one. If I can pull off what I hope, you won't be disappointed. Besides, everybody likes to be surprised every now and then.

Monday, October 2, USUHS, 7:00 PM

So it is the third meeting in four weeks. I told you I was busy.

Marc Canter, President of MacroMind will be coming out to speak to WAP, NASA HQ MUG, Pentagon MUG and GRAMA. (I thought I'd invite a few friends to join us. I just knew you wouldn't mind.) MacroMind is the company that puts out VideoWorks II, the VideoWorks Accelerator and the VideoWorks Driver for HyperCard. Marc is a highly animated extremely entertaining speaker. In fact, I plan upon just introducing him and clearing out of his way quickly. Although the MacroMind software doesn't all require color, Marc will be showing his wares in glorious, animated color.

I haven't asked whether Marc will be giving any software away, but give me a chance.

Saturday, October 28, ????

October is Learning Month. The emphasis will be on using Macintoshes for learning and education. Our usual setup at USUHS isn't available, so we are all scrambling to come up with another plan. As soon as we work out the details, you will all be the first to know. In fact, if you figure it out before me, please give me a call.

November 1989 - July 1990

This depends upon a number of factors. Holidays, regularly scheduled events and irregularly scheduled events.

There are a few things we can say for almost certain:

- The November meeting will be on the third Saturday, November 18. This way we can all go to Grandma's house for Thanksgiving.
- December 16, the third Saturday of December will be the Garage Sale.

I need help with your input. These are your meetings. I am constantly guessing what and who you want to see. If I am on the wrong track, please let me know. If I am on the right track, let me know. Your input is important. Last year I made a few changes based upon your feedback. The special meetings on weekday nights is an attempt to reach those of you that can't make an early Saturday morning meeting. If you come out to these special meetings, I'll schedule more.

Dave Lavery, a WAP member and NASA HQ MUG chair, suggested that a number of local MUGs get together and sponsor a mini-Expo. The idea would be to get a large room somewhere and invite a number of hardware and software companies out to set up tables and demonstrations. If this is something you are interested in, please let me know.

APPLE II

Where Are All Those Apple IIIs Coming From?

by Hendrik Van der Straeten, Apple III users of Belgium and The Netherlands

Edited by Dave Ottalini WAP III SIG

Many used Apple IIIs have appeared on the market in Belgium over the past year. They are purchased by students, hobbyists, teachers, engineers and so on. The reason is that most business users have gotten faster and newer machines and are now trying to sell their used Apple IIIs. In most cases, the Apple III is sold with the utilities diskettes only—all the manuals disappeared over the last few years. That's why I am being asked so many questions. Used Apple IIIs here sell for about $450 US (console & monitor). In some cases, there is also a hard disk: Profile, Corvus or Hall.

People are now using the Apple III for educational purposes, for studying and trying out everything they learned in school or college. Recently, 5 Apple IIIs were sold with a Corvus network. And all these people have had little experience with computers and need help. In this article I shall answer a question I was asked 3 times in just one month: how can I speed up my Apple III?

Let me ask you this question in another form: How can I speed up my computer ? The answer is very simple: in most cases computers can't be accelerated. Yes, they can by hardware modifications, but that isn't always cheap and demands a very good knowledge of hardware (and also software). Let's stay with our good old Apple III. Here is the answer: It's not possible. But let's put together what possibilities there are to speed up the EXECUTION of the programs you run on your Apple III.

1) Use the right application for your job. Suppose you need a database for your inventory. There are now two possibilities: take a program such as 3 EZ-pieces or take one like PFS-file (or better—OMNIS-3). The great difference is that all the data of the first (3 EZ-pieces) is kept in memory during execution. The second series of database programs (PFS, OMNIS, KEYSTROKE) read only in memory the data they need. So, use 3 EZ-pieces for small databases. Handling will be very fast. Use PFS for large databases. It will not be very fast, but you have no choice.

Depending on the total free memory on your computer, it may not be possible to handle large datafiles with programs such as 3 EZ-pieces. One thing more: in 3 EZ-pieces, every modification to a database record is kept in memory until you write the whole database to disk. In PFS, when you leave the record (press ENTER), every modification is immediately written to disk. Understand? When your little sister or your young son takes your power cord to play with, all your work may be lost.

You need a spreadsheet? You have these choices : VisiCalc, Advanced Visicalc, MultiPlan, 3 EZ-pieces. In my opinion the best is Advanced Visicalc. But it is very very slow. Load a large file and you can have a cup of tea before the file is loaded. For fast file access, use 3EZ-pieces. Forget MultiPlan. As you see, you can save time by choosing the right software.

2) Memory. Realize that a 512K Apple III doesn't run faster than a

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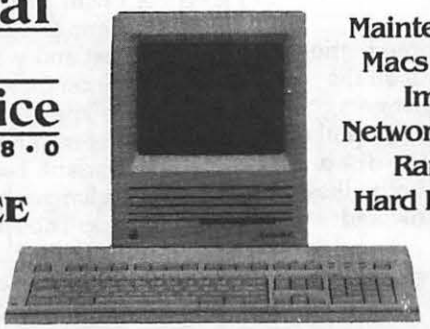
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256 k Apple III. But if you have a database in 3 EZ-pieces that doesn't fit in 256K memory, forget 3 EZ-pieces and use PFS. Everyone starts with a small database. It grows with the years and suddenly it doesn't fit into memory anymore. There is no solution unless you buy a memory upgrade. You can upgrade the Apple III to 512 k RAM. I would suggest you do it!

3) Hard Disks. A hard disk is faster than a floppy drive. The last profile hard drives are faster than the first made by Apple. I suggest a 10 MB Profile. *[Ed.—There are other hard disks available. See On Three's latest catalog.]*

4) RAM disks. It is possible to install a RAM disk. You can gain time by using it. Be sure, however, to save every file before shutting off the computer.

5) Set your prefix$. In most programs, it is possible to set a default prefix (prefix$). Because most pathnames are long, and many datafiles are deeply nested in subdirectories, use the ability to set the prefix$. This way you won't need to type the whole pathname. Typing a pathname of 30 characters is time-consuming.

6) Disk Fragmentation. Files stored on disk are broken up into pieces. The more disk accesses you do with different files, the more the files will be broken up and stored in different places on the disk surface. Disk drives take many times longer to move their read/write heads to the areas where these pieces are saved.

You can't prevent that. But after many hours of handling your databases, take a few minutes to make a copy of your data with the utilities diskette—not the diskcopy utility but the filecopy. In this case the file will now be copied as one long stream of data on the target disk and there will be no fragmentation.

7) Use macros to access files and to let the computer work for you. The most timesaving utility of all is the MACRO. Use one of the two well-known utilities for the Apple III: the Desktop MacroManager or Power Keys.

It is really a very good time saver. Here's an example: If you have to update two hundred records in your database with the same string or words, let the Desktop MacroManager do the job for you. With only one keystroke, you take the next record, tab to the right field, jump to the exact position and then write the desired string. Isn't that great ? Use these techniques. They are only limited by your own imagination!

Hendrick Van der Straeten is a member of WAP as well as the Apple III users of Belgium and The Netherlands. You can reach him by writing:

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Mechelsebaan 116,
2850 KEERBERGEN BELGIUM ;
tel.: 015 - 51 65 61.

KIDS needs the help of Washington Apple Pi

KIDS, Inc. is a charitable organization that fulfills dreams of gravely ill children. We frequently receive requests from children for Apple IIC Plus and Apple IIGS computers and accompanying software. If you have suggestions regarding where we can find donations of computers (new or used) and/or software, please let us know.

We currently are in need of software (graphics and drawing programs, word processing, math, spelling, flying, etc.) for the following children:

Timothy (age 15, lives in PA, has bone cancer) has an Apple IIGS and printer
Robin (age 10, lives in NY, has a brain tumor) has an Apple IIGS and printer
Joshua (age 6, lives in CO, has a malignant tumor on spinal cord) has an Apple IIC Plus
Joelle (age 14, lives in PA, has cystic fibrosis) has an Apple IIGS and printer
Kia (age 9, lives in MD, is quadriplegic with use of right hand and has Crohn's disease) has an Apple IIC Plus and printer

Each of these computers has a 3.5" drive. **Any suggestions or offers to help make some dreams come true, please call Elaine at 521-6554.**

Fulfilling dreams of gravely ill children

The Beagle Compiler

by Phil Shapiro

Applesoft BASIC is one of the most popular programming languages for the Apple II family of computers. It's easy to learn, flexible to use, and compatible with every Apple II computer ever sold. Applesoft is built into every Apple II computer since the antique Apple II+, so it's immediately accessible to everyone. Even the ancient, "original" Apple IIs, circa 1978, can run Applesoft BASIC programs (when installed with an Applesoft BASIC language board).

Although the acronym BASIC stands for "Beginner's All-Purpose Symbolic Instructional Code," Applesoft BASIC is used by more than a few professional programmers. And Applesoft is by far the most popular programming language for amateur Apple II programmers. You need only look at the mounds of public domain programs written in Applesoft to appreciate the great flexibility of the language.

But Applesoft does have one important limitation: sometimes it can be as slow as a snail with two broken legs. *[Ed.—we had a little trouble with this image, but it's summertime, and we are hot and cranky and just can't be bothered.]* The reason for Applesoft being slow is that it's an interpreted language. Each time you run an Applesoft program your Apple II has to translate each line of code into instructions that are intelligible to the CPU. In many programs this translation process does not slow the program down appreciably. After all, your Apple II can carry out hundreds of instructions in one second. But in other programs the translation of Applesoft lines into lower-level "machine language" code slows the program down to an unacceptable crawl.

"What to do?" you sigh impatiently. Never fear—Beagle Bros to the rescue. Beagle Bros is a company that built its reputation by selling extraordinarily useful software tools to Apple II programmers. (These days Beagle Bros has shifted their marketing emphasis to the sale of AppleWorks enhancements.) Back in 1986, Beagle Bros released their latest programming tool, the Beagle Compiler.

The Beagle Compiler is a program that translates your Applesoft program into low-level "machine code" before the program is run.

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Then, when you run your "compiled" program, the program zips along from anywhere between two to fifteen times faster than it did before. All of a sudden Applesoft BASIC is not only easy to learn and flexible to use: these days good old Applesoft is fast and powerful too.

The Beagle Compiler is not a panacea for all Applesoft woes. Some Applesoft programs are not speeded up much by being compiled. Programs that make heavy use of the random function (RND) or the trig functions (SIN, COS, and TAN) do not run at lightning speed. And some Applesoft programs are just not usable when running at a superfast speed. But your average Applesoft program that seems a little weary and fatigued in normal operation will benefit splendidly by being compiled. In the few seconds it takes for the Beagle Compiler to work its magic, your program will regain that youthful bounce in its step.

But your average Applesoft program that seems a little weary and fatigued in normal operation will benefit splendidly by being compiled. In the few seconds it takes for the Beagle Compiler to work its magic, your program will regain that youthful bounce in its step.

"So how do you go about using the Beagle Compiler?" Well, the best thing about this compiler is its ease of use. You don't need a PhD in computer science to use it. Even beginning programmers could learn how to use it. I should add that to get the most out of this compiler, you really ought to have a solid familiarity with Applesoft BASIC and the ProDOS operating system. You can use the compiler easily if you have simple programs to compile. But if your programs are long and/or complicated, you'll have to study up a bit to make use of the advanced features of the compiler.

The documentation that accompanies the Beagle Compiler is concise, informative, and complete. Used in conjunction with the demonstration programs on the disk itself, the documentation does an exemplary job of explaining what you need to do to use the compiler.

Basically, all you must do is: 1) Boot the Beagle Compiler disk, 2) Take the disk out of your disk drive, 3) Put your own ProDOS based Applesoft disk in the drive, and 4) Type RUN followed by the name of the program you want to run at compiled speed. Your disk drive will whir, the compiler will take about five to ten seconds to do its thing, and soon your program will be off and running at machine-language speed—easy enough for a second grader, come to think of it.

If you are a speed demon, the Beagle Compiler also allows you to compile your Applesoft programs to disk. The compiler can actually translate your program into pseudo machine-language code, and then save that code to disk. To do this, just type the command COMPILE, followed by the name of the program you want compiled, and the name you want the ensuing compiled program to be saved as. Once a program is compiled to disk, you can run it at the fast speed without even waiting the usual five to ten seconds for the compiler to translate your code. Pretty nifty, don't you think?

The Beagle Compiler opens up whole new programming possibilities for creative Applesoft aficionados. Gone are the nagging speed limits of old. Combined with the new Zip Chip speedy CPUs, and the fast CPUs of the Apple IIGS and IIc+, Applesoft BASIC is sure to enjoy a resurgence among amateurs and professionals alike. When Bill Atkinson first introduced HyperCard for the Macintosh, he likened the flexibility and ease of use of HyperCard to Applesoft BASIC. Like HyperCard, Applesoft BASIC is a wonderful "erector set": simple to use, fun to play with, practical to build upon. The Beagle Compiler runs on all Apple IIs from the Apple II+ to the Apple IIc+. In the great Beagle Bros tradition, the disk is not copy-protected. Please note that the disk is not compatible with any of the Laser series of computers.

The Beagle Compiler sells for about $46, mail order. A big thanks is owed to Alan Bird, the inspired creator of the Beagle Compiler program.

[The author, an educational software developer, used the Beagle Compiler in constructing the JoyReader Shareware disk and the Large-Text JoyReader disk. He has also contributed a special sample run-time program of Large-Test JoyReader called "WAP Welcome," which is the Apple IIGS demo program running at the PI office.]

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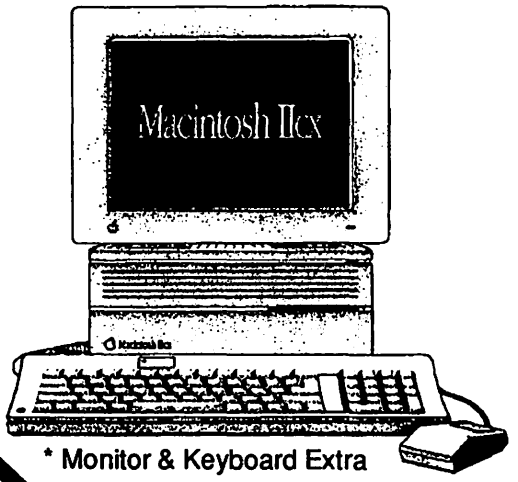

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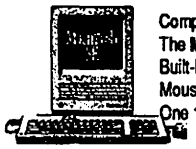

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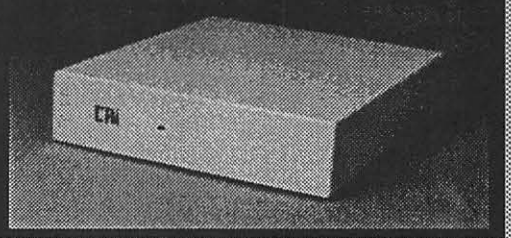

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National Collegiate Software Clearinghouse

by Joseph A. Hasson

The National Collegiate Software Clearinghouse Association was founded in 1983 for the purpose of distributing software devoted to subjects in the social sciences and liberal arts. The mission of the NCSC "is to distribute and encourage development of good, low-cost microcomputer software for the humanities and social sciences. We aim to put the best research and teaching tools we can find into the hands of faculty and students throughout North America and the world—at prices every departmental budget can afford." The software, available through the NCSC, therefore, falls into the two broad categories noted: (1) that useful for research and (2) that employed in computer-assisted instruction. On January 1, 1989, NCSC was integrated into the Duke University Press.

A recent catalog of the NCSC listed 250 MS-DOS products and three Apple II software libraries. It plans to produce a series of programs, based on the Macintosh, in the near future, including "HyperCard stacks, data sets and programs that take advantage of the Mac's unique graphics and user interface." Most software handled by NCSC originates with University faculty and is of such a specialized nature that a wide commercial market does not exist for it. The NCSC, therefore, fulfills a valuable function and provides an outlet for programs of interest to a narrow, but important, group of specialists. Many products distributed, useful for instruction, are aimed at the introductory college course level.

Apple II software from NSCS falls into three broad groupings: (1) social sciences; (ii) humanities; and (iii) statistics. The Association's catalog indicates the audience at which the programs are aimed: (HS/FR) for high school students and college freshmen; (UG) for college undergraduate levels; and (SR/Gr) for college seniors or graduate students.

Details of programs, placed into several other classifications, can be found in the catalog which can be obtained from the National Collegiate Software Clearinghouse

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(2) Foreign Languages (Spanish, French, German, Italian, Ancient Greek)
(3) Philosophy and Religion (including Bible and Logic)

Several software packages deal with Statistics. This term covers both statistics in the form of data and statistical techniques for testing hypotheses and the drawing of inferences. In the latter grouping, one program deals with descriptive statistics, continuous and discrete frequencies with histograms, correlation and other measures of association, multiple regression, factor analysis and analysis of variance, non-parametric tests and other more sophisticated statistical techniques.

Anyone who has written sound, useful software for which he (she) wishes widespread circulation throughout the United States and the world should write to the attention of Paul Baerman, Director, NCSC, at the above address to have the work considered. One can also subscribe to the Social Science Computer Review by writing to the Duke University Press. The Review is "a focal point for a network of hundreds of college social science units in statistics, simulation, and other applications of microcomputing." Subscription rates are $28 for individual and $56 for library subscribers.

AW 3.0 Compatibility?

by Gary Hayman

There is some compatibility between AppleWorks 2.1 and 3.0. All 2.1 word processor files can be read by AW 3.0, but AW 2.1 (or earlier) can read a word processor file which was originated by AW 3.0 if, and only if, none of the new special commands have been used in the document. If you have used, for example, TAB or some of the new CONTROL-X codes, AW 2.1 will not be able to read the file.

This means that if you want to give someone an AWP file that you have prepared using AW 3.0, there is a high probability that he/she will not be able to read it if they are using AW 2.1 (or earlier).

Don't think that all you have to do is to go back to the AW 3.0 document and DELETE the new codes. I have found that once you put the code in, AW 2.1 will not be able to read the file even if you later took it out with AW 3.0. I imagine that the header to the file changes and never changes back.

Repercussions

Suppose you prepare an AWP file using AW 3.0 that contains instructions to a neat program (of interest to AppleWorks users only) that you are going to UPLOAD to the TCS. You want to bundle the AWP file and the program file using Shrink.It—and do so. If you have used any of the new codes and the person who DOWNLOADS the .SHK (shrunk) file only has AW 2.1, then it will then be impossible for him or her to read the file.

Solutions:

A) Write all your AWP files using AppleWorks 2.1 or earlier. Bad solution.

B) Go ahead, use AW 3.0, but print your file to disk as an ACSII text file. The new AppleWorks allows you to print the file to disk in a format that contains no carriage returns at the end of each line, only at the end of paragraphs. After selecting Open Apple—P, choosing "Beginning", selecting "A text (ASCII) file on disk", you will find a NEW menu. In this menu you will have three choices:

"1) Standard text format with Tabs"—(you do not want this because if someone with AW 2.1 will be reading the file they will not be able to see "real" tabs).

"2) Spaces substituted for tab stops"—(THIS IS YOUR CHOICE as it will allow the receiver to load the text file into AW 2.1 in the format that AW can use immediately [carriage returns only at paragraph ends]).

"3) Returns after each line"—(not necessarily your choice because the receiver may be forced to remove many carriage returns in order to work with the document).

Offline Preparation of a File for TCS Message or Library

You may want to prepare a WP file using AW 3.0 for intended use of a message or a library file on the TCS. If this be the case you can select choice #3 above, since the TCS receives your file line by line and wants a carriage return at the end of each line. This is the technique that I use—there may be others, but this works for me. I set the following Options at the top of my document: TM = 0, BM = 0, LM = 0, RM = .3, PL = .5 (this is to minimize possible carriage returns at the end of a document if the printed lines default was set at 66). Then I print to disk an ACSII text file using choice #3 above.

I have already told the TCS that I want a prompt character of "^"—that is in my user profile. I tell my communications software (in this case, MouseTalk) that I want to send by line and have a character delay of 5 milliseconds, a line delay of 5/10 seconds, and a prompt character of "^". I also tell it to fix blank lines, which adds an extra space on all blank lines so that the TCS doesn't think I am finished with my message when it sees a blank line.

Now when I am ready to send a message the first thing I do after the Subject/To etc. requirements is to type ".U" (that's a dot and a U). This tells the TCS to turn off Word Wrap and to turn on your Prompt. I then send the message "from a file" (this will not use any of the Protocols) and will be ASCII text transmission. When the message is completed I type ".U" again (I can't tell you how many times I forgot to do that). I type one more carriage return and I will be in the editor where I can type an "L" and list my message or file before I save it with an "S."

Remember, this is only one technique to accomplish this action. But since it works for me you may want to try it too.

Windows

WINDOWS is a highly useful program available for downloading on the TCS (Apple II Utilities). It can be used to view AWP files and text files on your disks. It also views HR pictures and launches Basic programs from a menu. It has a slight problem with AW 3.0 produced AWP files in that it will garble the first line of the file. Everything else will be fine. Here's hoping that its author will make available a revised edition.

ProDOS 16— To The Rescue!!

by Richard FitzHugh

The ProDOS 16 disk operating system on the IIgs is a powerful tool for manipulating files. It can be called from ORCA/Pascal and enables one to do much more than is provided by the Pascal procedures for manipulating files: OPEN, CLOSE, RESET, REWRITE, READ and WRITE.

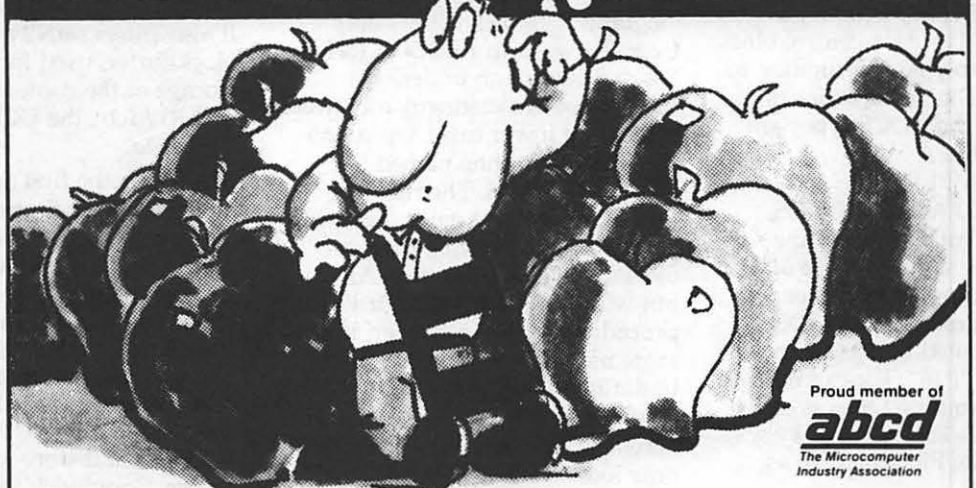
The ORCA/Pascal manual does not give much information on how to do this, and the Apple IIGS ProDOS 16 Reference (abbreviated APR below), published by Addison-Wesley, is concerned mainly with assembly language. I will describe a program I wrote that was very useful.

I have recently had trouble with a word processor. Occasionally, when I save a document to disk, it will overwrite a disk block in a different file than the one I am trying to save. The next time I open the affected file, I see a section filled with garbage somewhere in the file. This is annoying, but I can correct it by retyping that section in from a recent printout. This trouble probably results from the volume bit map block, which specifies what blocks are already in use, having gotten somehow corrupted. The best thing to do then is to copy all files to a new disk and re-initialize the old disk before using it again.

Then, disaster struck! I had a folder containing 24 files. When I tried to open the folder from the word processor, it was empty — all my files appeared to have vanished. When I tried to open the same folder from the Finder, I got the depressing message: "Volume may have been damaged."

The Sector Editor utility in the program Copy II Plus (Central Point Software, Inc.) provides a way to examine individual blocks on a disk. Appendix A in APR describes the format of directory, subdirectory, key, index, and data blocks. The volume directory starts in block 2; read that block. At the right of the screen appear the names of the files and subdirectories that it contains. The 2 bytes appearing just beneath the first two letters of each name give the number, in hexadecimal notation (low byte first) of the key block of that item. A subdirectory block similarly shows the names of the files it contains and their key block numbers. If the file is more than one block long, the key block is an index block that specifies the numbers (addresses) of the file's other blocks on the disk (or, for a really large file, the locations of still other index blocks). An index block has a peculiar format. The low

APPLE HEADQUARTERS



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bytes of its addresses are given in order at the beginning of the block, the high bytes 128 bytes later. Familiarity with the format of directory and index blocks makes it easier to track down the blocks to be copied with the program described below. This program can also display disk blocks, if you don't have Copy II Plus. However, the latter program has other features which make it more useful for this purpose, including a moveable cursor and the ability to scan for words on the disk.

On my sick disk, I found that the first subdirectory block for the affected folder had been overwritten with garbage, thus destroying the information needed for retrieving its files. By using the SCAN function in the Sector Editor of Copy II Plus to search for words I knew to exist in the files (from my printouts), I was able to find the disk blocks where they were located. After gazing wistfully at my inaccessible files for a while, I decide to see if I could rescue them.

The ORCA/Pascal program RESCUE.PAS enabled me to do this (see listing). It copies a succession of individual blocks from a source disk and writes them to a new file on a destination disk.

Each ProDOS routine has a parameter block, or data control block (DCB), used to pass information to and from it. The declarations of the routines and their DCB types are given in the file / PASCAL.SAMPLES/ TOOL.INTERFACE/PRODOS. Since some ProDOS 16 routine names are the same as those of Pascal procedures (Open, Read, Write), the names of all ProDOS procedures called by Pascal are preceded by "P16". For examples, the ProDOS routine Open is called from Pascal as P16Open. It is declared in the PRODOS file as:

```
procedure P16Open (var parms:
openDCB); prodos ($10);
```

Its DCB type is declared as:

```
openDCB = record
          refNum: integer;
    pathName: pathPtr;
    reserved: longint;    (* set this
value to $00000000 *)
    end;
```

Unfortunately, some of the information in file PRODOS is wrong! When you try to compile a Pascal program using the above name "reserved", or the name P16Get_Dev_Number (also given there), you get the error message "Identifier Not Declared". Apparently, when the program is compiled, it doesn't use the information in file PRODOS. Instead it looks in the file /ORCA.PASCAL/LIBRARIES/ORCAPASCALDEFS/ PRODOS.INT, a binary file which can't be read with the ORCA Editor. To see what it contains, use Copy II Plus again. In block 02C1 (hexadecimal notation) of my disk, starting at byte 1C3, appear, at the right of the screen, the words: OPENDCB ....REFNUM ..INTEGER ..PATHNAME ..PATHPTR ..IOBUFFER ..LONGINT. So "reserved" should be IOBUFFER. Similarly, byte 1B8 in block 2C5 shows that "P16Get_Dev_Number" should be "P16GET_DEV_NUM".

These correct names agree with what is given in APR. On p. 137, the third name in the parameter block for OPEN appears as "io_buffer", which differs only from the word in PRODOS.INT by the presence of an underline (Pascal doesn't distinguish between upper and lower case). On p. 155 appears the routine named GET_DEV_NUM. The rule for finding the correct names seems to be this. For names in parameter blocks, use the name from APR, but without underlines. For Pascal procedure names, however, use the same names as in APR, but with underlines, and preceded by "P16". Don't despair!

Having disposed of all that, we can now look at what RESCUE.PAS does. To use it, first enter the name of the source disk (disk1). The device name is entered into the GCB for P16_Dev_Num as a pointer to the string d1name. P16Get_DEv_Num is then called, and the corresponding device number (GNdcb.devNum) is returned and stored as BLdcb.devNum. BLdcb.dataBuffer is set the pointer to blockBuffer, the 512-byte array where the disk block is temporarily stored. These parameters are needed later by P16ReadBlock.

You can search the disk and display blocks on the screen. Just follow the directions. The display format is similar to that of Copy II Plus, and shows the bytes on the left of the screen in hexadecimal notation, on the right as ASCII characters.

Enter the ProDOS pathname for the new file in the destination disk (disk 2), and its file type as a hexadecimal number, using upper case letters. The file type is 4 for a text file, 6 for a binary file. Each program, whether word processor, data base, or spreadsheet, uses its own file type, which can be discovered by displaying a catalog of such a file with the CAT command from Basic.System or the ORCA Shell. See also APR p. 278 for file types and numbers.

Next, the procedure CreateFile is called. It first sets values in the parameter block CRdcb, and then calls P16Create to create the new file on disk 2. Then OpenFile is called, which sets values in the DCB for P16Open. This routine opens that file for writing and obtains its reference number refN2, needed later when the file is closed. It also enters refN2 and a pointer to blockBuffer, used for temporary storage of the contents of the block, into RWdcb , the DCB for P16Write.

Next enter the first and last disk block numbers (in hexadecimal, using upper case) of a sequence of blocks on disk 1 which you want to copy to the new file. Do not enter block numbers for index blocks, since ProDOS creates a new index block. For each block, CopyBlock is called. It calls LoadBlock, which in turn calls P16Read_Block to read the block and store it in blockBuffer. CopyBlock then calls P16Write to rewrite from blockBuffer to the end of the new file on disk 2. If not all the blocks occur in a consecutive sequence on disk 1, more block sequences can be entered. Finally, the new file is closed with CloseFile, which calls P16Close after giving it the file's reference number.

Enter the program using either the

text environment editor or the desktop editor (more convenient) and save it as RESCUE.PAS. Then type the shell command RUN RESCUE.PAS to compile and run the program. This can be done either from the text environment or from a shell file in the desktop environment. An EXE type file called RESCUE is also created. To rerun the program without recompiling it, just type RESCUE. (You can also compile and run the program from the desktop environment by using the command "Compile to Memory" in the Run pulldown menu, but the RESCUE file it creates bombs; I think this is caused by a bug in ORCA/Pascal.)

To make an application file RESCUE.S16 that can be executed from the Finder, in ORCA/Pascal type the shell commands:

```
COPY RESCUE RESCUE.S16
FILETYPE RESCUE.S16 S16
```

Using this program, I was able to rescue my lost files. Since the program does not have the information from the directory block regarding the exact number of bytes in a file, it reads only whole blocks. There will therefore probably be spurious characters (ASCII 0, inverse F) at the end of your file. Just re-enter the program (word processor or other) that saved the file originally and delete these characters.

This program works with disks written with both ProDOS 8 and ProDOS 16, since the file formats for both are identical. It works best with two disk drives. If you have only one, write the new files to a RAMdisk and later copy them to a 3.5 disk.

I hope the reader never has to face the same problem with a corrupted disk that I did, but programmers wanting to make use of ProDOS 16 for other purposes may find the program a useful guide. There are other routines in ProDOS 16 which do things that cannot be done with Pascal built-in procedures and are worth exploring. For instance, one can retrieve or reset prefixes or the file information which appears with the CATALOG command.

LISTING:

```
{$keep 'rescue'}
program rescue(input,output);
{
    /P2/RESCUE.PAS
Copies disk blocks from a 3.5 disk and rewrites them
into a text file
on another disk.  Used to retrieve text files from a
corrupted disk.
To find block numbers of original file before copy-
ing, displays blocks.
This program may be of interest to ORCA/Pascal
programmers as an example
of how to use ProDOS calls.  Details are given in
the book "Apple IIGS
ProDOS 16 Reference".
}
uses Common, ProDOS;

const
  hexes = '0123456789ABCDEF';

type
  str = string;
  str4 = string[4];

var
  refN2,fType: integer;
  ans: char;
  dlname,plname,p2name: str;
  fTypeStr: string[2];
  block1,block2: string[3];
  blockBuffer: array[0..511] of byte;
  half: array[0..1] of string[6];
  CRdcb: createDCB;
  OPdcb: openDCB;
  GDNdcb: getDevNumDCB;
  BLdcb: blockDCB;
  RWdcb: readWriteDCB;
  CLdcb: closeDCB;

function HexToDec(hexin:str):integer;
var
  i,intout: integer;
begin
  intout:=0;
  for i:=1 to length(hexin) do
intout:=16*intout+pos(hexin[i],hexes)-1;
  HexToDec:=intout
end;

procedure DecToHex(decin:integer; var hexout:str4);
var hexstr: str4;
begin
  hexstr:='';
a repeat
    hexstr:=concat(copy(hexes,(decin mod
-16)+1,1),hexstr);
    decin:=decin div 16
  until decin=0;
  hexout:=hexstr
end;

function noAns:boolean;
begin noAns:=(ans='N') or (ans='n') end;

procedure OpenFile;
begin
  with OPdcb do { Note: "reserved" in file PRODOS i
wrong; use "ioBuffer" }
    begin pathName:=@p2name; ioBuffer:=0 end;
    P16Open(OPdcb); refN2:=OPdcb.refNum;
  with RWdcb do
    begin refNum:=refN2; dataBuffer:=@blockBuffer
end
end;

procedure CreateFile;
begin
  with CRdcb do
  begin
    pathName:=@p2name;
    access:=$E3;
    fileType:=fType;
    auxType:=0;
    storageType:=1;
    createDate:=0;
    createTime:=0
  end;
  P16Create(CRdcb)
end;

procedure CloseFile(refN:integer);
```

```
begin CLdcb.refNum:=refN; P16Close(CLdcb) end;
procedure LoadBlock(blockNo:integer);
begin
  BLdcb.blockNum:=blockNo;
  P16Read_Block(BLdcb)
end;

procedure CopyBlock(blockNo:integer);
var hexBlock: str4;
begin
  LoadBlock(blockNo);
  RWdcb.requestCount:=512;
  P16Write(RWdcb);
  DecToHex(blockNo,hexBlock);
  writeln('Block ',hexBlock,':
',RWdcb.transfercount:0,
           ' bytes transferred')
end;

procedure DisplayHalfBlock(bn,k:integer);
{ Displays first (k=0) or second (k=1) half block
of disk block # bn }
var
  i,i1,i2,j,j1,j2,j3,bb: integer;
  hexno: str4;
  hexno1: string[5];
begin
  i1:=15*k; i2:=i1+16;
  DecToHex(bn,hexno); writeln; writeln;
  writeln('Block number $',hexno,', ',half[k],'
half');
  for i:=i1 to i2 do
  begin
    DecToHex(16*i,hexno);
hexno1:=concat('00',hexno);
    write(copy(hexno1,length(hexno1)-2,3),'- ');
    j1:=16*i; j2:=j1+15; j3:=j1+8;
    for j:=j1 to j2 do
      begin
        if j=j3 then write('- ');
        DecToHex(blockBuffer[j],hexno);
hexno1:=concat('0',hexno);
        write(copy(hexno1,length(hexno1)-1,2),' ')
      end;
    write('  ');
    for j:=j1 to j2 do
      begin
        bb:=blockBuffer[j] mod 128;
        if (bb>31) and (bb<127)
          then write(chr(bb)) else write('.')
      end;
    writeln
  end;
  writeln; writeln('Type SPACE to exchange block
halves,');
  writeln(' - to show next earlier block, + to show
next later block,');
  writeln(' E to exit display, followed by RETURN')
end;

procedure DisplayOneBlock;
var
  bn,k: integer;
  bb: byte;
  block: string[3];
begin
  write('Type block number in hexadecimal: ');
readln(block);
  bn:=HexToDec(block); k:=0;
  repeat
    LoadBlock(bn); DisplayHalfBlock(bn,k);
    readln(ans);
    if (ans=' ') then k:=1-k else
    if (ans='-') or (ans='_') then begin bn:=bn-1;
k:=0 end else
    if (ans='=') or (ans='+') then begin bn:=bn+1;
k:=0 end
    until (ans='e') or (ans='E')
end;

procedure DisplayBlocks;
begin
  repeat
    DisplayOneBlock;
    write('Search elsewhere on disk ',d1name,' for
blocks? (Y/N) ');
    readln(ans)
  until noAns;
end;

procedure RescueBlocks;
var n,n1,n2: integer;
begin
  repeat
    repeat
      writeln('Type complete pathname for new desti-
nation file');
      write('Start but do not end with a "/": ');
      readln(p2name)
    until (p2name[1]='/') and
(p2name[length(p2Name)]<>'/');
    write('Type file type in hexadecimal, ');
    write('4 for TXT, 6 for BIN, or other: ');
readln(fTypeStr);
    fType:=HexToDec(fTypeStr);
    CreateFile; OpenFile;

    writeln('Type first and last disk block for
each',
            ' successive sequence of blocks to
rescue.');
    repeat
      writeln('Type first disk block in hexadeci-
mal');
      write('   (or just RETURN if no more wanted):
');
      readln(block1);
      if block1<>'' then
      begin
        write('Type second disk block in hexadeci-
mal: '); readln(block2);
        n1:=HexToDec(block1); n2:=HexToDec(block2);
        for n:=n1 to n2 do CopyBlock(n)
      end
    until block1='';
    CloseFile(refN2);
    write('Rescue another file? '); readln(ans)
  until noans
end;

begin {main}
repeat
  half[0]:='first'; half[1]:='second';
  write('Type source disk name: '); readln(d1name);
  if d1name[1]<>'/' then d1name:=concat('/',d1name);
  GDNdcb.devName:=@d1name;
    { Note: "P16Get_Dev_Number" in file PRODOS is
wrong;
            use "P16Get_Dev_Num" }
  P16Get_Dev_Num(GDNdcb);
BLdcb.devNum:=GDNdcb.devNum;
  BLdcb.dataBuffer:=@blockBuffer;
  write('Display blocks on screen? (Y/N) ');
readln(ans);
  if not noAns then DisplayBlocks;
  write('Rescue blocks? (Y/N) '); readln(ans);
  if not noAns then RescueBlocks;
  write('Another source disk? '); readln(ans)
until noAns
end. {main}
```

The Cutting Edge

by Lee Raesly

Here it is late summer and AppleWorks 3.0 has just been released. Have you ordered yours yet? It is definitely a "Must Have" item, with many substantial improvements, just one of which could be worth the costs. You can order your AppleWorks 3.0 update direct from Claris for $79. Call them, and they will send you a form to order. Another way to get your AppleWorks 3.0 update is through A2-Central (formerly Open-Apple). If you subscribe to A2-Central they have a special arrangement with Claris: you can send a check ($99) with the A2-Central form to get the 3.0 update if you can't find your original disk. That alone would make it worth subscribing to A2-Central.

Their address is: A2-Central, P.O. Box 11250, Overland Park, Kansas 66207

The subscription cost is $28 per year, and a full disk version is $84 per year. Besides containing the full text of each issue, the disk version contains many extras and Public Domain or Shareware programs and is well worth the price. With the full disk version, you also get the paper copy as well. This publication has been a treasure trove (and clearinghouse) of Apple II information since its start. If you only subscribe to one publication, this should be it.

While I am on the subject of publications, there is another worth subscribing to: AppleWorks Forum, the monthly publication of NAUG (National AppleWorks User Group). The opposite of A2-Central in printing style (it uses compressed type to cram a lot of information into each issue), AppleWorks Forum spaces things out to make the issue full. Usually 36 pages, it has some good columns, and other information about AppleWorks, some of it fluff, and some real gems. Overall, I consider this the second Apple publication to order—I should say third, for surely the Pi Journal is first.

NAUG's address is: National AppleWorks User Group, P. O. Box 87453, Canton, Michigan 48187. Their subscription price is $27/year.

Beagle Buddies

All of the TimeOut AppleWorks utilities from Beagle Brothers, Inc. need to be updated for AppleWorks 3.0. The Pi now has a network of Beagle Buddies in place and one is probably near you. To get your TimeOut updates, check the listing in the HotLine for the name and telephone number of the nearest Beagle Buddy. They are available for technical help, as well as upgrades to the TimeOut programs.

Updates (major improvements to a program) must still be ordered from Beagle Brothers, Inc. directly. The procedure is to call the Beagle Buddy (please observe listed hours and days) and arrange to come to their location (usually in their home). Bring your TimeOut ORIGINAL disk, and a check. The fee is $2 per disk, and is payable to the PI. You can also get your TimeOut update by mail from Beagle Brothers, Inc. Their fee is $10 per disk. Quite reasonable, really, but your local PI Beagle Buddy is much cheaper, and the money goes to the PI.

RepairWorks

Everyone that uses any program (including our beloved AppleWorks) sooner or later comes up against the problem of files that can't be loaded, disks that can't be accessed, and other vagaries of using a computer. It is inevitable.

Help is on the way. RepairWorks by Gary R. Morrison is sold by Quality Computers. Its cost is $49.95 and it can be ordered from: Quality Computers, 15102 Charlevoix Street, Grosse Pointe, Michigan 48230.

Before we look at RepairWorks, let's make sure that you have done all the things you can to find a previous backup. Have you checked all your disks, to see if one might be left from yesterday? How about that stack over there at the edge of the desk? O.K., O.K. you made changes and this is the file you saved just before you quit yesterday. Hmmmm. You made changes to the file? That means that there was a previous copy on disk. Yes, but when I saved it yesterday, the old one is gone—maybe not. Did you save any other files after you saved this? No? Well maybe the old file is still there. Let's check and see.

For this I suggest Copy II +. You can usually get a copy at Crown Books (discounted) so if you don't have a copy, run out now and buy one. A great little utility!

To understand what we are going to try to do here, let's look at how AppleWorks saves files. First, AppleWorks looks for a file of the name you gave it, and if it finds that file, renames it AppleWorks TEMP.000000 (why all the zeros, I don't know). Then it saves the file under the name you gave it. Then it marks AppleWorksTEMP.00000 as deleted. That is very important ProDOS function. It does *not* delete the file—it marks it as deleted. To delete a file, ProDOS places a null ($00) in front of the file name. That signifies that it is deleted, and its space can be reused. So if you have not saved any other files since you did that AppleWorks save, it should be there.

Let's look for it! Boot up Copy II+, and go to undelete files (it has just such an option). Go to the appropriate subdirectory on your disk, and look. If it is there, just undelete it. That's all there is to it! But another file had been saved later, and the AppleWorksTEMP.00000 was overwritten? O.K., NOW let's get out RepairWorks.

Let's look at some things RepairWorks will do. I have version 1.0, and it works with Word Processor

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or Data Base files. Version 2.0 is supposed to add spreadsheet files. First, it will repair files (not disks, with a sorta exception). It asks you if you wish to create a new AppleWorks Word Processor file, or a text file. Generally, it is best to do each, so that you have options.

As you know, if you have a partially damaged file, AppleWorks Word Processor won't load a partial file, but rather aborts and loads none of it. Since RepairWorks is actually loading a block at a time, and then interpreting that information, it does not stop at a bad block, but rather informs you of this, and then continues. This leads to the "sorta exception." Since it is loading a block at a time, it will recover most of a file that cannot be copied or loaded. Thus, you can create a new file from a bad disk.

Please note the difference. It does not, nor is it intended to, recover THAT file from a disk. It creates a new file with as much of the data as it can recover—a neat addition to other techniques of disk and file recovery. The interface is just like AppleWorks, so you will feel right at home. It will not recover print commands within the file, but will get all the rest. A nice job. If you have told it to make a new text file for you, when finished just load into AppleWorks as a text file, and you have your new AppleWorks Word Processor file. As simple as that!

Now you will have to go back and add some of your formatting information. But the text has all been recovered. Generally, RepairWorks will take your Word Processor formatting information intact, unless that particular data was in the damaged area of the file. Then it is missing. So it is necessary to carefully read your document, to see if ALL of your formatting information is there.

If you have told it to create a text file, it tells you what the formatting information was; i.e., if you had a top margin command for 1 inch, it would present it to you like this: [—Top Margin 1.0] You would need to go into the document and delete this (why print it out?) and then enter the actual OA-O TM command. You would need to re-enter all of the formatting commands, as well as delete these reminders. When it creates the new Word Processor file, it adds the suffix ".RepairWorks" to the filename you select, leaving the original file intact.

Suppose you were working with MYFILE, it would create a new file called: MYFILE.RepairWorks for you. When you create a text file, it adds .TXT to the filename you create, thus MYFILE becomes MYFILE.TXT. This makes identification easy. When working with database files, it only creates a text file, so that all printer, screen formatting, and other related information is missing. But your data is there. If RepairWorks recognizes that data is missing, it places **'s at that location, then inserts: [=-=-=-=- DAMAGE CONTROL REPORT DATA MISSING -=-=-=-=]

This makes locating the the place to enter the missing data very easy. You would create a new database from a text file, and enter the missing data ".... from memory or from an old printed copy." Riiigght! After repairing the file, and creating the new text file, RepairWorks displays the number of records repaired, the number of categories (fields) in each record, and the full pathname of the new text file.

You can now print this information plus the category labels. If the first part of the file was damaged and RepairWorks is not able to tell how many categories you had, it assumes the AppleWorks maximum of 30. You would need to create a new batabase with 30 records, no matter how many you really had. You would then go into AppleWorks database and delete the categories you don't need. Sometimes the new AppleWorks database file has misaligned records. All of the sudden, the street address is where the telephone number was! Not to despair, a simple answer is available! Load it into a AppleWorks Word Processor file, and go down to the section with the misalignment, and either add or delete carriage returns to bring the number of fields into correct count with what it should be.

Thus, if you had a file with 7 categories, you would find that it is either missing a category, or has an extra carriage return entered. Since this is loaded from a text file, each category is marked by a carriage return at the end of the category. Thus, the original file might look like this:

Leon<cr>
Raesly<cr>
6201 Greenbelt Road, #M-16<cr>
College Park<cr>
MD<cr> 20740<cr>
220-0717<cr>

While a damaged file would look like either of these:

Leon<cr>
Raesly<cr>
6201 Greenbelt Road, #M-16<cr>
College Park<cr>
20740<cr>
220-0717<cr>

or

Leon<cr>
Raesly<cr>
6201 Greenbelt Road, #M-16<cr>
<cr>
College Park<cr>
MD<cr> 20740
<cr> 220-0717<cr>

Notice that the original file had 7 fields (categories) while the first damaged one has only 6, and the second one has 8 (the extra field has no data in it, just an extra carriage return in the middle of the record.)

The correction is simple in either case. For the first one, enter the missing data, and a carriage return (if you do not know what the missing data is, just enter the carriage return.) In the second example, simply delete the extra carriage return. Then (for both examples) print it to disk as an ASCII text file, and reload it into your AppleWorks database.

Sometimes it will be necessary to repeat this process several times until you get all the errors corrected. There is a special case where you can use ReportWorks. I had a standard text file, downloaded from a BBS locally, which has since closed down. It is a list of books about the Powtomack River (no, that is not a misspelling, but the original Indian version). I captured it as an ordinary ASCII text file. But that disk had a bad block right in the middle of my file. So AppleWorks would reject it. I tried other efforts to copy, all to no avail.

(Continued on Page 74)

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Fall TeleCom—Spectacular

by David Ottalini
Apple III SIG Co-Chairman

Or...everything you ever wanted to know about telecommunications! That's what you'll be able to discover this month with the introduction of FOUR new PD disks. Our latest offerings, disks 1063-1067, provide not only extensive tutorials about how to telecompute, but also a number of programs to help you do it! Please see our disketeria article for more details, but needless to say, I haven't been this excited about a series of PD offerings in a long time.

The main tutorial (on disk 1064) is by a number of long-time Apple III community folks: Dr. Al Bloom, Harry Baya and John Lomartire, all long-distance III SIG members as well. In addition, you will find a disk full of answers (1063) to many of your Apple III telecommunications questions. Disk 1065 lists many BBS's around the county you can try.

Actual telecommunication programs introduced into the PD this month include XMODEM III by Gary Kato (manual transcribed by our own Jim Suthard), the Interpreter version of Access III and Kermit III as well as a number of Basic programs and a Pascal telecom program. Added to what we already have in the library, TerminALL and the telecom program included with Daryl Anderson's PowerKeys DM+, you now have an excellent selection of programs, and an inexpensive way to learn about and get up to speed with a modem and your III.

The Cutting Edge (Cont'd from page 72)

But ReportWorks takes care of it—it thinks that it is an AppleWorks word processor file with a damaged header. It copies all except a portion of the bad block to a new file, and there it was. Good as new, missing only a few lines. ReportWorks is really quite versatile.

The one area it won't work with is the Directory of a disk. It is not intended for disk recovery. For this you will need programs like Bag-O-Tricks II (and FixCat), Mr. FixIt, and a disk Zap program and LOTS OF TIME! More on these next time around.

In my next article, I expect to cover how to recover disk from Peanut Butter & Jelly immersion, 3.5" disks turned into Frisbees by heat (car heater outlets do a good job here), and other disk recovery techniques. If you are interested in these, please drop me a line. You can also reach me by leaving me a message on the TCS (best place would probably be TCS COMMENTS & SUGGs, or Apple II Telecommunications on Conference 2). On GEnie my "handle" is LEE.RAESLY (wonder how I ever came up with that!); or call me at 220-0717 (weekdays 9-5) and I would be delighted to chat with you.

Take Care, Now! Lee...

[The author is a regular columnist for several magazines and the PI Journal and an elected Director-At-Large of the PI Board of Directors. He is the TCSO [TeleCommunications System Operator) of the PI, as well the Director of a Community Mental Health Center where they do all their administrative work with AppleWorks on Apple IIcs and IIgs computers.

And if you think he likes exclamation points, you should have seen this in the original...]

Bob Consorti Moves

On Three's Bob Consorti has moved to Chicago with his wife, Cathy, who will attend medical school at Loyola University there. This shouldn't have an effect on On Three (at least in the short term) since they continue to take orders through their Kirkland, Washington address.

And while the Consortis may have trouble adapting to the Illinois winters (California really spoils you), it is good news for our sister group, TAU, The Third Apple Users Group. Having the last "major" developer for the III that close at hand should prove to be very positive for them and the entire Apple III community.

Titan III+IIe Emulation Mode

Having recently started my own small home-publishing business, I purchased Timeworks' Publish It!2, with plans to use it under the Titan III+IIe emulation mode. The program comes with ProDOS version 1.7, however and causes my III to "burp" on bootup under Titan emulation.

The solution was to replace the 1.7 ProDOS Kernel with an older 1.1.1 Kernel from my Copy II+ disk. After having done that, the program booted and works as advertised (and I'm using a joystick, not a mouse). There is still one problem, however. I can't get it to print! My little Seikosha SP-1000AS is a serial Epson look-alike, but despite trying every setting in the print menu, something is still not right.

I'll keep working on it, but suspect it may very well have to do with the older ProDOS kernel (although other programs print without problem under 1.1.1; but then, they were written to work with that ProDOS version). I'm looking at either a new printer or a new GS to really solve the problem, but any suggestions in this regard would be appreciated.

In any case, this experience of mine points is that the Titan cards will really only work with the 1.1.1 version of ProDOS and no later versions. That being the case, if there is a piece of Apple II software

you are considering for III+IIe emulation mode, you should make sure it will run properly. As I did above, you can exchange the ProDOS .Kernel file for the 1.1.1 version, but you may still run into trouble if the program was written to work with later, more up-to-date versions of the II's operating system.

Apple III Information

We've had a number of new Apple III users coming into the SIG of late, most of whom know little or nothing about their machines. As a result, I thought it might not be a bad time to update our Apple III information for our new—and perhaps not so new—users. We'll present half this month, and finish things in the October Trail column:

The Apple III (code name: SARA) was the first computer ever designed from the ground up by Apple Computer. It was designed to include many of the "extras" one had to buy separately for the Apple II: an 80 column card, a serial card, larger memory, etc. In addition, it came with the most advanced operating system (OS) for small computers of its day: SOS, or the Sophisticated Operating System. It is still an advanced OS; so advanced, in fact that Apple based its ProDOS Operating System for the Apple IIe, IIc and gs on SOS. The Macintosh's HFS, or Hierarchical Filing System, was also based on a similar system offered with the III at its introduction.

Shipments of the machine started in 1981 or so and almost immediately there were problems. The biggest one: the chips would pop out of their sockets after only a few hours (primarily due to heat). This led to the famous "two-inch drop" where owners would pick their machine up and drop it two inches to reseat the chips. This short-term solution was not totally satisfactory, however, and Apple ended up replacing every main circuit on the "mother board." At about that time, IBM came out with the PC and Apple introduced its Lisa and Macintosh lines. A III+ was introduced with a new IIe-style keyboard and a few other upgrades. But in 1984, Apple ended its production run at approximately 100,000 machines.

A Rundown of the Capabilities of the Apple III

Keyboard Friendliness
1) Arranged in a strictly traditional typewriter layout.
2) Sculptured, stepped and angled keys.
3) Numeric key pad. Recognized differently from main keyboard.
4) Software-definable character set. Can be used for graphics.
5) All characters used by programming languages.
6) Dedicated cursor or arrow keys.
7) Two-key method to boot a disk without powering on and off.
8) Alpha lock key. Shift locks alphabetical keys only.
9) The entire ASCII code.
10) Automatic repeat for all keys and the speed can be tripled.
11) Can print 224 distinct characters.
12) Bumps on D, K and 5 keys for finger positioning.
13) Numeric keypad can be redefined into 12 special function keys.
14) Dvorak American simplified keyboard available on file.
15) 128 byte type-ahead buffer.
16) Many different fonts available on file.
17) Character set can be changed under program control at any time.
18) Up to 13 control keys.
19) Computer "ON" light.
20) Two system keys, Closed and Open Apple keys redefine others.
21) 73 keys in all.

Integrated Main Unit (Built-In Features)

1) 80 Column display.
2) 143K internal disk drive.
3) Interface for up to 4 disk drives.
4) RS232-C. Can be made to serve six devices with a T-switch.
5) Color. All 16 colors with 192 lines of 280 dots per line.
6) Graphics. 16 shades of green with 192 lines of 560 dots per line.
7) Sound. 64 volume settings and over seven octaves.
8) Speaker. Of speech-producing quality.
9) Monitor ports. RGB or any video device; NTSC 80 column monochrome.
10) Real time clock (location 3-B on mother board).
11) Two Joystick ports, A&B. Silentype printer can share port A.
12) Diagnostics in ROM.
13) Audio output. SOS Audio Driver can be rewritten to your needs.
14) Built-in security mount to prevent theft.
15) 256K RAM ability, 512K potential without strain.
16) Four expansion ports.

New Operating System

1) First ever written to be user friendly.
2) Data base capabilities. Hierarchical file-structure.
3) Manages ALL memory locations and I/O.
4) One-disk format for ALL allows file sharing and communication.
5) Able to share files with Apple // e and c ProDOS systems.
6) Easily updated without hurting existing compatibilities.
7) Ability to rewrite software drivers instead of changing hardware.
8) Will locate which drive a file is in for you.
9) Error-proof menu system.
10) Automatic date/time stamping of every file.
11) Any destruction of data requires confirmation.
12) Interruptdriven.
13) Device-independent I/O.
14) Stores information using all empty space.
15) Programs that request printing could continue while the printing goes on.
16) Powerful drivers for graphics, console, audio, printer and RS232.
17) Programs can run 20% faster by pressing Control-5 on keypad (no video).
18) Uses all available memory.

Your Apple III Today

Despite the fact that the Apple III is no longer manufactured, it is far from useless. To the contrary, it was designed as a business machine and it remains one of the best computers ever built by Apple. In fact, you can put together an

(Continued on Page 76)

HyperStudio (IIGS)

by Frank Evangelista

Move over, Mac! Hypermedia is here for the IIGS. HyperStudio is promoted as The Hypermedia System for the Apple IIGS. This program was demonstrated at a IIGS SIG meeting by Bob Platt and it impressed me so much that I ordered it, knowing that only a preliminary version of the system was available. In a letter, Roger Wagner states that the company would prefer to "polish" the software to perfection before releasing it but the indications were that IIGS users were anxious to get a start as soon as possible. The result is a functional program with some modules in which work is still in progress. Purchasers were encouraged to send in their registrations immediately on receipt so that updates can be sent as soon as they are ready.

HyperStudio requires an Apple IIGS with at least 768K total RAM and a 3.5" disk drive. It is compatible with ProDOS 16 and GSOS, and can be run on hard disks, as well as the Appleshare Network, according to the manual.

Hardware Included

The program includes a set of sound digitizing and playback equipment. A microphone allows you to record music or sound effects, including voice. A small amplified speaker is also included. Installation instructions are included in the manual and no slots are needed. The speaker is powered by four "AA" batteries and includes an on/off switch. When on the internal speaker is automatically turned off. To save power and prolong the life of batteries, the speaker has an auto/off function that turns the speaker off when no sound is coming from the computer.

The package comes with four 3.5" disks: program, demo , sounds, and art disks. The disks are not copy protected and can be installed on a hard disk. The manual is not yet complete but comprehensive and

(Continued on Page 78)

Apple III Continued from page 75)

excellent system based on the Apple III for about $700 (or less) that will provide you with powerful word processing, database, spreadsheet and telecommunications capabilities that are unmatched for the price. The bottom line here is: Can the machine do everything you need it to do? For almost every application, the Apple III can meet the test ably and at a competitive price.

An Apple III System

Just what do you need to make your Apple III a complete and useful system? Here are some recommendations (assuming you have a 128 or 256K Apple III or III+ and Monitor III:

1) A second disk drive. It speeds up your work considerably, and makes it easier to load and save data, etc. Also usable: 800k Unidisk for the III and many hard disks.

2) System Utilities disk. This program lets you copy files, format disks and configure your SOS.Driver file.

3) III EZ Pieces. This is an excellent integrated software program that is easy to learn and use. Its files are also compatible with the Apple II version called AppleWorks. (On Three)

4) ThreeWorks. A fantastic set of III EZ Pieces Data Bases with extensive information about the III including a 1000+ bibliography of III articles. (On Three, and TAU)

5) Printer. The kind is up to you. You can run it off the RS232 port in the back of the III or by using a Serial or Parallel card you plug into one of the four slots internally. To connect your serial printer to the III you will need what is called a Null-Modem cable. Local computer dealers and national chains like Inmac sell them.

6) A surge protector to prevent electrical surges from destroying your machine.

As mentioned earlier, the Apple III uses an operating system called SOS, or Sophisticated Operating System. It is entirely RAM-based. That means every time you load a program, it loads the operating system as well. You will find three files on all program disks: SOS.Kernel; SOS Interp and SOS.Driver. The Kernel is the operating system itself. You should make sure you have the latest version: 1.3. You can tell what version you have when you boot up. You will see a message that tells you the version along with the Apple copyright.

The Interp file is the language the program uses or it may be the program itself. Basic and Pascal are examples of SOS.Interp files you will find. Finally, the SOS.Driver file contains the drivers that enable the III to operate properly. At the minimum you will need the console driver, called ".Console" and you might find others: ".Printer" to drive your printer; ".RS232" operates the RS232 port or a serial card for telecommunications; ".Audio" lets your III talk to you; ".Grafix" is the graphics driver. There are many more. You can install these using the System Configuration Program on the System Utilities disk. In most instances, you want to make sure you have the 1.3 versions of the drivers installed.

Your III can also operate in an emulation mode to make it think it's a 48K Apple II+ (you will need the appropriate software). You can also buy a two-card III+IIe system that turns your III into a 128K IIe.

Finally: Make copies of all your software! Then use the copy. It will save you a lot of headaches later.

an errata pamphlet instructs how to use the system at this time. Although some of the applications are not functional with this release it is possible to get a sense of what the program is capable of doing.

When the final release is available the boot process will load GS/OS and automatically load a stack. The preliminary version requires you to go another route but the instructions are clear and easy to follow. The first screen you encounter will be the home card. This card is a central reference point from which you will be able to launch the application programs (all of them eventually) and other stacks. The home card consists of icons representing the applications and stacks you can launch.

Introduction Stack

Clicking the "Intro" stack on the home card will provide the various objects which can be put on a card and say what the objects will do. You can load graphics, sounds and buttons to move to other cards. This section does not allow all the possible applications but gives the user a good idea of the program's capabilities without requiring programming expertise.

The Demo Stacks

An art library illustrates the clip art provided in the package. It is possible to import art from other 640-mode graphic images. There are paint tools for editing graphic images, including most tools used with other paint programs.

There is a demonstration of how a youngster could use the program to tell a story, although the way some youngsters are taking to computers these days, users with children may want to keep this module away from them or they may never get to their own computers until after bedtime. It is a unique way for a youngster to show and tell.

Another demonstration is an example of the use of graphics and sounds and hidden buttons to activate the sounds. As an example of a "Spanish" lesson, the program uses a scene with a señorita which sounds the word "señorita" when clicked with the mouse. This demonstrates the use if hidden buttons which may be placed on graphics or text to play sounds or move to other cards.

An extended feature of the program is a user-defined button that sequentially loads and displays any super Hi-Res pictures in the same directory as the stack. The user-defined button action lets assembly-language programmers add their own special functions to the program.

Sounds...Sounds...Sounds

The sound shop includes a number of sounds and the capability to record and edit sounds you create. You can launch this module from the home card or from any other program selector for any ProDOS16 file. The screen you are greeted with is impressive. The upper half displays sound waves when a sound is loaded into memory. The lower half contains three boxes for editing sounds, the amount of memory available and used, the buffer status including the recording time and play time, the editor status. There are also record, play, and stop buttons. The instructions for creating and editing sounds are good enough that someone like me, who has no experience with this type of activity, can just jump right in and make it work.

This application allows you to put a startup picture and sound on a disk. This is another feature that I had to try. It is more fun to see a picture of a guitar and hear it play for a few bars instead of watching a "thermometer" indicate that a disk is loading. In addition, you can replace the "beep" sound in some of your programs with a sound of your choice. This feature will give you a chance to use interesting ways to vent your frustration at the persistent indications that you have done something the program doesn't like.

The first time I tried the program I decided to make it as simple as possible. First I loaded a background picture of four animals, added text which instructed a user to click on the lion, elephant, parrot or monkey. I then overlaid hidden buttons on each animal and instructed the menu in the button area to provide the sounds of each of the animals. In a period of about five minutes I had a working program which would interest a pre-schooler although my youngest son is almost thirty. Well, even the thirty year-old got a kick out of what a computer with an excellent program could accomplish.

I have sent in my registration card but have not received anything yet from Roger Wagner. I am hounding my letter carrier, but not too strongly because the preliminary version has enough features to hold my interest until the program is perfected.

The Latest and Greatest

by Ted Meyer

The biggest happenings in the Meyer household these days have nothing to do with computers. We are expecting family member four (child number two) sometime around mid-October.

Things haven't stopped happening in the Apple IIGS world because the Meyers are having a baby. Sam Knutson and I discussed IIGS System Software Version 5 a few months ago in our AppleFest report and it has now been delivered. I had an opportunity to test a laser printer hooked up to a IIGS for the Pi.

IIGS System Software Version 5.0

Dealers and Developers have received copies of the new IIGS System Software. WAP, as of the 9th of August, has not received a copy of the license which allows them to release it. When System 5 becomes available, you will have several options if you're interested in getting it. (Which I recommend.)

First, you could buy it from the WAP Disk Library for $10.00. This will get you the complete set of software, two disks, in the exact form distributed by Apple.

Next, you could go to a dealer with a pair of blank disks and request that he copy it for you. This might get you a blank stare and it might get you a set of System Software disks. Be sure that they provide a COMPLETE and original set of the software. Apple has, in the past, stated that dealers should provide this software "free of charge."

However, the dealer is not obligated to perform this service free and will probably suggest the final option, which is buying System 5 for between $40 and $50. This will get you the complete set of software AND the official documentation which will probably consist of one or two manuals or pamphlets.

There are some who would argue that the documentation is not worth $40. System 5, however, is worth getting one way or another, if you have more than 512K of memory. The PI-SIG meeting report in this journal should discuss System 5 if you want to know why you should have more than 512K of RAM.

PI-SIG

I was elected as chairman of PI-SIG in May. PI-SIG is the Programmer's Interface Special Interest Group. This SIG is a forum for those IIGS users with more technical interests to get together and talk about their latest discoveries and projects. We don't expect all attendees to be super-hackers, but if you're interested in writing software or learning to write software for the IIGS ,then come and let us know what you're up to. So far members have demonstrated font editing and display software, use of the IIGS's Ensoniq chip, and a file rescue program. These software packages have been written in AppleSoft BASIC, APW C, Orca/Pascal, and Assembly language.

We are currently looking for projects to work on and are considering some group software projects. We hope to generate some WAP Disk Library Disks in the future. We are also demonstrating and reviewing various development packages like the ByteWorks Orca Series, TML Languages, APW, and packages like Genysys, which is a source code generation package for writing desktop software.

AppleFest—San Francisco

With every AppleFest comes a whole bushel of rumors. I won't spread them all, but maybe this will be the event where a new machine or an upgrade to the current GS will be unveiled. It would be nice not to have to buy a Transwarp GS card from Applied Engineering.

I wouldn't bet on it though—the next Apple II may be the low-end Mac/Apple II bridge machine and I suspect we will have to wait a bit longer for that. Other possible announcements: new ROM for the IIGS, Mac disk file transfer software, a HyperCard for the IIGS, and some kind of new monitor display or interface.

AppleLink and the TCS

Those who get on the TCS know that there has been an AppleLink board for some time, even before AppleLink-Personal Edition was announced. Apple has an in-house telecommunication/electronic mail system which was called AppleLink. When AppleLink-Personal Edition (ALPE) was announced this in-house system, which Apple made available to dealers, developers, and certain user group, became known as AppleLink-Apple Edition. With it you can contact via E-mail almost anyone inside of Apple and the Apple Community. Now ALPE has taken over some of the functions of ALAE for the Apple II community. ALAE is currently inhabited mainly by Mactypes, but it can still be used as a valuble connection to many developers and Apple itself.

I am slowly learning how to use the TCS as a SYSOP for the AppleLink board, which, I hope, will be a way for Pi members to get a message directly to Apple via ALAE . Leave a message on that board for me with your ideas.

If the Pi gets a laser printer in time, I plan on writing my next article using the word processor and page-layout parts of AppleWorks GS to produce final copy. THAT will be FUN! I'll try to do a tutorial on desk accessories using the Disk Library disk WAP2020 and then a short tutorial on fonts with one of WAP's GS Font disks. A System Software Version 5 of the FAD (Finder/AppleWorks Disk) has been requested and I will present this as soon as I get my upgrade to AppleWorks 3.0. If you have other topics you would like me to cover, let me know!

Until next time...

Sonic Blaster

by Dan Slaven

How well does your Apple IIgs talk? Can it sing? Laugh, cry, shout? Play a symphony or a great rock song? With Sonic Blaster from Applied Engineering, it will do all that and more. If you've been wondering how to make the "s" in your IIgs really do its thing—read on.

I suppose there may still be a few Apple II hermits out there who have never heard of Applied Engineering. If so, they must be on the endangered species list by now. Any Apple II user who is familiar with AE's products knows that if the box says "Applied Engineering," the product inside is high quality. The Sonic Blaster is no exception to this rule. In fact, the more I use this accessory, the more amazed I am at how much power and sophistication has been packed onto this modestly priced board.

Installation

After you have unpacked the card, software and manual, be sure to jot down the serial number on the card and put your note in a safe place—in case you ever need service or an upgrade, you'll want this number handy. The next step is to decide which slot you want to install Sonic Blaster in. Whichever slot you choose will have to be set to "your card" in the control panel in order to access it. My personal choice is slot six, since my CPU is getting pretty crowded and I rarely use my 5.25" drive anymore. Toggling between SB and the 5.25" drive does not present a problem for me. But give this some thought before you install the card.

Sonic Blaster is only slightly more difficult to install than a plug-and-run board. The 1/8" mini jacks install in a rear panel slot and a cable must be attached to the Ensoniq connector on the right front corner of the mother board. As usual, the instructions from AE are clear, straightforward, and very well illustrated. The inexperienced IIgs user will require perhaps 10-15 minutes to install the card and be up and running. Installation requires only a medium point Phillips screwdriver and those marvelous, all-purpose tools we call hands. In a word—it's easy. Once the card is in and the CPU cover is on, you will want to plug any extension cables, speakers, etc. you might need into the I/O jacks. If you need adapters, AE lists many common types available from Radio Shack, right down to their part numbers. I added an extension cable—from Radio Shack—for the input, since I didn't want to have to reach behind the computer to switch between microphone, tape player and CD player when recording sounds.

Using Sonic Blaster

Once installed and connected, and you're ready to run, start up your computer. If you are like me, you will have forgotten to set the control panel before you installed the card, and will need to do that now. Then, reboot so the change will take effect. If you haven't already made a back up of the program and sample sounds disks, you'll want to do that now as well. AE supplies non copy-protected software for their products, so making a working disk will be no problem. Boot the program and prepare for some FUN! To start with, most users will find that a quick perusal of the basic instruction is all that is needed. Keep the manual handy, because you will soon want to launch into some of the more advanced capabilities—Sonic Blaster is just that easy to learn and use. Start out by exploring the possibilities SB offers with the included sound files. You will have great fun expANDING and SHRINking sounds with the fade functions; cutting, splicing and generally up-ing mix the sounds; ec-ec-echoes ala Max Head-Head-HeadRoom are real hoo-hoot! You can rearrange range-er-re, reverse and esrever the sounds and tangle them up every which way. And you will certainly find doing it easier than trying to describe it in print!

Room for Improvement

"Well, that all sounds pretty positive" I hear you say. "Is there a downside to this?" Yes and no. As with any product where an attempt is made to maximize both quality and capabilities at the lowest possible price, there are trade-offs. Typical of AE's products, however, these trade-offs are minimal. I have found only four specific areas of concern: 1. Memory requirements are huge. This is a function of digitized sound, though, and has nothing to do with Applied's engineering. They do include two compression routines for sound files which alleviate the problem somewhat. 2. The card is not transparent to the computer, as some sound cards are. This may be a function of having both input and output capabilities. Toggling between slot functions via the control panel may be a minor irritant, but is much to be preferred over actually having to remove and replace hardware each time you need it. This built-in flexibility is still virtually unknown in the Big Blue/clone world. I find it an acceptable trade-off. 3. When recording sounds from the tape player or CD player, there is no "play-through" capability. In other words, you can't hear what you are recording until you're done. This causes a certain amount of guesswork as to whether an entire sequence has actually been recorded. A capability similar to that of a tape recorder with separate record and playback heads would be much appreciated. Timing a selection or using a tape counter helps reduce the guesswork and the number of trials needed to get a complete recording. 4. Probably most surprising and irritating (to this reviewer, at least) is the pop-up dialog box that indicates that recording is in progress. The dialog box pops up right over the VU meters and record/playback

controls, making them invisible and inaccessible during recording. I want, at the very least, to be able to monitor the VU meters when recording. Being able to manipulate the controls while recording would also be nice. Viewing the meters might be easily accomplished by either eliminating the dialog box (is it necessary?) or by remapping it to the lower half of the screen. The sound graph is not of much use during recording and I'd much rather see the VU meters than the graph. This is the shortcoming I would most like to see corrected. I am surprised that it got by the folks at AE.

BOTTOM LINE The most important point for any of us -except maybe Donald Trump- has to be value for the dollar. In this regard, AE has once again demonstrated their understanding of the users, students and hobbyists who are constrained by a budget. The sophistication and power of this modestly priced accessory are truly amazing. If you need serious sound capabilities, then you need to seriously consider Sonic Blaster. This is especially true if you have a limited budget for sound accessories. Sonic Blaster provides extensive recording and playback capabilities without the need for expensive amplified speakers or other costly peripherals. Once again, my hat is off to the folks at Applied Engineering. N-n- nice work, g-guys!

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Apple II Game

John Madden Football

By Nigel Broder

As I write this review, it is a typical Washington summer day: 95 degrees and like a sauna outside. Hard for most to think about football, but not for me. I am an avid football fan, which is why I have anxiously awaited the release of John Madden Football for the Apple II series since I first read it was in development, several years ago. Was it worth the wait? Read on.

John Madden Football includes both a Quick Game and a Standard Game. Both versions allow playing the game as either a strategic game or an action game. You can call the plays and let the computer control the execution of your choice or begin to control the key players by using the joystick. You are able to direct your runners or pinpoint the passing attack. Defensively, you have the ability to pick any player and control his movement. In addition, you can call blitzes for up to five players, tell your strong safety to cheat up to defend the run and assign man to man coverage to specific players. This last option allows you to double team your opponent's hot receiver. Watch the line blocks as the play begins and call "run" if that is the indication; then your guys can pound in—"smash, bam! get to that runner."

The Quick Game, with a limited number of plays, helps the new user become familiar with the mechanics of the operation of the game. The documentation does a good job of explaining the options available and the game uses a Mac-like interface . Once you are comfortable with the operation of the game, you will want to advance to the Standard Game.

One book of offensive plays and one of defensive plays is included for use with the Standard Game. Each book has 89 plays, including diagrams and Madden's thoughts on their use. This is more plays than any other football game I have seen available for the Apple II. If these plays are not enough, you can create your own offensive and defensive plays—the game provides an editor to do just that. You can give every player an assignment, map out pass routes and blocking schemes, then walk through the play. When you have perfected the play to your satisfaction you can go to a full-pads practice and run your creation against any defense you choose. This is where John Madden football becomes more than just a game: you can learn a lot about football strategy by experimenting here. For example, I found that blitzing from a zone defense is usually a disaster! You could create multiple play books and use each based on your opponent's strengths and weaknesses. It will take some effort to create an effective book of your own plays—no wonder Joe Gibbs spends weekday nights at Redskin Park!

The game can be played against another human opponent, or the computer can coach either team or both teams. You definitely can beat the computer team with a little practice and preparation. A handicapping system allows for varying skill levels. You can specify game conditions which will affect

Mac Game

Gauntlet

By Dave Romerstein

I have news for those of you have been waiting for an arcade-style game for your Macintosh. The Mac-arcade game is here, and it's one of my all-time favorites, Gauntlet. Sure, there have been a couple of arcade adaptions for the Mac (Arkanoid is the first which comes to mind), but Gauntlet is the first multi-player game.

Gauntlet (Mindscape; Mac Plus or higher, 2MB required to run under MultiFinder; $49.95) comes from the manufacturer on two disks, one in black and white for Plus and SE owners, and a color version for those lucky enough to own a II-series. The arcade version features marvelous color graphics of an overhead view of a typical dungeon, stocked full of points (I mean fodder.. er, monsters). Also available to pick up along the way are amulets of invisibility, magic potions for various tasks, and food to help regain hit points. One of the money making points of the arcade game is the ability to pump more quarters into the machine for more hit points. Alas, this feature is not implemented here (anyone know how to get a quarter out of a 3.5-inch drive?).

I must say, I'm not impressed by this game. It stays fairly close to the original, although I can't vouch for the color, only having a Plus. However, you can only have two characters in play at any one time (the arcade version allowed four) and it runs very SLOWLY. I didn't realise how slowly until I got an accelerator board for my machine, which took the game to arcade-level speeds. The Mac version can be played with either the keyboard or mouse, but I find the keyboard much easier. I will admit that the game is rather addicting if you've played the arcade version before, because it is slightly easier.

Final scores:

Look: 8 1/2 (would probably be 9 on a color machine)

Feel: 6 (much too slow on a standard machine for my taste)

Play: 7 1/2 (close enough to the arcade game, but easier)

Recommendation: If you like the arcade game, you'll like this one. I f you DON'T like the quarter-eating version, you still should take a look.

the play. A team used to playing on Astro-Turf in balmy weather will not fare as well on grass in a driving snow storm. Remember "...playing on grass, that's real football—guys with mud and blood and stuff all over them, that's my kind of guys." Several other features are incorporated into the game and the use of most of them is optional. Players can incur injury which will remove them from play for times varying from one series to several games. Penalties, interceptions and fumbles are all a part of the play. You can also play with a thirty-second clock active, call timeouts or run the ball carrier out of bounds to stop the clock. The game will record many statistics for later analysis although, curiously, it does not track defensive tackles by player. The game can be saved at any point—handy if you need to eat, sleep or mow the lawn, since computer games can last nearly as long as real ones. You may play shorter than fifteen-minute quarters if you wish.

Several fictitious teams are supplied with the game, including the All-Madden team. Followers of football will not have any trouble recognizing such fictional players as"Joe Idaho" or "Mean Green." Redskins fans will not be surprised to find "Riggo," "Grim" and "Jackobee" on the All-Madden team. An optional disk with the complete 1987 & 1988 players for all 28 teams was supposed to be available in June, but should be released in September, according to ElectronicArts. This disk will include a complete 3-4 base defense playbook and 20 bonus offensive plays. Meanwhile, you can use the team/player editor to create your own teams. Each player has several ratings that are the key to that player's abilities and which vary by position. I have created the Redskins, trying to be objective in assigning realistic ratings to each player (these are an integral part of the game). I will confess, I am a fanatical Redskin fan: I may have been overly generous with one or two player ratings here and there (ahem!) and Riggo has become bored with retirement.

Graphics stretch the limits of the II series, except for the GS. The animation is good and all eleven players are represented on each team. A typical play involves a huddle screen, where the formations of both offense and defense are represented with player numbers. If you are on offense and you do not like the looks of the defense, you can substitute different players or call an audible to another play. The defensive player can also make similar adjustments. Once you're set, the screen switches to the stadium view, where you can see the result of your play selection, with excellent realism. You will notice that plays do not always evolve as diagramed. Players miss blocks, fall down and do any number of other things that make coaches' hair turn gray.

Before beginning play, you will want to check the Madden Report, which assesses, by position, your team against your opponent. Here you formulate your overall game plan. "...I'm gonna do this. Now if you take that away, then you're going to give me something else. Then I'll take the things you give me the next time." I don't need to identify John Madden as the source of that quote—his personality and philosophy are embedded throughout and I am certain that he insisted on authentic strategic elements in the game.

While the game is not copy-protected, it does use a code wheel to authenticate ownership of an original version. Unfortunately, it does not use a standard DOS and can not be run from a hard disk or a 3.5 inch disk. However, backups may be made with any disk-copying utility. John Madden Football can be used with one drive but to avoid multiple disk swapping, you really need a two-drive system. Setting up the data disk used by the game is a bit of a chore, but this task needs only to be done the first time the game is played.

John Madden Football is the best football simulation I have played. It is rich in detail and realism, and now I understand why it took so long to develop this game, since it must contain some very complex programming. When playing, I found myself getting almost as excited as when the real Redskins beat Dallas! I highly recommend this game for anyone who wants to learn more about football. It is an absolute delight, although to be honest, it is something less of a delight for my wife!

John Madden Football

Apple II series with 64K. Joystick and two blank 5 1/4 disks required

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Software Review

Shufflepuck Café

by Stephen Jablon

In Shufflepuck Café (Brøderbund, Macintosh 512K with 800K drive, key disk copy protection, $39.95 list), you play air hockey against the computer. You and your computer opponent hit a small hockey puck back and forth across a small playing court trying to score a point by breaking the glass behind the other player. Happily, the glass is completely repaired right before the next serve. The first to score fifteen points wins.

To become champion, you have to win the tournament, playing the eight opponents in this order: Skip Feeney, Visine Orb, Vinnie the Dweeb, Lexan Smythe-Worthington, Eneg Doowtrop, Nerual Ttoille, Princess Bejin, and Biff Raunch. The first opponents are easy to defeat. As you progress further in the tournament the opponents hit the puck back faster and block your shots more quickly. If you lose to any opponent the tournament ends and you have to endure the boos and hisses of everyone in the café. Eventually, you find yourself up against Biff Raunch, the club champion. If you manage to defeat Biff then you become the current champion, replacing Biff's name on the current champion sign with your own. You also receive the cheers of all the players and the honor of adding your name to the permanent Roster of Champions, which list all of the champions' scores against Biff. Even after defeating Biff you can play the tournament again and again, trying for the perfect fifteen to nothing score against Biff.

You can practice against any of the opponents or against DC3-ALSO, a training droid that can be set to any ability level. In practice mode, you can alter your paddle, changing its size or its power. You can also add a blocker—an extra paddle that moves across the middle of the court. When the puck hits the blocker, it is reflected. Of course, in the tournament mode you have to play with a tournament paddle and no blocker.

Even if you defeat Biff Raunch you can always set DC3-ALSO to a skill level that makes Biff look like a pushover. The main disadvantage is that the game is repetitive and can easily become boring. Apart from quick reflexes, no skill is required in the game.

There is a freeware version of Shufflepuck (The Postmen, Macintosh, free) by Christopher Gross, who wrote the commercial version. When he decided to market it commercially, he made several changes in the game. The most important change was the addition of the eight computer opponents. Although the freeware version does not contain preset opponents, you can create your own opponents, just as you can in the commercial version with DC3-ALSO. He likewise added the option of playing with a blocker.

Several features of the freeware version have been removed from the commercial version. While you can create new paddles and opponents in both the commercial and freeware versions, the freeware version also permits you to save them to disk. In the freeware version, you can also change the court size and the puck size, two other features missing from the commercial version. There is one other advantage to the freeware version: it is not copy protected.

Overall, Shufflepuck Café is not worth its price value. I would recommend that you find a copy of the freeware version instead. Although the preset opponents are missing, the additional variety of options makes it a better game than the commercial version.

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Best of the TCS - Apple II

by Paul Schlosser

The New SuperPatch for AppleWorks

FROM TOM O'HAGAN, ON 06/26 With AppleWorks 3.0 coming out in August does it make sense to get SuperPatch 5.0 now that it is no longer shareware or should we just wait for 6.0 which your message said would support 3.0?

FROM PAUL SCHLOSSER, ON 06/26 Tom - John Link (author of SuperPatch) has set the prices so that it doesn't matter when or in what order you purchase SuperPatch. SuperPatch 5.0 (for A/W 2.1) is $20. Upgrade SuperPatch 5.0 to 6.0 is $10. SuperPatch 6.0 (for A/W 3.0) is $30.

MacWrite to AppleWorks Transfers

FROM DAN WHITE, ON 07/13 I was given an 800K disk full of MacWrite documents. What's the best way to get them into AppleWorks format? I have a IIGS, and could probably use a Mac at the Pi Office.

FROM DAN HUGHES, ON 07/13 Use Apple File Transfer on the office Mac to transfer the documents to a ProDOS disk. But first save all the MacWrite Docs as text or you'll have to chop out a lot of MW formatting stuff.

The New AppleWorks, version 3.0

FROM GARY HYATT, ON 07/06 Can anyone tell me if you can bury the Print Options on a word processor document (bold, underline, etc.). I'm trying to generate some form "blanks" for an ASW (Anti Submarine Warfare) exercise and the Print Options make it difficult to visualize the document.

FROM LEE RAESLY, ON 07/08 You cannot "bury" them in Version 2.1 (or earlier). Version 3.0 will allow you to bury them, though.

FROM GARY HYATT, ON 07/09 That sounds like the answer to my dreams. Where can I sign up???

FROM MARTY STEIN, ON 07/18 According to Beagle Brothers, who helped write 3.0, it is supposed to ship sometime towards the end of August. Beagle has a bunch f enhancements almost ready for it as well. Seems AppleWorks really will live forever!! Anyway, the tech at Beagle said the $79.95 update is WELL worth it.

FROM RICK ZEMAN, ON 07/18 Can I upgrade from AppleWorksGS to 3.0, as that is the only Claris registered product that I own?

FROM LEE RAESLY, ON 07/19 Well, if they let you do that, it would be an upgrade, but I don't think they will!

FROM BILL HARK, ON 07/18 In late May, I got an application for upgrade from Claris. For $79 and my old, unused Applewriter (1981 vintage) original disk, I ordered AppleWorks 2.1. I heard about 3.0 about a week later! When the package arrived, I found AppleWorks 2.1 just as ordered and figured for another upgrade bill. Last week, I got a card from Claris telling me that they were going to send me 3.0 FREE! I'm surprised and delighted.

FROM HARRY BACAS, ON 07/19 Claris is finally accepting telephone orders for upgrades. They say they will ship "late in August." They ask for the serial number of your Claris 2.1. When I couldn't find mine, they looked up my name, saw I was registered for AppleWorksGS too and said o.k. The price is $79 plus $2 shipping and sales tax. Sales tax? Yes, they say that because they have local dealers in the state they have to charge sales tax. They asked me what Virginia's rate was and I said 4.5 percent. They also ask whether you want 5.25 or 3.5 disks.

Print Shop GS problems

FROM MICHAEL MICHEL-HOWEL, ON 07/01 To my dismay I found out that Print Shop GS does not support my PKASO interface card for my EPSON MX-80 (Graphtrax) printer. Anyone know of a patch/modification or a work around so that PSGS will drive PKASO?

FROM GARY HAYMAN, ON 07/18 Don't dismay - at least yet. There is a secret button in PS GS that allows you to enter 103 special codes for printer drivers. I wrote an article about this a few months ago and it was published in the Journal. Take a look at the article and then call Print Shop tech people and tell them that you are aware of this "Button" and ask them if they could supply you with the proper codes that will meet your configuration.

Basic.System 1.3 Bug

FROM PAUL SCHLOSSER, ON 07/28 Another bug that was reported at KansasFest was the one involving BASIC.SYSTEM 1.3 that comes with 5.0. Because of this, it was recommended that we revert to 1.2 for now. When a BSAVE to an protected area of memory occurs, instead of an error message, a BLOAD takes place. This may destroy your volume, or parts of it.

Is Your Keyboard Broken?

FROM MICHAEL RODEMEYER, ON 06/28 Here's an oldie but goodie for those of us with aging IIs, my "n" key has suddenly stopped working. Not intermittently working, plain old dead. (Ns still appear on the screen reading files, so its not the video ROM.) What can I do, absent a new keyboard? I've tried dusting, even a little tuner/cleaner, to no avail. Should I re-solder the connections? (And in case you're wondering how I can leave this message with "n's" in it, I'm using my backup Macintosh.)

FROM NIGEL BRODER, ON 06/28 First of all, I LOVE the fact that the Mac is the backup! I had the same problem with my old II+ as you have. Try blasting in between the keys with some Dust Remover

Spray from Radio Shack (cat #64-2325) $1.99 a can. Expensive for air, but worth a shot. If that fails to dislodge any accumulated crud, you could get adventurous and take your whole computer apart to get to the keyboard module for a thorough cleaning. Over time a lot of things can get in between the keys especially if your like me and like to consume brownies and chips and other goodies while reading the TCS. None of the aforementioned munchies are very beneficial to your computer, since it prefers a low-cal diet of electrons.

FROM EUCLID COUKOUMA, ON 06/29 I have had a number of keys fail on my Apple //e and on my Heath H-151. I have replaced the offending key each time. Normal function returned every time There are other things that might happen but this solution has been so successful (100%) that I stock spare keys for my machines. I have bought my replacements from Clinton Computer in Clinton (for the Apple). They were somewhere around $3 to $5 each. If you can do your own dissection, soldering, and reassembly, this can be cost effective - there has been a long period between failures. If you have to pay a shop to do it you might do better to replace the whole keyboard. Labor charges will be much more expensive than the keys. If you want to buy the switches take a sample with you. There is more than one type of keyboard used in some (or maybe all?) Apple models. They work the same but they are physically different.

Which 3.5 Drive Should I Buy?

FROM TIM MCGRAW, ON 07/20 A neighbor with a IIe at home and a Mac at work would like to buy a 3.5" drive so he can transfer his ProDOS files to his Mac with the Apple File Exchange. Is the Central Point 3.5" w/ their Universal Disk Controller the choice, or does he HAVE to go Apple brand to maintain compatibility w/ the Mac drive? Are there any other alternatives besides Central Point?

FROM DALE SMITH, ON 07/21 In spite of its price and flexibility, the Central Point drive and UDC do NOT have a good reputation for being trouble-free — there have been more complaints about that combination than I can count (drive speed, I/O errors, copy-protected software, etc., etc.). It's not all bad, but there are so many problems that many who've purchased the combination end up getting rid of it for a real Apple drive (more money, but they work).

AppleWorksGS and the Clipboard

FROM JOSEPH NEMECEK, ON 06/30 An undocumented feature built-in to the Scientific Calculator, in our DA library, is the ability to copy to the clipboard! I used this feature to paste a calculated value into AppleWorksGS. This is the first application that follows up on Apple's promise of being able to copy/paste between applications (DA to applications is a good start).

FROM DAVE RANDALL, ON 07/01 I think the Scientific Calculator is a terrific DA to have. I use and like it a lot! You mentioned a undocumented feature that allows copying to the clipboard. How is this done? Also, the Orca Pascal Desktop has the capability to copy to the clipboard.

FROM JOSEPH NEMECEK, ON 07/02 When you have an amount on the calculator results area you want to transfer to the clipboard, just pull down the edit menu and select 'copy'. If you are in the application you want to copy to copy to, select the 'Edit' pull down menu (first position the cursor where you want the figure to go), and select 'paste'. That should put your number where you want it. The clipboard data can be transferred between applications that support Apple's Finder implementation of copy/paste.

System Disk 5.0 News

ROM APPLE, ON 07/17 NEW IIGS SYSTEM SOFTWARE AVAILABLE CUPERTINO, California. July 17, 1989. Apple Computer, Inc. announced today the availability of new system software for Apple IIGS computers. Apple IIGS System Software 5.0 is the first 16-bit operating system for the Apple IIGS that operates over the AppleTalk network system. It provides easier access to network services and greater speed, performance, and ease of use for both individual and networked users. The software was introduced and demonstrated at the AppleFest tradeshow in May.

FROM LEE CABANA, ON 07/27 I picked up System 5.0 on my way home from work this afternoon. After a very brief review, the system does live up to it's claims. The windows explode open!

FROM DAN HUGHES, ON 07/28 Got hold of System 5.0 yesterday and have been playing around with it. It's very impressive, especially with Transwarp card, e.g. AppleWorks GS loads from the Finder to File Dialog box in 10 seconds from hard disk. That must be three or four times faster than System 4.0. The new control panel is very nice too as is the Icon Info function which calculates the size of folders. I had a problem booting at first. System 5.0 wouldn't recognize my hard drive. It would mount it and then bomb, unable to open the disk. This frustration was caused by a bad icon file called Custom Icons that I had installed on my hard drive. Once I deleted that the drive opened. Another bug that I haven't been able to get rid of involves opening the Fonts folder in the System folder. Every time I try and open that folder I get Icon file damaged $0005. I tried deleting the Font icon, but that didn't fix it. Anybody have any idea how to fix a broken icon?

FROM DALE SMITH, ON 07/28 I could use help with that too - my trashcan icon disappears when I throw something into it from an open directory (first or second level) - BOOM no "full trashcan" icon - nothing and can't get it back without leaving and returning to the desktop. Another problem is the "no 5.25 icon", if you boot the system with no disk in the 5.25, most of the time (but not all) you get no 5.25 Drive icon on the desktop - the only way to get it is to have a ProDOS disk in the drive.

Hard Drive Questions

FROM JONATHAN KERN, ON 07/07 If it's possible, I would like

to move my Dataframe 20 (20 meg SCSI) hard disk from my Mac to my IIGS (and buy a 40 meg drive for the Mac); but I have lots of questions, and am actively soliciting advice. Is Apple's the only SCSI card to get for the IIGS? Is it cheaper at any particular local dealer? (I have found CPUs to be cheapest at Computer Age, but peripherals are often high-priced there.) Do I need special software to format a hard drive for the IIGS? (I hope to acquire System 5.0, since it is presumably so much faster than 4.0>) With the Mac, I just plugged the drive in and started using it — it came formatted, with lots of utilities. I presume I'd want to have different ProDOS 8 and ProDOS 16 partitions for the IIGS. What do I need to do so? Would it be easier or cheaper just to buy an internal hard drive for the IIGS? Is the Applied Ingenuity as good as the AE drive? (It seems to be considerably cheaper.) Anything else I should consider before I lay down my money? Thanks in advance.

FROM TIM MCGRAW, ON 07/07
You can buy other SCSI cards, but Apple's ensures compatibility with future standards. You don't need special software to format a previously used SCSI device, but at a minimum use the 4.0 Installer for formatting and partitioning There's no reason to have a ProDOS 8 partition; for back-up convenience, I partitioned mine into two; one for data only. Internal drives for the IIGS are overpriced, but it's nice to be portable.

Which Slot Does A Mouse Belong In?

FROM THOMAS MCKNIGHT, ON 07/27
I have a IIgs; currently slots 1, 2, 3, 5, 6 are empty. Slot 7 has a Printer Pro parallel card for my daisy wheel printer (I also have an ImageWriter). In slot 4 is a SCSI card for my HD. I have both 3.5 and 4.25 drives, and 1 meg of RAM. Here is the problem: so far, I have been an AppleWorks and DB Master user only. I kept the mouse in a drawer, but now I am considering several DTP programs, all of which demand a mouse. So how do I regain use of the mouse without a lot of control panel and on/off switch action? Which cards should go in which slots? Is it possible to have a HD, an Imagewriter, a daisy wheel, a modem, and the use of a mouse.

FROM RICK ZEMAN, ON 07/28
Easy!!! Put the SCSI card in slot 7, the parallel card in slot one (and toggle the control panel when you want serial/parallel) and regain the Slot 4 mouse. It is bad for you GS to use the power switch except for the purpose of turning your GS on or off. If you need to reset the control panel, a ram disk or whatever, hit OA-Option-control-reset and put the computer into the self-test and then reset it, control-reset. Or you can go in the GS utilities download section and there are lots of neat little control panel utilities there. SWCP by Tim Grams comes to mind.

FROM DALE SMITH, ON 07/28
My suggestion is to put both printers in Slot/Port 1, since I don't think you be using both at the same time - then you'd just flip the Control Panel from Port to My card or back to move from one to the other. This would free, Slot 7, which could take the HD; and that would free Slot 4 to be switched to Mouse. You'd only have to do control panel switching when you changed printers that way.

Macintosh Programmer

Senior Member Technical Staff

We're Telenet, a US Sprint Company, and we are the leader in providing sophisticated communications solutions using X.25 and Telemail Electronic Messaging services and technology. We currently have an immediate need for an experienced programmer to lead in the design and implementation of an innovative Electronic Messaging software product which will provide a user friendly Macintosh human interface with our Telemail Electronic Messaging Service.

The ideal candidate should have a Bachelors or Masters degree in Computer Science, 5+ years programming experience, and demonstrated capabilities in the implementation of one or more Macintosh applications. Programming experience in 'C' and 68000 assembler language using the MPW development tools is essential, and a telecommunications background is highly desirable.

Telenet offers a competitive salary and benefits package and plenty of room for professional growth. Send your resume in confidence to: Telenet Communications Corporation, Attn: James F. O'Brien, Dept AP-789, 12490 Sunrise Valley Drive, Reston, VA 22096. We are an equal opportunity employer M/F/H/V. Principals only.

Telenet

A U.S. Sprint Company

Download City

by Paul Schlosser

The following is a list of files uploaded to the TCS during the last thirty days. These files are available for downloading by TCS users. A longer, more detailed browse description is available on the TCS. Call the Pi office at 654-8060 to obtain a TCS password.

File area 2 - Apple II Misc.

018 BACHTOLD.SHK 07/18/89 0019K Apple II official discusses the future

017 VANILLATAPE.SHK 07/12/89 0013K Build your own SCSI tape backup

File area 4 - Apple II Utils

128 DOGPAW320.SHK 07/31/89 0014K DogPaw version 3.20

127 APPLENET1.3.SHK 07/30/89 0122K AppleNET BBS, version 1.3

126 SHRINKIT2.1.XTX 07/24/89 0068K Self-extracting ShrinkIT v2.1

125 XTRAX2.0.SHK 07/24/89 0021K Creates self-extracting archives

124 SHRINKIT2.1.SHK 07/23/89 0050K Version 2.1 of ShrinkIt

File area 5 - GS Desk Accs

061 FILEFINDER.SHK 07/24/89 0022K NDA for file searches.

060 ASCII.DECODER 07/13/89 0003K Keypress—>hex, decimal, or binary.

059 AREACODE.SHK 07/03/89 0008K Area code CDA—VERY comprehensive.

File area 7 - GS Games

029 SILIPHEED.SHK 08/05/89 0008K Picture of enemies in Silipheed IIgs

028 IMAGINE2 07/25/89 0016K Formula for peace, human rights

027 SPELLBINDER.GS 07/09/89 0062K Mouse-driven GS Adventure-requires 768k

File area 8 - GS Graphics

060 IMAGINE2 07/25/89 0016K Fourmula for peace, human rights

059 FLIGHT.DEMO.SHK 07/02/89 0005K SHR graphics simulation

058 FILLMAZE.SHK 07/02/89 0023K SHR graphics simulation

File area 9 - GS Misc.

052 KFEST.SHK 07/27/89 0011K Kansasfest Report

051 RESTORE.CP.SHK 07/23/89 0008K Restore control panel settings.

050 RS.ICONS.SHK 07/18/89 0059K Extensive Personal Icon Collection

File area 10 - GS Utilities

059 TEXTDSPLY.SHK 07/24/89 0006K Text Display v1.3

058 PS.SHK 07/24/89 0138K Sound creation/exploration tool for GS

057 EMACS.SHK 07/23/89 0173K The MicroEMACS Editor

056 FIRST.START.SHK 07/08/89 0009K FirstStart Version 3.1

055 SWCP.SHK 07/02/89 0031K Control panel utility

File area 13 - Mac Fonts

031 DAYTONA.LAS.FNT 07/21/89 0049K Laser font

File area 14 - Mac Games

059 BLACKBOX 07/31/89 0036K Semi-intellectual game

058 CAIROSHOOT.SIT 07/10/89 0049K Cairo Shootout. Good.

File area 15 - Mac Graphs

106 GRAPHICS.HELP.S 07/28/89 0017K Graphics Bibliography & ideas

105 APOLLO11.SIT 07/18/89 0266K Mac II screen of moon landing w/sound

104 BATMAC.SCREEN 07/11/89 0004K Great looking Batman-Mac StartupScreen!

File area 16 - Mac Hypercard

112 BUTTAN.SIT 07/24/89 0013K XCMDs to animate & move buttons.

111 GEOMETRY.SIT 07/12/89 0035K High Sshool Geometry Tutorial

109 IMPORTER1.1.SIT 07/05/89 0009K Import and Export from Excel.

File area 18 - Mac Utilities

149 TOGGLE.020.CDEV 07/24/92 0003K Toggles 68020 Instruction Cache. C-Dev

148 FBACK2.SIT 08/03/89 0325K FastBack II demo (appl) Part 2 of 2

147 FBACK1.SIT 08/03/89 0262K Part 1 of 2 FastBack II demo

146 MOIRECDEV.SIT 07/30/89 0015K Auto screen saver & clock Cdev

145 GATEKP1.1.1.SIT 07/30/89 0080K GateKeeper v1.1.1

144 SNAP2.1.SIT 07/30/89 0074K Great screen shot util.Multifinder ONLY

143 VIRUSPKG.SIT 07/28/89 0290K Eleven Anti-Virus Applications

142 XSCHEME1.SIT 07/26/89 0079K XScheme for Macintosh.

141 DA.MENUZ.SIT 07/24/89 0023K v.9984 hierarch DA menus & pop-up menus

140 GIFFER106.SIT 07/23/89 0063K Giffer 1.06

139 SCROLL2.SIT 07/20/89 0033K GREAT- adds 2 arrow boxes to scroll bar

138 V.JOURNAL.SIT 07/18/89 0022K Xerox PARC's Virtual Journal

137 CHAOS.SIT 07/18/89 0097K Chaos paper.

136 NOTEPAD.II.SIT 07/16/89 0011K Superior NotePad DA.

135 FH.UPDTR.SIT 07/16/89 0023K Font Harmony Updater to 1.2.1

134 SUPERCLK3.5.SIT 07/15/89 0016K SuperClock! 3.5 Latest Version

133 DUALBIN1.SIT 07/14/89 0026K No description entered.

132 FFP.SIT 07/14/89 0031K No description entered.

130 MONITORS.4.0 07/11/89 0017K New version of Apple Monitors C-Dev.

129 DIALABLEBBSLIST 07/10/89 0010K Saves programming Phone nos. in Telecom

128 QUICKDRAW32.SIT 07/07/89 0165K Apples Offical Relase 32-bit QuickDraw

127 CALENDAR2.1.SIT 07/05/89 0046K Calendar DA version 2.1

126 SOUNDMVR14.SIT 07/05/89 0055K Sound Mover 1.40. Add beep sounds.

125 RAMCHECK.SIT 07/03/89 0006K RAM diagnostics.

124 SCSI.PROBE 07/02/89 0005K SCSI Probe Cdev

123 BOOMERANG.2.05B 07/02/89 0050K Folder & Dialog helper

122 SUITCASE2.1.2.5 07/01/89 0036K Suitcase II 1.2.5 Update

File area 21 - Pi Documents

010 JUNE22MIN.TXT 08/02/89 0058K Minutes of June 22, 1989 BOD meeting

009 JUNE14MIN.TXT 08/02/89 0103K Minutes of June 14, 1989 BOD meeting

008 MAY31MIN.TXT 08/02/89 0063K Minutes of May 31, 1989 BOD meeting

007 MAY10MIN.TXT 08/02/89 0010K Minutes of May 10, BOD meeting

006 TELLERRPT89.TXT 07/31/89 0011K Plain text version of the tellers' rpt

005 WRITEIN89.TXT 07/31/89 0006K List of write-in votes by ballot number

004 BALLOTS89.2.TXT 07/31/89 0090K Ballot Data with fixed length records

003 BALLOTS89.1.TXT 07/31/89 0107K Tab Delimited Ballot Data

002 ELECTION89.TXT 07/31/89 0007K Information on 1989 election uploads

001 BYLAWS70189.TXT 07/11/89 0027K Bylaws as of 7/1/89

Apple II Library

Disk Library—Apple II

by Sam Knutson

This month the IIgs library adds disk 2021 JUMPSTART. This is an alternate launcher to use with or instead of the Finder. It provides some utility functions and allows you to define menus for quick launching frequently used applications, start up programs by selecting to run without building the menu (similar to the old IIgs Launcher used before Finder), boot any Slot, and much more. Jumpstart is shareware. Look for a full review of Jumpstart coming to the Pi Journal soon.

For Apple II we add Apple System Disk 3.1 in both 3.5" and 5.25" formats. This disk has Apple's current system utilities for the IIe,/ /c,//c Plus. Please note the utility disk requires 128K and will not work on an Apple][+.

The Apple System Disk is an indispensable part of your computer system. It has a variety of utility programs for copying disks, checking to see what files are on a disk, copy files, deleting files, renaming files, and much more. It also gives you a way of entering the Applesoft BASIC programming environment so you can write your own programs and save them to disk.

The Apple System utilities will work with ProDOS, DOS 3.3, and Pascal disks although some options only apply to the newer ProDOS operating system. The utilites also allow you to catalog DOS 3.2 and CPM disks to see what is on them although you cannot use the other utility option on these two formats.

The utilities also allow you to setup the printer and modem ports on a / /c or a //c Plus. The utility disk comes with the latest version of Prodos 8 and with a label supplied by Apple so you will know it is the real McCoy.

The listing of Apple II disks may be found on page 93 of this Journal, and the order form for all disks in the Disk Library is on page 95. We certainly do not encourage you to fold, spindle, mutilate or otherwise tear pages from the Journal, but if you feel constrained to do so, this makes it as painless as possible.

To order by mail us the order form, or list by disk number.

5 1/2"disk: $3 member, $6 nonmember

3 1/2"disk: $5 member, $8 nonmember

Deduct $1 per disk on 3 1/2" disk if ordering more than 5. Postage and packaging

$1/disk to $5 max.

Some disks are sets, and some require a startup or initialization disk.

Look for more announcements in this space in the coming months.

Disk Library—Macintosh

by Dave Weikert

MacWorld Expo Specials

This is another special month for the Mac Disketeria because of MacWorld Expo in Boston. We are happy to extend our Expo special pricing on disks to all of you, whether or not you were able to attend Expo. Our special pricing for disks will remain in effect from the August 8th start of Expo through the month of September, 1989. During the Expo special, all disks are priced at $3.00 per disk. In October, disk prices will return to their previous levels.

Mac Disk Catalog

The current disk catalog contains a list of disks and titles, a new introductory section, descriptions of files across all the disks, a list of files across all disks sorted alphabetically by file name, and an second list sorted alphabetically by file type and then by file name. The catalog cost $3.00 at the WAP meeting or at the WAP office; add $1.50 for mailing. The catalog is current except for the recently issued ImageWriter Fonts series, Mac Disks #5.05 through 5.15 and the disks released this month.

New and Recent Disks

We have two new and two revised disks this month. The revised disks are two of the Anti-Virus Utilities series and the two new disks are System Utilities.Other recent disks include ImageWriter Fonts (Mac Disks 5.05 through 5.15) 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 are new to the Washington Apple Pi disk collection and some of them are candidates for our "super-fonts" list of "best" fonts.

Anti-Virus Utilities Update

The latest versions of Virus Detective (v3.0.1) is on Mac Disk #1.01A; Gatekeeper (v1.1.1) and Disinfectant (v1.2) are on Mac Disk #1.02A. The first disk, #1.01, is self-booting (starting) from a System Folder containing abbreviated System Software 6.0.3 and includes the essential files for detecting, eradicating and preventing virus attacks. The second (and third,) disk contains only anti-virus utilities and is not self-booting.By the way, please note the change in shareware fees for Virus Detective. One of our members was unpleasantly surprised when he received the disk he ordered along with a bill for the difference between the old ($25) and new ($40) fees for Virus Detective.

System Utilities Series

We have added two disks to the System Utilities series, Mac Disks #16.07B and #16.08B. Most of the material on these two disks are new to the disketeria, although some of the programs are updates.

Help Still Wanted

A number of our Disketeria volunteers test programs and develop the program notes for our disks. Steven Payne is currently preparing the soon-to-be-available Fun and Games series from our collection. William Jones is doing the same for the forthcoming INIT/cdev series. (He had previously done the same for our disk series of DAs, LW Fonts, Paintings, Miscellaneous Utilities and Systems Utilities.) Dave Condit is our HyperCard guru and keeps a small but changing group busy with StackWare and HyperCard Externals. Rick Chapman works the Mac II programs, and its descendents, and was also the major force behind the first three HyperCard Externals disks. Chuck Sicard and I try to pick up the remaining cats and dogs, and Tony Salerno is "starting out" by testing and annotating a future conversion of the FKeys series to 800K format and by documenting new FKeys. Other volunteers also support testing and annotation.

However, the backlog of candidate programs for our library is expanding faster than is our ability to test, annotate and assemble them. ***We need additional volunteer help!***

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 evaluate a program's worth to our members. If you have these skills and can devote 20 to 30 hours per month to annotation and testing, please call me at (301) 948-9646.

Donations Still Needed

We archive programs in our Mac Disketeria on five inch 20 Megabyte Bernoulli cartridges or on 45 Megabyte SyQuest cartridges. Because of the expense, the club has been able to purchase only a limited number of these cartridges. I have used a number of my own cartridges but am running low and the programs keep coming in. If anybody has any of either type of storage media, that they would be willing to donate or loan on a long-term basis, I (and the club) would be eternally grateful. You may leave them at the office in care of my attention or give me a call at (301) 948-9646. The Bernoulli cartridges may be from IOMEGA, Mountain Computer or Bering; the SyQuest cartridges may be from PLI, CMS, MassMicro, LaCie or a number of other vendors. Thanks.

Disk #1.01A — AV 1

Anti-Virus Utilities

ReadMeFirst: By Dave Weikert. This text file describes the results of running Interferon, Virus Detective, Virus RX 1.4a1 and some other virus detection programs on disks that have the WAP INIT file installed.

Vaccine™1.0.1: By Don Brown, CE Software Systems. Intercepts any attempts to modify applications and systems files and requests operator confirmation of each change. This is a cdev type file, so copy it into your system folder and access it through the Control Panel (under the menu). Setup instructions are provided when you select Vaccine from within the Control Panel. The space in front of the file name places it at the head of the list of cdevs so that it is loaded before any other at startup.

Intro to Viruses: By Robert I. Wright. A HyperCard stack that describes the prevention, detection and eradication of viruses. The content is good but some of the descriptions are somewhat dated in terms of what virus strains they prevent, detect or eradicate. (Requires HyperCard in order to use this stack.)

Repair 1.5: By Steve Brecher. This application repairs files infected with the nVIR virus. You must first determine if a file is infected using a virus detection utility such as Virus Rx version 1.3 or later (this disk has ver 1.4a2).

Virus Encyclopedia: By Henry C. Schmitt. This HyperCard stack is an excellent tutorial on the different types of viruses, what they do and most of the Anti-Virus Utilities useful to combat them. Virus encyclopedia covers virus prevention, detection and removal and repair of viral infected applications and other files. This stack covers the "Peace", "Scores", "nVIR", "Dukakis" and "INIT 29" viruses. It is also an excellent stack in its own right. (Requires HyperCard in order to use this stack.)

Virus Rx 1.4a2 *f*: **Virus Rx 1.4a2:** By Apple Computer, Inc. Scans selected drives or folders for any damaged applications, INIT, cdev and RDEV files, invisible files, altered system files and altered applications. Creates a text file which includes an analysis of what is found. The Teach Text document **Virus Rx 1.4a2 Release Notes** describes what Virus Rx does and also provides some useful guidance for reducing your risk of exposure to any virus.

Virus Detective™ *f* (v3.0.1): **Virus Detective™:** By Jeffrey S. Shulman. This Desk Accessory scans a disk, folder or file to detect a virus. It includes the capability to search for operator-entered strings and can write a log file to disk. This version permits you to easily check out an entire floppy disk library. **VD 3.0.1 Doc (MacWrite)** is the terse but comprehensive documentation on the theory and use of Virus Detective. ***Shareware – $35, for license, $40 for license and disk with other demo programs.***

system 6.0.3 *f*: Includes Apple System Software version 6.0.3 with System, Finder and associated system files to provide a self starting disk. The System has been stripped of most fonts and DAs and the DA Virus Detective has been installed for your convenience in using this as your primary virus detection, eradication and prevention disk. Always keep it locked (with the hole showing in the upper corner of the disk,) to prevent it from bcoming infected.

Disk #1.02A — AV 2

Anti-Virus Utilities

ReadMeFirst: By Dave Weikert. This text file describes the results of running Interferon, Virus Detective, Virus RX 1.4a1 and some other virus detection programs on disks that have the WAP INIT file installed.

AGAR *f*: **AGAR:** By Bill Krimmel. This very small program just sits on your disk waiting to be infected. Check it from time to time to see if it has been modified by a virus. **AGAR Picture** is a MacPaint document of the program listing. See the **AGAR Doc** for Bill's offer to disassemble any virus and report on its action and removal techniques.

AntiPan 1.1: By Michael Hamel. This application finds and removes the nVIR and Hpat viruses from infected disks. It also installs an nVIR immunity feature to the System file (unless the target disk is locked) without asking first. This would not be our preferred anti-virus utility since we don't like programs that mess with the System file or which modify other files without asking.

AntiViral 1.0 *f*: **AntiViral 1.0**: By Chris Klugewicz. An application to help prevent your computer system from succumbing to a viral infection. It monitors the size of applications and alerts you when applications change size between one "run" of AntiViral to the next. **AntiViral 1.0 Doc (MW 4.5)** is the documentation and **Sample AntiViral List** is an associated file. ***Shareware - $10.***

Disinfectant 1.2: By John Norstad. Detects and repairs files infected by all of the currently known viruses including nVIR, AIDS, INIT 29, ANTI and MacMag (Peace). Like Virus Detective, it operates under your control and can scan a succession of floppy disks and create a log file of the results.

Ferret 1.1 *f*: **Ferret 1.1:** By Larry Nedry. Scans a selected drive for files infected with the "Scores" virus and permits you to repair the infected file or skip over it. See the brief **Ferret 1.1 docs** for how to do it.

GateKeeper *f* (v1.1.1): **GateKeeper**: By Chris Johnson. This cdev is placed in your system folder and is then accessible via the Control Panel after booting. It monitors the types of action that viruses take and limits the system's response in order to prevent further infection. GateKeeper creates a log file for later analysis and diagnosis of virus attacks. A description of the program and help information is found by clicking the question mark when the cdev is selected at the control panel. **GateKeeper Release Notes** and **GateKeeper Introduction** describe the privileges needed by selected applications.

Interferon (v3.10) *f*: **Interferon:** By Robert J. Woodhead. Scans all on line or selected volumes for files with any of a number of known and generic virus characteristics. An eradicate option performs a similar scan but attempts to delete infected files. The **Interferon (READ ME)** documentation is necessary to understand the results of the scan. **This is the last version of this shareware as its commercial version is now known as VIREX.** ***Shareware — free, but contributions to the Vision Fund are solicited.***

KillScores *f*: **KillScores:** By anon. Scans a selected drive for any files infected with the "Scores" virus, automatically removes "Scores" and then repairs the infected program.

The Scores Virus: by Howard Upchurch. This documentation provides an excellent description of the "Scores" virus and its operation and the steps necessary to eradicate it using ResEdit or KillScores.

New Virus Info: This download from MacNet describes a then-newer strain of nVIR (INIT 29) and its characteristics. This is particularly useful for modifying anti-virus utility programs that support user input search characteristics.

nVIR Assassin *f*: **Assassin:** By Pete Gontier. Scans volumes for the nVIR virus and destroys it. **nVIR Assassin docs (TEXT)** describes what Assassin does and **nVIR description** tells you about the technical characteristics of the nVIR virus. *Be forewarned, if you have Smart Alarms installed in your System (which has an INIT 32 resource) it will be eradicated also because nVIR Assassin thinks that all INIT 32s are nVIR resources. Other programs may also install INIT 32s in the System; make backups first since nVIR Assassin does not ask before destroying what it believes to be an infecting resource.*

nVIR Vaccination: By Anon. Examines one selected file at a time for the nVIR virus and eradicates it.

QuickScores! DA *f*: **QuickScores! DA:** By

Anthony M. Tuorto. This DA provides a fast and efficient way to check the current operating system file for the SCORES virus. QuickScores! examines only the system file for the virus because SCORES always attacks the system file first, after invading any disk. **QuickScores! Docs** is the documentation.

RWatcher ƒ (v1.0): **RWatcher**: By John Norstad. This is a virus detection INIT for protection against Scores and nVIR. RWatcher was written for non-MPW programmers needing limited virus protection but not willing to use Vaccine because Vaccine complains whenever an attempt is made to create a CODE resource. **User Doc** describes the program and its operation. **Notes** describes the results of testing RWatcher against Scores and two different strains of nVIR. **RLIS Template, RWatcher.a**, and **ShowInit.a** are a ResEdit template and source code provided for the programmer.

Sniffer ƒ (v1.0b1): **Sniffer:** Scans selected drives or folders for any INIT files and creates a text file of what it has found. **Sniffer Docs** describes what Sniffer does and how to interpret the text file.

ViruSTAK: By Joe Zobkin. This is another tutorial on the spread and control of viruses. It is very good but it does not have the quality or quantity of information of Virus Encyclopedia. ViruSTAK covers the Scores and nVIR viruses and six of the anti-virus utilities. (Requires HyperCard in order to use this stack.)

Disk #16.07B — SU 7
System Utilities

Blesser: By Dave McGary. Permits selection of a specific system folder to use if you have to keep more than one system folder on a disk.

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

DES 2.2 ƒ: **DES 2.2**. By John P. Powers. Encrypt those sensitive files into seemingly random bytes, safe from prying eyes. Decrypt them with the proper password. DES stands for Data Encryption Standard of the National Institute of Standards and Technology (previously National Bureau of Standards). **DES 2.2 Documentation** is the MacWrite documentation. ***Shareware – $15.***

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

FileList 1.2 ƒ: **FileList 1.2**. This disk cataloging program displays files or volume information in user selected sort order and can also export the data to other databases or word processors. **FileList.KEY** is a supporting file. **FileList.DES** is the brief text file documentation.

Floppy Fixer 1.0 ƒ: **Floppy Fixer 1.0**. By Frank Beatrous. Recovers files from damaged floppy disks if the data in the files and file tags is intact. Requires two disk drives (one of which may be a hard disk). **Floppy Fixer Docs** is the TeachText documentation. ***Contribution of $20 to Lupus Foundation of America is requested.***

Launcher™ ƒ (v3.2): **Launcher™**. By Bill Steinberg. Think of Launcher as a magic button. Double click on this magic button and you're instantly in your favorite application. Your favorite document will be open too, if you want. Now think of a dozen or two of these magic buttons, each one set to put you in a different application or document, instantly. You can put these magic buttons anywhere you like: right on the desktop, in groups in an open window (or both, or neither!). **Launcher™ Doc (MacWrite)** is the documentation.

Mug Shot ƒ (v1.0): **Mug Shot:** By James K. Miles. Creates a text file of information about the Mac that may be pertinent to programmers and developers. This includes CPU and FPP types, the keyboard type, the system version number, the Apple Talk version (if running), a list of desk accessories, total memory installed, and a list of cdevs (control panel devices), INITs (programs that run at start-up time), and FKeys (Command-Shift-#). **_Rap Sheet_ (Sample)** and **_Rap Sheet_** are sample and supporting files respectively. **Mug Shot Notes** is the Word documentation.

Multi-Launch ƒ: **Multi-Launch**. By James G. Stout. Multi-Launch allows quick and easy launch your favorite applications and documents - without having to dig through Folder after Folder. Multi-Launch permits definition of a 'pop-up menu' of your favorite applications (up to 25 of them) and for each application, you may define a 'pop-up menu' of documents to go along with that application. **About Multi-Launch** is the MacWrite documentation.

MultiMeter ƒ: **MultiMeter**. By Jason Cook. Analyzes programs to determine how well programs run under MultiFinder. **MultiMeter Data** is a supporting file.

myPageSetup 1.1: By D. G. Gilbert. Allows you to choose and save your own default settings for the Apple printer drivers (ImageWriter and LaserWriter) Page Setup and Print dialog boxes. You can change paper sizes for the ImageWriter dialogs.

NavCom ƒ: **NavCom**. Harry R. Chesley. A simple MultiFinder background application intended to provide interesting ambience to a Mac screen by giving the illusion that a lot of things are going on. NavCom creates small, 32x32 pixel windows, up to 30 of them, that randomly change contents. As the author notes "NavCom has no redeeming social value that I can detect. However, just to prove that nothing is totally worthless, here are some uses for it: making computer-naive people think your system is incredibly advanced and sophisticated; giving people a taste of the future, when agents and other autonomous processes are constantly running around doing things behind your back; justifying that color monitor you bought but don't have any applications that use." **About NavCom** is the MacWrite documentation.

Newer ƒ (v1.0b1): **Newer**. By George Touchstone. A backup and restore program that copies files and folders from a folder on your working disk to an external disk or from the external disk back to your working disk. It preserves full folder structure on the backup external disk, i.e.,., the files on the copy disk are accessible by the finder and will be found in the same folders they are in on the original disk. If a copy of the file already exists, it will be copied over only if the file being copied is newer than the copy to be overwritten. **mini Newer Doc** and **Newer 1.0b1 Release Notes** are the Word text documentation. ***Shareware – $25.***

Quick Format! 4.3.0 ƒ: **Quick Format! 4.3.0**. By Michael Conrad. Like Fast Formatter, permits you to initialize disks at the quickly and control how the disk is initialized by permitting you to select the volume name and disk size once at the beginning instead of once for each disk. Demo version has erase, rename volume, set vol-

ume name (other), verify disks and external drive capabilities disabled. **Quick Format! Doc {MW}** is the MacWrite documentation. ***Demoware – $12 for password, $15 for disk.***

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

SCSI Evaluator 1.00: By William A. Long. Tests the performance of any Small Computer System Interface (SCSI) device. Tests include read and write seek times and data transfer (Kbits/sec.) rate. Note the author's caution "Joy riding with SCSI Evaluator can be dangerous!" ***Shareware – $20.***

Index to Advertisers

Ameritel ..... Cover 3
Award ..... Cover 3
Carver 73
Clinton 1
Computer Age 62-63
Darby 15
Data Conversion 58
Desktop Pub Ctr. ..... Cover 4
Galaxy Graphics 82
Gestalt 6
GS Software 46
HighLighted Data 25,26,80
Kids Inc. 61
Ken Gordon Associates 62
Laser's Resource 44
MacCorner ..... Cover 2
MacInOffice 34-35
MacSource 83
MacTemps 19
MacUpgrades 43
MidAtlantic Telesis 28
Multisoft Resources 65
Operant Systems 22
PCResources 36
PLS, Inc. 61
Rent-A-Computer 67
Satellite Scientific 36
Software Ventures 64
Sunrise 46
Symantec Corporation 5
Technical Sales & Service 58
TeleNet 86
Tempest Products 8

Disk #16.08B — SU 8

System Utilities

RapidUp 1.1a *f*: **RapidUp 1.1a**. By Dale Semchishen. A fast backup program for Mac hard disks; data is written to the floppy at almost one Megabyte per minute. Provides volume, folder and incremental (files changed since last backup) capability. Capability to exclude system folder and or files, applications and invisible files. The backup program is included but you get a floppy of the restore program only after you send in the shareware fee. **Rapid-Up 1.1 Manual (MacWrt)** and **Rapid-Up 1.1 Manual (Word 3.0)** are the documentation. ***Shareware – $29.***

SCSI Identifier *f*: **SCSI Identifier**. By Laurie Gill, Dantz Software Development (DiskFit™ and Retrospect™). Scans your SCSI bus and gives a short description of any devices that respond that it knows about. Useful if you want to know the manufacturer of the drive mechanism in a storage device. **SCSI ID Docs** is the TeachText documentation.

Set Clock 2.0: By Jim Leitch. Synchronize your Mac to within one second with a 10 second call to Toronto, Canada or Chesapeake, Virginia.

Snap™ 2.1 *f*: **Snap™ 2.1**. By Mike Hewett and Vaughan Johnson, Knowledge Source, Inc. When used under MultiFinder, allows you to take a snapshot of a rectangular portion of the Macintosh™ screen and save it in a window for later use. The snapshot can be inverted, moved, saved as a PICT file, copied to the Clipboard, printed, or just left hanging around on-screen for reference. Handles color, snapshots on or across multiple monitors, and multiple snapshots. **Read Me First-...** is the text documentation. ***Shareware – $17.***

Speedometer *f*: **Speedometer**. By Scott Berfield. A system information and performance testing program for the Macintosh family of computers. Various tests are available, the central one of which is designed to give a Performance Rating (PR) for the system as a whole. Intended to help you understand and tune the performance of your computer, and also to give some method of comparing different systems. **SpeedoMan.wd** and **SpeedoMan.TT** are the Word and Teach Text documentation respectively. ***Shareware – $25.***

System Switcher: By Keisuke Hara, Canon. Permits you to easily search for and switch to systems on other mounted disks.

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

Take Off *f* (v3.0.4): **Take Off**. By Jim Richardson. Allow the selection of either Finder or MultiFinder as the desktop display application and the launching of any selected application. Includes password protection at startup. **"Take Off" Documentation** is the MacWrite documentation. ***Shareware – $3.50 and a disk or $5.***

TextPrint *f*: **TextPrint**. By Gerald Baron. An ASCII Text file lister for a Grappler driving a 9 pin parallel Epson compatible dot matrix printer. **TextPrint.Doc** is the text documentation.

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

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

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

WhereSIT *f* (v1.2): **WhereSIT**. By Robert S. T. Gibson. Allows you to search for a Stuffed file, an uncompressed file, or both. Includes pattern matching "grep" searches. **WSAdd1.2.wd4** is the WORD documentation.

Apple II Disks

DOS 3.3
41 IAC 25 Mach.Lang. Util.
42 One Key DOS***
43 IAC 29 Utilities H
44 Utilities I
45 Diversi-Copy***
46 French Vocab. Tutorial
47 Tic-Tac-Toe in French
48 Boot for l'Hote
49 l'Hote Story
50 l'Hote Quiz
51 French Poetry Tutorial
52 Apollinaire Biography
53 Albert Camus Interview
54 Tic-Tac-Toe in Spanish
55 Rafel-boot
56 Rafel
57 Rafel Quiz
58 Matute
59 Lo Fatal
70 Business/Math/Statistics
71 Music
72 Keyboard Games
73 Text Adventure Games
74 Paddle Games
75 Color Graphics for Fun
76 Education
77 Utilities
90 Spreadsheet C Genl.Bus.
91 Spreadsheet D Investment
92 Spreadsheet E Bus. Recd.
93 VisiPlot & VisiTrend
94 CALCULINK***
95 Spreadsheet F: Coin Collect.
100 Utilities A
101 Utilities B
102 Games A
104 Business A
106 Science Engineering
107 Games B
108 IAC 10(Graphics)
109 IAC 11(Applesoft Tutorial)
110 Personal/Education
111 Games C
112 Utilities C
113 Business B
115 IAC 12/13 Misc.
116 IAC 14 MicromodemII
117 Picture Packer
118 Utilities D
119 IAC 15 Misc.
120 IAC 16 Misc.
121 WAPABBS 1.1 Doc**
122 IAC 17 Misc.
123 French Vocabulary
124 Utilities E
125 IAC 18 Misc.
126 Sights and Sounds
127 Math/Science
128 Games D
129 GLAQ
130 Disversi-DOS***
131 Personal/Educ. 2
132 IAC 19 - Utilities F
133 IAC 20 - Pascal & DOS 3.3
134 New Members Disk
135 WAPABBS 1.1 Disk 1**
136 WAPABBS 1.1 Disk 2**
137 IAC 21 Spreadsheet A
138 IAC 23 Utilities G
139 IAC 24 Education 3
140 Education 4
141 Special Data Bases
142 IAC 28 Pinball Games
143 Sports
144 IAC 27 Applesoft Prog.
145 Apple Logo Tool Kit
146 Logo Documentation
147 Apple Logo Sample Prog.
150 EDSIG1 (Elem. Math)
151 1983 Tax Template
152 IAC 31 Miscellaneous
153 Investments A
154 Investments B
155 IAC 33 Miscellaneous
156 IAC 35 Applesoft-AW//e
157 IAC 36 Arcade Games
158 Apple Logo Programs
159 Recipe Files
160 Utilities & Games
161 Wizard Worker
162 Games E
163 Graphs and Displays
164 Games F
165 Happy Holidays
166 Charts and Graphs
167 IAC 40 - Pilot Lang.
168 IAC 41&47-/AW Util.
169 Hayes Term.Prog.***
170 Love's Follies (Util.)
171 Cat-Graphix
172 Print Shop Graphics
173 Riley's Pers. Instrum..
174 Imageworks
175 No Name
500 Master Catalog Listing
501 Utilities: Beginner's Choice
502 Utilities: Intermediate Users
503 D-Comm***
504 Database***
505 Reading Fun
506 Astronomy Programs
507 Griffith Observatory
508 Educational Games G
509 Educational Games H
510 Education - Math
511 DOS 3.3 System Master
512 DOS 3.3 Tutorial

Eamon Series
180 Dungeon Designer
181 Beginners Cave
*182 Lair of Minotaur
*183 Cave of the Mind
*184 Zyphur Riverventure
*185 Castle of Doom
*186 Death Star
*187 Devil's Tomb
*188 Caves of Treasure Island
*189 Furioso
*190 The Magic Kingdom
*191 The Tomb of Molinar
*192 Lost Island of Apple
*193 Abductor's Quarters
*194 Quest for Trezore
*195 Underground City
*196 Merlin's Castle
*197 Horgrath Castle
*198 Deathtrap
*199 The Black Death
*200 The Temple of Ngurct
*201 Black Mountain
*202 Nuclear Nightmare
*203 Feast of Carroll
*204 The Master's Dungeon
*205 The Crystal Mountain
*206 The Lost Adventure
*207 The Manxome Foe
*208 The Gauntlet
*209 Caverns of Langst
*210 Future Quest
*211 House of Secrets
*212 Sewers of Chicago
*213 Slave Pits of Kzorland
*214 Alternate Begin. Cave
*215 Lifequest
*216 Swordquest
*217 Priest of Xim!
*218 Heros Castle
*220 Utility II
*221 Utility III
*223 Temple of the Undead
*224 Quest for Holy Grail
*225 Caves of Mondamen
*226 Orb of Polaris
*227 Death's Gateway
*228 Escape From Orc's Lair
*229 City in the Clouds

Pascal (See also 133)
300 PIG0: ATTACH 1.1/BIOS
301 PIG1:
302 PIG2:
303 PIG3:
304 PIG4:
305 PIG5:
306 PIG6:
307 PIG7:
308 PIG8:
309 PIG9:
310 PIG10:
311 PIG11:
312 PIG12:
313 PIG13: Guerrilla Guide
314 PIG14:
(PIG0:,PIG2:,PIG4:, and PIG11: are reissues)

CP/M
401 Master Catalog
402 Utilities 1
403 Communications
404 Utilities 2
405 Utilities 3
406 ZCPR2 Install
407 ZCPR2 Documentation
408 ZCPR2 Utilities
409 Modem 730
410 Essential Utilities
411 Text Editor
412 Spreadsheet
413 MDM740AB (SSC&Comm)
414 MDM740CD (7710 & A-Cat.)
415 Orig. 350 Pt. Adventure
416 Kermit Source Code
417 Kermit Documentation
418 Kermit Running Code
419 Utilities: Z83, REZ, VDE
420 Small C Compiler

Forth
700 Assembler/Disassembler
701 Full Screen Editor
702 GoForth Tutorial
703 Fig-Forth
704 Floating Point Arithmetic

ProDOS Volumes
802 Utilities (A)
803 Filecabinet
804 Shareware
806 ZAP
807 Imageworks
808 Comm-Term
810 Haunted House
811 Adventures Disk
812 Toddlers and Kids Game Room
813 TAWUG-1
814 TAWUG-2
815 TAWUG-3
816 TAWUG-4
817 Telecom
818 AppleWorks Tax Template IRS 1987***

Apple IIgs
3 1/2" DISKS

2001 Utilities & Pictures A
2002 Demo Disk A
2003 Freeterm
2004 Slide Show I
2005 Demo Source Code 1
2006 Demo Source Code 2
2007 M16 Courses
2008 Odd Bits I
2009 GS Fonts I
2010 GS Fonts II
2011 GS Fonts III
2012 AppleWorks Tax Template IRS 1988***
2013 Odd Bits II
2014 Sounds I
2015 Sounds II Nostalgia
2016 Slide Show II
2017 Slide Show III
2018 Mean 18 Courses
2020
2021
2022
IIGS Systems Disk

Apple III Disks

WAP /// SIG PD LIBRARY
1000 WAP /// SIG PD Catalog
1001 Games 1
1002 Basic Utilities 1
1003 Footnote ///
1004 System Utilities & Data Disk
1005 New Member Disk
1006 Word Processing and WPL
1007 Games for Kids
1008 The Best of MAUG
1009 The Best of the Source
1010 The Best of TAU
1011 D3.Backup
1012 Sketchpad and Slideshow
1013 A3 Diagnostics
1014 Basic Boot Disk
1015 Best of ///s Company
1016 AppleCon
1017 Pohlman Disk 1
1018 Pohlman Disk 2
1019 Pohlman Disk 3
1020 Pohlman Disk 4
1021 Pohlman Disk 5
1022 Basic XT and Basic Utilities
1023 The Retriever
1024 Power Print ///
1025 Disk Window ///
1026 Source Window and Data Window
1027 Power Cat and Basic XRF
1028 ASCIDIF by Bloom
1029 Ink Well Manual
1030 Ink Well
1031 Basic Extension
1032 TerminALL Manual
1033 TerminALL
1034 Power Keys DM+
1035 Best of Bloom
1036 Ram+3/Two-N-Fro /// 128K
1037 CustomFONT Manual
1038 CustomFONT
1039 Fonts Disk One
1040 Ottalini Articles: Disk 1
1041 Capt'n Magneto
1042 GUCSPAR by Bloom
1043 Apple // Emulation: Disk 1
1044 Apple // Emulation: Disk 2
1045 Disk Maker/AppleSeed
1046 File Cabinet/Sort Directory
1047 Phase /// Conference Plus!
1048 Mail List Manager Utilities by Bloom
1049 Mail List Manager Utilities by Bloom
1050 Mail List Manager Utilities by Bloom
1051 Basic GTO
1052 SOS Drivers
1053 Contributions Disk #1
1054 Pascal Menu.Maker
1055 Best of ATUNC
1056 Programmers Power Tools
1057 Best of ///s Company: Disk 2
1058 Ottalini Articles : Disk 2
1059 Ottalini Articles : Disk 3
1060 3EZP/AW Business Templates
1061 Contributions Disk #2
1062 Graphics Disk #1
1063 Telecommunications Disk #1
1064 Telecommunications Disk #2
1065 Telecommunications Disk #3
1066 Kermit ///
1067 XMODEM ///

Footnotes

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

DISK LIBRARY

Classified Ads

HELP WANTED
Secretary
Bethesda (2 blocks from Metro) computer software consultant looking for responsible, flexible secretary who enjoys a busy, fast paced environment. Must be proficient in word processing software, type 80+ wpm, possess excellent communication and organization skills and be committed to quality products. You will enjoy excellent company benefits, including 401K plan. Call Mark at 656-4030.

HELP WANTED
Macintosh Trainers
OneOnOne Computer Training is looking for F/T and P/T freelance trainers. Send your resume of qualifications and software programs taught to: 7754 Brandeis Way, Springfield, VA 22153 or call 644-5726.

HELP WANTED
WORD PROCESSOR/SECRETARY
Architectural Design Firm has opening for person with min. 3 yrs. secretarial experience. Macintosh experience a must! Microsoft Word, Pagemaker experience a plus. Send resume ASAP to:
FSI Design Group, Inc.
200 Prospect Square
Ft. Washington, MD 20744
Attn: Katerine
(302) 292-0200

HELP WANTED
Visual Information Specialist Medical and Scientific Work
Organized, Skilled in Communication, Aesthetic Judgment, Strong Interpersonal and Keyboard Skills?
Call Edward N. Squire, MD 576-1853 or 576-1849

HELP WANTED
ADMINISTRATIVE ASSISTANT
Washington Apple Pi, Ltd. business office is looking for a bright enthusiastic individual to assist with broad range of office functions. Must have good phone skills and enthusiastic attitude. Duties include: answering phone, data entry, mail processing, advertising coordination. Knowledge of Apple II and/or Mac is a plus. Some evening and weekend work required. Flexible hours.
If you enjoy hard work and are looking for an exciting and interesting atmosphere where you can learn more about your computer, please contact Nancy at 301/654-8061 or send resume to:
Washington Apple Pi, Ltd.
7910 Woodmont Avenue, Suite 910
Bethesda, MD 20814
We are an equal opportunity employer.

Looking to upgrade? A donation of old computers to Dance Place, a nonprofit organization, can give you a tax-deduction for close to the full value of the computer (preferably Macintosh sustems). Call Cathy at 659-3000

The Chelsea School, a nonprofit secondary school program for learning disabled students in Silver Spring, needs Apple II's, Macs and Imagewriters for programs which reinforce math and reading skills, word processing and graphic abilities. Please contact Lauretta Farrell at 585-1430.

FEEDBACK WANTED
Is anyone out there using an HP DeskJet with an Apple II? I'd like to chat with you about your experiences. Please call Phil Shapiro, (202) 686-5465.

WANTED
Apple IIE (enhanced), Memory card, 800K drive for IIE with controller card. Tom Davenport, (703) 592-3701 9am-6pm.

WANTED
MacHacker, help us get creative, work smart. Work flex part-time (even nights and weekends if you want) to help 18 eager, capable but inexperienced users in public television association on Dupont Circle with 18 Mac network, VAX fileserver. Word, Excel, Double Helix, Pagemaker, Alisashare, Ethernet and Appletalk. Call Darlene Bruton 887-1700.

WANTED
Crosstalk or other comm. software that will run on IIgs with App. Eng. CP/M Bd. (CP/AM 5.1). Similar to Microsoft Softcard CP/M. Call Scott Birdsong (O) 529-1700, (H) 776-9363

FOR SALE
1.5 Meg AE GSRAM PLUS memory expansion board: $280. Call York at (202) 647-1140 day, (703) 759-4293 eve.

FOR SALE
Latest version Appleworks GS with all documentation $100. Okidata Microline 83A (wide carriage) dot matrix printer $50. Phone Manny Tinari (301) 262-9738.

FOR SALE
Macintosh II, 4 Megs RAM, 40 Meg Hard Drive with Extended Keyboard, Apple Color Monitor, Extended Color Card, $5,000. Also: LaserWriter IINT, New in box, $3,300. Call Greg at (301) 652-8789.

FOR SALE
Apple III Thermal Printer, $25, Apple III software, Call S. Cohen
(301) 774-9182

FOR SALE
1 Mac+ keyboard $50
1 Std ADB keyboard $65
1 Supra 2400 modem w/cable $100
256K SIMMS (II& SE to 2 megs) $199.set
1 Meg SIMMS (not DIPs 100ns) $150.ea.
Call (703) 590-9324 Woodbridge

FOR SALE
SE 2.5m/30mHD, Std KB, Tote Bag; $2,500 Joe Morey 727-6460 days

FOR SALE
LQ PRINTER
Comrex IV32cps, cut sht feeder, serial cable incl, almost new, $830 newyours for $450 at 448-0578

FOR SALE
Mac Enhance, 2 MB memory, 800K internal drive, SCSI, numeric keypad. SuperMac XP20 DataFrame hard disk. $1100, W. Rivers, (703) 45-6463.

FOR SALE
Hayes External 1200 baud modem and Apple SCRIBE printer used only 4 hours. $125 or best offer for each. Call Tom (301) 593-9683 after 7:00 P.M. & weekends

FOR SALE
Mac IICX with 4MB RAM and 80 MB hard disk, Macintosh Portrait Display and gray scale video card. Includes keyboard, mouse, all cables, disks, packaging, etc. Mint condition, only used for 3 weeks! All for $5,900 (List price is $9429). Call (202) 543-0095.

FOR SALE
Mac SE with extended keyboard, two 800K disk drives, 20 MB internal, mouse, and software. Call 544-3769.

FOR SALE
Full Impact spreadsheet (new) $75.00. Call Steve at 270-9464

FOR SALE
IBM Correcting Selectric II typewriter, 13" carriage, blue, $200; typewriter stand, folddown wings, walnut, locking rollers, $50; Sanyo transcribing machine, standard cassette size, with foot control pedal and earphones, $200. Call Cynthia, (301) 565-3951, day or evening until 9:30 pm.

FOR SALE
Miicrosoft Works, IBM or PC, version 1.05, unused $90. 262-5332

FOR SALE
Business Laser Printer
General Computer's PostScript BLP, only 4100 copies, great contrasts, fast. Comes with all documentation, cables and Talknetwork cables. Eight months old, like new. Must sell. $2,800/best offer. Will Packard (202) 462-3511 days.

FOR SALE
DaynaFile Dual Floppy Disk Drive
Reads and writes DOS files for the Macintosh. Two 51/4" drives for 360K and 1.2M DOS formatted disks. Comes with all cables and original documentation, plus excellent translation software. Eight months old, like new. $750/best offer. Will Packard (202) 462-3511 days.

FOR SALE:
PowerPoint 2.0 - $125, MORE II (shrink wrapped), $195, Call Lynn, (301) 845-2651 evenings before 10:30 PM.

FOR SALE

ImageWriter II $375 and new 40 MB Sider D4A $525.00. Call Rick Folea at (703) 818-0252.

FOR SALE

Microsoft Word 4.0 (unopened upgrade) $175
Call C. Perry, (202) 333-7821

FOR SALE
1200 Baud Apple Modem. Mint condition. Never used. Best offer.
Call 537-0775.

FOR SALE
FullWrite Professional,V.1.1 unopened. List $395 FIRM $150 (Better even than Egghead) (Requires 800K disk and Hard Disk, 1 MB RAM Mac Plus, SE, II WYSIWYG, 100,000 word spelling checker with thesaurus. Bezier curves and powerful graphics manipulation for Page Layout. Import data from dBASE, Word, MacWrite, Advantage II, Sam Knutson (301) 498-8411

Mac Disks

Anti-Virus Utilities
- ____ 3 disk set
- ____ 1.01A - AV 1
- ____ 1.02A - AV 2
- ____ 1.03 - AV 3

Desk Accessories
- ____ 10 disk set
- ____ 2.01B - DAs 1
- ____ 2.02B - DAs 2
- ____ 2.03B - DAs 3
- ____ 2.04B - DAs 4
- ____ 2.05B - DAs 5
- ____ 2.06B - DAs 6
- ____ 2.07B - DAs 7
- ____ 2.08B - DAs 8
- ____ 2.09B - DAs 9
- ____ 2.10B - DAs 10

FKeys (Function Keys)
- ____ 2 disk set
- ____ 4.01 - FKs 1 •
- ____ 4.02 - FKs 2

ImageWriter Fonts
- ____ 15 disk set
- ____ 5.01 - IW 1
- ____ 5.02 - IW 2
- ____ 5.03 - IW 3
- ____ 5.04 - IW 4
- ____ 5.05 - IW 5
- ____ 5.06 - IW 6
- ____ 5.07 - IW 7
- ____ 5.08 - IW 8
- ____ 5.09 - IW 9
- ____ 5.10 - IW 10
- ____ 5.11 - IW 11
- ____ 5.12 - IW 12
- ____ 5.13 - IW 13
- ____ 5.14 - IW 14
- ____ 5.15 - IW 15

LaserWriter Fonts
- ____ 3 disk set
- ____ 6.01 - LW 1
- ____ 6.02 - LW 2
- ____ 6.03 - LW 3

Paintings (MacPaint)
- ____ 5 disk set
- ____ 11.01 - P 1
- ____ 11.02 - P 2
- ____ 11.03 - P 3
- ____ 11.04 - P 4
- ____ 11.05 - P 5

Digitized Sounds
- ____ 31 disk set
- ____ 12.01 - S 1
- ____ 12.02 - S 2
- ____ 12.03 - S 3
- ____ 12.04 - S 4
- ____ 12.05 - S 5
- ____ 12.06 - S 6
- ____ 12.07 - S 7
- ____ 12.08 - S 8
- ____ 12.09 - S 9
- ____ 12.10 - S 10
- ____ 12.11 - S 11
- ____ 12.12 - S 12
- ____ 12.13 - S 13
- ____ 12.14 - S 14
- ____ 12.15 - S 15
- ____ 12.16 - S 16
- ____ 12.17 - S 17
- ____ 12.18 - S 18
- ____ 12.19 - S 19
- ____ 12.20 - S 20
- ____ 12.21 - S 21
- ____ 12.22 - S 22
- ____ 12.23 - S 23
- ____ 12.24 - S 24
- ____ 12.25 - S 25
- ____ 12.26 - S 26
- ____ 12.27 - S 27
- ____ 12.28 - S 28
- ____ 12.29 - S 29
- ____ 12.30 - S 30
- ____ 12.31 - S 31

Telecommunications
- ____ 8 disk set
- ____ 13.01 - T 1
- ____ 13.02 - T 2
- ____ 13.03 - T 3
- ____ 13.04 - T 4
- ____ 13.05 - T 5
- ____ 13.06 - T 6
- ____ 13.07 - T 7
- ____ 13.08 - T 8

Programmer/Hacker Utils
- ____ 14.01 - PH 1

Miscellaneous Utilities
- ____ 13 disk set
- ____ 15.01 - MU 1
- ____ 15.02 - MU 2
- ____ 15.03 - MU 3
- ____ 15.04 - MU 4
- ____ 15.05 - MU 5
- ____ 15.06 - MU 6
- ____ 15.07 - MU 7
- ____ 15.08 - MU 8
- ____ 15.09 - MU 9
- ____ 15.10 - MU 10
- ____ 15.11 - MU 11
- ____ 15.12 - MU 12
- ____ 15.13 - MU 13

System Utilities
- ____ 8 disk set
- ____ 16.01B - SU 1
- ____ 16.02B - SU 2
- ____ 16.03B - SU 3
- ____ 16.04B - SU 4
- ____ 16.05B - SU 5
- ____ 16.06B - SU 6
- ____ 16.07B - SU 7
- ____ 16.08B - SU 8

Word Processing Utils
- ____ 3 disk set
- ____ 17.01 - WP 1
- ____ 17.02 - WP 2
- ____ 17.03 - WP 3

Adobe Screen Fonts
- ____ 14 disk set
- ____ 18.01 - AF 1
- ____ 18.02 - AF 2
- ____ 18.03 - AF 3
- ____ 18.04 - AF 4
- ____ 18.05 - AF 5
- ____ 18.06 - AF 6
- ____ 18.07 - AF 7
- ____ 18.08 - AF 8
- ____ 18.09 - AF 9
- ____ 18.10 - AF 10
- ____ 18.11 - AF 11
- ____ 18.12 - AF 12
- ____ 18.13 - AF 13
- ____ 18.14 - AF 14

HyperCard Stackware
- ____ 29 disk set
- ____ 19.01A - SW 1
- ____ 19.02A - SW 2
- ____ 19.03 - SW 3
- ____ 19.04 - SW 4
- ____ 19.05 - SW 5
- ____ 19.06 - SW 6
- ____ 19.07 - SW 7
- ____ 19.08 - SW 8
- ____ 19.09 - SW 9
- ____ 19.10 - SW 10
- ____ 19.11 - SW 11
- ____ 19.12 - SW 12
- ____ 19.13 - SW 13
- ____ 19.14 - SW 14
- ____ 19.15 - SW 15
- ____ 19.16 - SW 16
- ____ 19.17 - SW 17
- ____ 19.18 - SW 18
- ____ 19.19 - SW 19
- ____ 19.20 - SW 20
- ____ 19.21 - SW 21
- ____ 19.22 - SW 22
- ____ 19.23 - SW 23
- ____ 19.24 - SW 24
- ____ 19.25 - SW 25
- ____ 19.26 - SW 26
- ____ 19.27 - SW 27

HC Stackware (contd.)
- ____ 19.28 - SW 28
- ____ 19.29 - SW 29

Mac II Series
- ____ 14 disk set
- ____ 20.01 - M II 1
- ____ 20.02 - M II 2
- ____ 20.03 - M II 3
- ____ 20.04 - M II 4
- ____ 20.05A - M II 5
- ____ 20.05B - M II 5
- ____ 20.06 - M II 6
- ____ 20.07A - M II 7
- ____ 20.08 - M II 8
- ____ 20.09 - M II 9
- ____ 20.10 - M II 10
- ____ 20.11 - M II 11
- ____ 20.12 - M II 12
- ____ 20.13 - M II 13

HyperCard Externals
- ____ 4 disk set
- ____ 21.01 - HE 1
- ____ 21.02 - HE 2
- ____ 21.03 - HE 3
- ____ 21.04 - HE 4

System Software 6.0.3
- ____ SS.ST
- ____ SS.PT
- ____ SS.U1
- ____ SS.U2
- ____ SS.LW 6.0
- ____ SS.32 Bit QDraw

HyperCard 1.2.2
- ____ HC.01
- ____ HC.02

Serially Numbered
- ____ Disk 28.1 •
- ____ Disk 29 •
- ____ Disk 30 •
- ____ Disk 31.1 •
- ____ Disk 32 •
- ____ Disk 35 •
- ____ Disk 41 •
- ____ Disk 45 •
- ____ Disk 46 •
- ____ Disk 54 •
- ____ Disk 55 •
- ____ Disk 56 •
- ____ Disk 74 •
- ____ Disk 75 •
- ____ Disk 76 •
- ____ Disk 77 •
- ____ Disk 78 •
- ____ Disk 79 •
- ____ Disk 80 •
- ____ Disk 84 •
- ____ Disk 85 •
- ____ Disk 89 •
- ____ Disk 91 •
- ____ Disk 92 •
- ____ Disk 95 •
- ____ Disk 96 •
- ____ Disk 104 •
- ____ Disk 105 •
- ____ Disk 106 •
- ____ Disk 108 •
- ____ Disk 123 •
- ____ Disk 128 •
- ____ Disk 134 •
- ____ Disk 143 •
- ____ Disk 147
- ____ Disk 150 •
- ____ Disk 151 •
- ____ Disk 153

Other WAP disks
- ____
- ____
- ____
- ____
- ____
- ____

Disk Prices are $ 3.00 during MacWorld Expo. Special pricing is in effect from 8 August through 30 September only.

HyperCard Upgrade requires that you show us proof of purchase of HyperCard; any of original disk, first page of manual, receipt or previous HyperCard Upgrade disk.

Disks marked with a • are in 400K single side disk format; all others are 800K double side disk format.

Mail this form with your check to:
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Washington Apple Pi, Ltd.
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Bethesda, MD 20814

Are you a member of Washington Apple Pi, Ltd? Yes/No ___. If Yes, Membership Number _____.
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	TOTAL AMOUNT		_____

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Apple III SIG		
AV SIG (Arts & Video)		
CP/M SIG		
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Disk Library	■	
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EDSIG (Education)		
Excel SIG		
Federal SIG		
GameSIG		
HOTLINE	■	
HyperCard SIG		
Law SIG		
Mac Programmers SIG		
Music SIG		
NeXT SIG		
PIG (Pascal Programming)		
PI-SIG (Program Interface)		
Stock SIG		
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- ☐ Franklin
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- ☐ Mac 128
- ☐ Mac 512
- ☐ Mac 512 e
- ☐ Mac Plus
- ☐ Mac SE
- ☐ Mac SE/30
- ☐ Mac laptop
- ☐ Other Mac _____
- ☐
- ☐ LISA
- ☐ Mac II
- ☐ Mac IIx
- ☐ Mac II cx
- ☐ Other Mac II _____
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- ☐
- ☐
- ☐
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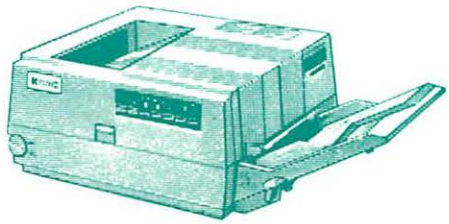

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