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# Washington Apple Pi

Volume 11 August 1989 Number 8

## Features

Macintosh Apple Apple

## Tutorials

## Hardware and Software Reviews

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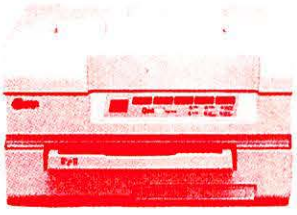

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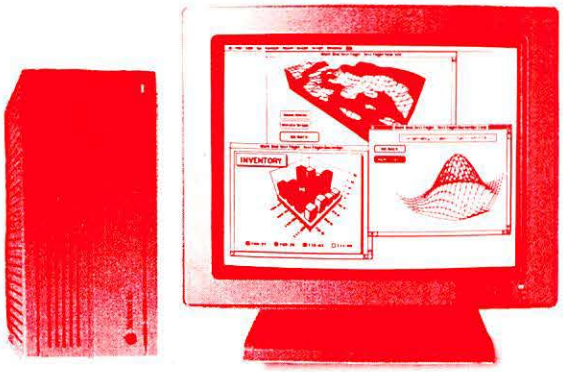

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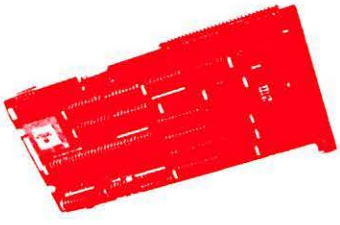

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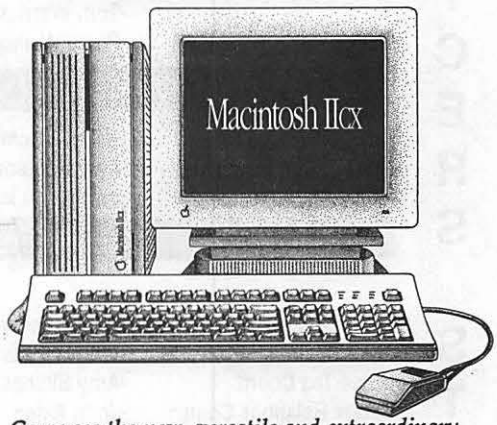


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*This issue of the WAP Journal has been created on a Macintosh IIcx, and printed on a LaserWriter IINT. The principal lzayout software used was PageMaker 3.09 (Aldus), and the word processing program was Microsoft Word 4.0.*

# Journal Deadlines

*Writers' submissions*
*October ..... September 4*
*November ..... October 2*
*Editors' submissions .....*
*October ..... September 11*
*November ..... October 9*
*Ad space reservations .....*
*October ..... September 6*
*November ..... October 11*
*Camera-ready ad copy .....*
*October ..... September 13*
*November ..... October 18*
*Distribution dates*
*October ..... September 23*
*November ..... October 28*

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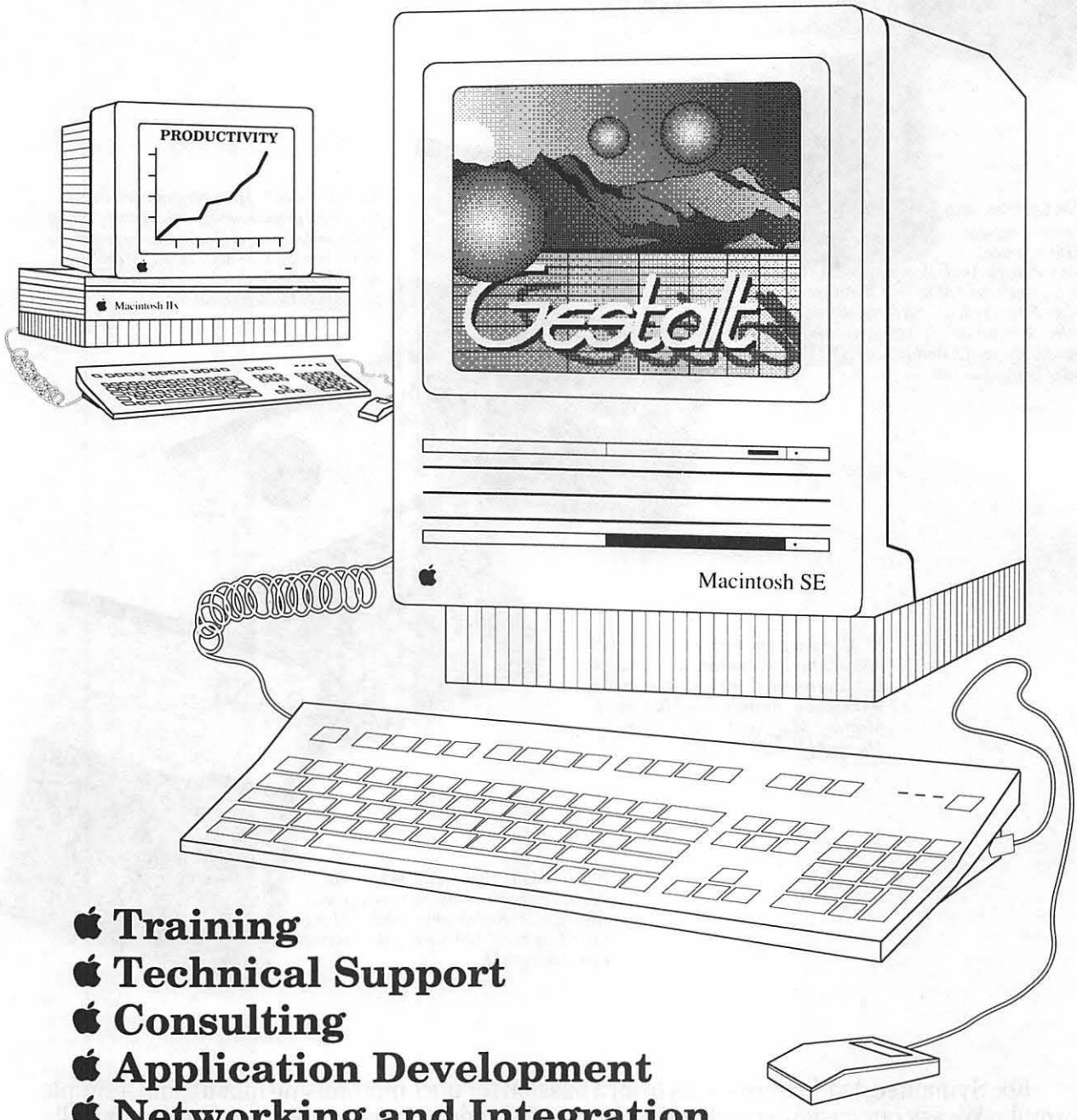


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It is, of course, not as simple as that. It never is. But it isn't real complicated, either. You don't have to be a member of a small in-group, complete with secret handshakes and rituals, as some have feared. Essentially, what we need to know is whether or not you can write balanced, readable reviews, and get them in on time to be useful to the membership of the club. An Author's Guide is available to all potential contributors to the Journal, detailing the conventions that we have adopted and laying out the kinds of information that we think other users will be interested in knowing about new programs.

If you want to become a regular software reviewer, probably the easiest way to begin is to...begin. Write a review of a program that you are comfortable with and let us have a look at it. Ideally, this would be a program that is reasonably new and that hasn't yet been reviewed in the Journal, because it will be readily available as press time approaches and holes begin to appear in the dummy for the next issue. This happens. But if that is not possible, don't assume that you are shut out—pick another program and tell us about it. Use graphics, such as screen shots, where they would be helpful or illustrative, and concentrate on passing along the kind of information that you wish you had in hand before buying such a program.

If the program deserves commendation, do it. If the program needs work, tell us. And if you hate it, tell us that too. Rumors abound about the editorial bias in national magazines that favors laudatory ads about programs published by advertisers. They may or may not be correct, but they certainly are not correct here. Just the facts, ma'am or sir, as the case may be.

## New Talent

Discerning readers will see a number of new faces, or at least bylines, in the Journal this month. Leaning unashamedly on friends, we have managed to winkle articles—perhaps even regular columns—out of several talented and articulate members who have lain dormant far too long, and whose insights should be useful and valuable.

These new contributors are all Macintosh owners, and so the Macintosh section of the Journal is larger than it has been in the past. Be assured, however, that we harbor no particular bias in that direction, and that we actively encourage those of you who use other computers to pick up the cudgels. Or gauntlets, as the case may be.

Our intention is, or should be, absolutely clear: to make the WAP Journal a publication that will better inform the membership of WAP and enhance their productivity (or fun, if it comes to that). If we are correct in believing that computers are here to stay, and that they will inevitably play a growing role in the development of the economic and social fabric of the world community, then it stands to reason that we need all the help we can get in increasing our ability to make these suckers do what we want them to.

If you don't find the articles here that you want to read, then help us find authors who will write those articles and, if necessary, help us browbeat them into picking up their...keyboards? Whatever.

We can't do it by ourselves, but we can surely do it with your help.

## Achtung! Minen!

Being the first kid on the block to have the latest and newest is always satisfying, but it is also not what you would call a risk-free occupation.

A case in point: we were able to pick up one of the first Macintosh IIcxs—that doesn't look right, but it is—in the area. And it was everything that we had hoped for: fast, light, responsive, powerful. It almost threatens to cure the Heartbreak of Psoriasis, or so the ads would have us believe.

What they didn't tell us is that the 80-megabyte hard disk drive that came with it seems to have serious problems—problems not restricted to this one unfortunate user. About two weeks ago, the drive just...disappeared from the screen. Nothing worked—rebooting, using SUM, saying rude things, walking widdershins around it while murmuring ancient Celtic curses. Zip.

Off it went to ComputerLand at Tysons (from everything we hear, one of the best service departments in the area). They poked it. Still zip. They had none in stock, because Apple doesn't stock them and won't even ship a replacement until they have the old one in hand. Seems bizarre, but that is policy. There just aren't enough around, and demand for the IIcx hasn't let up.

The problem came after the replacement arrived five days later. No real panic, because the deadlines were comfortably far away. Replacement installed, backups loaded—we ARE backing up regularly, aren't we, campers—and this issue of the Journal began to take shape.

And then the *new* drive did it again. One week later. Deadlines imminent. Panic. Frantic calls. Nervous prostrations. Rage. More calls to Apple—John Sculley, if we knew his number. The calls worked, and two days later a new

*Please turn to Page 74...*

WAP HOTLINE

Have a computer problem? Several club members have volunteered to help other club members.

### Guidelines for Hotline Use

- 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.
- Calls regarding commercial software packages should be limited to those you have purchased. Do not call about software for which you have no documentation.
- All telephone numbers are home numbers unless otherwise specified.
- When requests are made to return calls, long distance calls will be collect.

## Hotline Coordinator

Larry Feldman (202) 546-9556

## Apple II

**General**
Dave Harvey (703) 578-4621
John Wiegley after2:15 (703) 437-1808

**Accounting Packages**

**BPI Programs**
Jaxon Brown (301) 350-3283

**BPI & Howardsoft (Tax)**
Otis Greever (615) 638-1525

**Dollars & $ense**
Barry Fox (717) 652-2899

**Home Accountant**
Leon Raesly (301) 431-0853

**APPLE SSC**
Bernie Benson (301) 951-5294

**Apple Works**
Ken DeVito (703) 960-0787
Bob Martz (301) 795-5689
Ray Settle (301) 647-9192
Harry Erwin (703) 391-0295
Michael Osborn (301) 894-8903
Gary Hayman (301) 345-3230

**Apple Works Data Base**
Morgan Jopling (301) 261-3886

**Communications Packages**

**ASCII Express**
Dave Harvey (703) 578-4621

**ProTerm**
Alan Levy (703) 578-4621

**Talk Is Cheap/Pt. to Pt.**
Barry Fox (717) 652-2899

**DataBases**

**dBase II**
John Staples (703) 255-6955

**dBase II&III,Data Perfect**
Leon Raesly (301) 220-0717

**Profiler 3.0**
Barry Fox (717) 652-2899

**Dvorak Keyboard**
Ginny Spevak (202) 362-3887

**Hard Disk**

**CMC (not CMS)**
Barry Fox (717) 652-2899

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

**Corvus**
Leon Raesly (301) 220-0717

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

**Languages**

**Applesoft**
Louis Biggie (301) 967-3977
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**
Barry Fox (717) 652-2899

**Publish.It!**
Gary Hayman (301) 345-3230

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

**Word Handler**
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

**General**
Barry Fox (717) 652-2899

**General/PaintWorks+**
Paul Tarantino (703) 455-7670

**//e Upgrade**
Morgan Jopling (301) 261-3886

**APW**
Andy Gavin (703) 734-3049
Jim Frison (703) 525-9395

**Deluxe Paint II**
Rich Sanders (703) 450-4371

**GS BA SIC**
Barry Fox (717) 652-2899

**Multiscribe GS**
Ray Settle (301) 647-9192

**Telecommunications**
Dale Smith (301) 762-5158
Allan Levy (301) 340-7839

**TimeOut Series & Utilities: ProSel**
Chuck Ward bef. 9pm (703) 830-3720
Barry Fox (717) 652-2899

**VIP-Pro/Multibe**
Jim Frison (703) 525-9395

**816 Paint/Writ'rs Ch.El**
Andy Gavin (703) 734-3049

## 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

**Data Bases**
**Fourth Dimension**
Bob Pulgino (301) 474-0634

**FileMaker+**
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**
Jay Rohr (301) 655-0875

**PageMaker**
Eleanor Sontag (301) 251-0695

**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**
Holdger 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
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

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

**Sidekick**
Ray Hobbs (301) 490-7484

**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

**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 (30l) 431-0853

**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) 431-0853

**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 at 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 |

WAP HOTLINE

CALENDAR AND SIG NEWS

# AUGUST

**2 Wednesday**
7:30 PM dPub SIG ..... PEPCO
7:30 PM Mac Programmers ..... office

**3 Thursday**
7:00 PM Columbia Slice ..... Columbia
7:30 PM GameSIG ..... office

**7 Monday**
↔ Writers Deadline — September Issue
7:30 PM PI-SIG (Program Interface) ..... office

**9 Wednesday**
☎ Ad Space Reservations Deadline — September Issue
6:30 PM Board of Directors Meeting ..... office

**10 Thursday**
8:00 PM StockSIG ..... office

**12 Saturday**
9:30 AM Annapolis Slice ..... Anne Arundel Co.
9:30 AM Frederick Slice ..... Frederick
2:00 PM Music SIG ..... Call

**14 Monday**
↔ Editorial Deadline — September Issue

**16 Wednesday**
✉ Ad Copy Deadline — September Issue
7:00 PM WorksSIG ..... office
7:30 PM AVSIG ..... BCCHS
7:30 PM Excel SIG ..... office
7:30 PM Fed SIG ..... Call
7:30 PM HyperTalk SubSIG ..... Arlington

**17 Thursday**
8:00 PM PIG (Pascal Interest Group) ..... office

**23 Wednesday**
7:30 PM Apple III SIG ..... office

**24 Thursday**
7:30 PM Business SIG ..... office

**26 Saturday**
8:00 AM AppleWorks SIG (also at noon) USUHS
9:00 AM WAP General Meeting ..... USUHS
noon HyperCard SIG ..... USUHS
noon Telecomm SIG ..... USUHS

**28 Monday**
7:00 PM Apple IIgs SIG ..... McLean

## 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 a.m. 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. (August meeting at Dolley Madison, August 28.)

**Apple III SIG** 4th Wednesday; WAP office, 7:30 PM. (No meeting in August.)

**AVSIG** (arts and video) 3rd Wednesday; Bethesda–Chevy Chase HS 7:30 PM.

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

**Database SIG/4D** 2nd Thursday; Computer Factory, Bethesda, 7:30 PM.

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

*August*

| SU | M | 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 | | |

## Meeting Notices

**Excel SIG** 3d 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 Patnck 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** 2d Saturday; call Bill Bittle, 236-9898 for location and times.

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

**PIG** (Pascal Interest Group) 3rd Thursday; WAP office,8:00 PM.

**PI-SIG** (Programmer's Intcrface) 1st Monday; WAP office, 7:30 PM.

**StockSIG** 2d 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:~ PM.

*September*

| *SU* | *M* | *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* |

# 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 AVSIG ..... BCCHS
7:30 PM Excel SIG ..... office
7:30 PM Fed SIG ..... Call
7:30 PM HyperTalk SubSIG ..... Arlington

**21 Thursday**
8:00 PM PIG (Pascal Interest Group) ..... office

**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

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

CALENDAR AND SIG NEWS

# Power.

## Explore the power of microcomputers at America's top-rated* microcomputer show.

**Fed Micro '89**™
Federal Microcomputer Conference And Exposition

**September 6-7 · Washington, DC Convention Center**

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- Take advantage of the in-depth Fed Micro conference program. Attend as many as 40 educational sessions and how-to workshops on all the critical topics, including desktop presentations, CD ROM, desktop publishing, and decision support systems.
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**Plan now to attend Fed Micro '89** if you are a professional in business or government who manages, uses, purchases, or sets policy for the use of microcomputers.

## For information on how you can attend, call (800) 638-8510 or (703) 683-8500.

*According to an independent survey by Exhibit Surveys, Inc.

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# Directors' Corner

by David Morganstein

I'd like to begin by thanking everyone who participated in the WAP election process. The turnout was one of the biggest, with almost one in three members casting a vote. Particular thanks are due to Jonathan Hardis, Linda Van Zee and Charles Sicard, who formed the Elections Commission. They worked hard and spent many hours over several months carrying out the election process. Thanks to them for their hard work and diligence and to the volunteers who helped them count the ballots: Bruce Field, Marty Milrod and Dave and Nancy Harvey.

It is appropriate to give special thanks to the outgoing board members. It has been a difficult year for all WAP volunteers. To Bob Platt who served as President, Ray Hakim who served as Vice President for Apple ][, Peter Combes who served for many years as Secretary, and Lynn Trusal, Nancy Seferian and Cynthia Yockey, who served as Members at Large, we say "thank you." As well as serving as At-Large members, Lynn did an excellent job coordinating the Tutorials program. Nancy put in many hours as Editor for the last few issues of the Journal. A volunteer organization only works because of volunteers like you who are willing to spend the time needed to keep it going. Each of you contributed more than your share of time and energy for the WAP. Although this has not been a year of agreement and harmony, it was a year of questions and debate—healthy signs in any organization.

It's been four years since I had the pleasure of serving the WAP as president. I look forward to this next year with enthusiasm. The board you elected has a lot of strength. There are members of long-standing and known contributions as well as brand-new folks with a lot of talent and ideas. There are men and women, as well as enthusiasts about just about every computer Apple has manufactured. One thing we all seem to have in common is a great love for the WAP and a desire to see it grow stronger. My challenge will be to harness the potential of our organization and to try and get it working harmoniously, given some obvious and natural differences.

Among the first things I would like to see accomplished is a survey of our members. The board can only do its job when it knows what you want. If in the next few months you receive a questionnaire about the club's services, I hope you will take a few minutes to complete it and provide us with needed feedback on what you like and what you don't like about the way the WAP operates.

**Growth.** There has been some discussion of our growth and size. The New Member Handbook, distributed a little over a year ago in June 1988, said that we had 5,600 members at that time. According to Nancy Pochepko, our hard-working office manager, the number of members has ranged between 5,500-5,700 in the past few months. The fluctuation results from new members and non-renewals. While there has been substantial influx of new members, there have also been substantial non-renewals of about the same magnitude, an indication that some people are not getting what they want from the WAP.

However, this is a solid base of members. The suggestion has been raised that we should expand. No doubt there will be differing views and I hope you will add your comments to this discussion. As we reach a decision on what to do and how to do it, the critical challenge will remain: the continuation of a high level of satisfaction on the part of members.

What we need to prevent is a loss of members who feel they are not being well-served by the WAP, a situation we may currently be facing. If we decide to expand, we need to do it in a manner that maintains and even increases the support and benefits you receive from the WAP. You, the current membership, deserve the best the club can give you.

**Budget Meeting.** As is usual at this time of year, the Board is working on an annual budget. We want to know your views. Feel free to contact any board member with your thoughts and suggestions. There will be an open meeting held at the office to discuss the budget. As of this writing, that meeting is scheduled for the evening of Monday, August 7. Please check the TCS or call the office to confirm the time and date if you wish to attend.

As a part of the accounting process, I would like to see an annual listing in the Journal of all funds received by any WAP member for services rendered to the club. There has been some expression from a couple of members who wanted to see this information. I have spoken with most Board Members about this, including the Treasurer, and everyone is in agreement that this would be appropriate.

I have asked the Treasurer and Editor of the Journal to assist me in insuring that we return to a previously-followed accounting practice. All monies received by the WAP for services such as tutorials or for equipment should go through the office so that an audit trail can be maintained. If you read an ad or hear anyone suggesting that they are representing the WAP in an official capacity and are collecting monies on our behalf and are not part of the office staff, please contact me

Please see next page

# Election Returns

The results of the Spring elections are in and they point to a strong new direction for the club.The Election Commission (Jon Hardis, Chuck Sicard and Linda Van Zee) performed heroically, under circumstances that can only be described as trying. A summary of their report to the club follows:

Ballots went out to 5874 members. Of these, 1586 were returned. 88 were ruled illegal, mostly because they did not contain the member's enrollment number or were unsigned. The winning candidates for each office are indicated in **boldface**.

President

| | | |
|---|---|---|
| Number of votes cast | 1571 | |
| **Mr. David Morganstein** | 1098 | (74%) |
| Mr. Raymond C. Hobbs | 222 | (15%) |
| Mr. Robert C. Platt | 162 | (11%) |
| Other Write-in votes (total) | 1 | |

Vice President, Apple II

| | | |
|---|---|---|
| Number of votes cast | 1420 | |
| **Mr. Sam Knutson** | 810 | (61%) |
| Mr. Allan E. Levy | 518 | (39%) |
| Other Write-in votes (total) | 4 | |

Vice President, Macintosh

| | | |
|---|---|---|
| Number of votes cast | 1500 | |
| **Mr. Eric L. Rall** | 1015 | (72%) |
| Mr. Manny De Vera | 396 | (28%) |
| Other Write-in votes (total) | 1 | |

Treasurer

| | | |
|---|---|---|
| Number of votes cast | 1431 | |
| **Mr. Ed Myerson** | 950 | (71%) |
| Mr. Paul Browner | 393 | (29%) |

Secretary (all write-in)

| | | |
|---|---|---|
| Number of votes cast | 339 | |
| **Mr. Chris Bastian** | 114 | (45%) |
| Mr. Peter Combes | 16 | (6%) |
| Ms. Cynthia Yockey | 10 | (4%) |
| Mr. Ed Myerson | 9 | (4%) |
| Mr. Raymond F. Hobbs | 8 | (3%) |
| Mr. Robert C. Platt | 7 | (3%) |
| Other Write-in votes (total) | 87 | |

Director-at-Large

| | |
|---|---|
| **Mr. Thomas S. Warrick** | 971 |
| **Mr. Leon H. Raesly** | 969 |
| **Ms. Priscilla Myerson** | 919 |
| **Mr. David Weikert** | 896 |
| **Mr. Robert L. Shaffer** | 840 |
| **Mr. Richard Byrd** | 827 |
| **Ms. Barbara Garlock** | 781 |
| **Dr. Patricia Kirby** | 755 |
| **Mr. Gary E. Hayman** | 602 |
| **Mr. Thomas J. Piwowar** | 569 |
| Mr. Harvey Kaye | 504 |
| Mr. L. Dale Smith | 462 |
| Mr. David G. Ottalini | 445 |
| Mr. Bruce E. Jacobs | 408 |
| Mr. William J. C. Logan | 366 |
| Mr. Manny De Vera | 357 |
| Mr. Curtis B. Lauret | 47 |
| Other Write-in votes (total) | 75 |
| Illegal Votes: | |
| Mr. Chris Bastian, ineligible | 804 |
| Voted for too many candidates | 12 |

*Director's Corner (cont'd)*

or the office staff immediately. Insuring proper fiscal control of the club's funds is critical for many obvious reasons, not the least of which is our obtaining the much-discussed 501(c)3 status.

**Boston MacWorld.** Due to a "breakdown in communication," the club is only now gearing up to attend the Boston MacWorld. At this writing we don't know if the usually-offered booth is still available. Please check the TCS or contact the office or Eric Rall, who will be coordinating our participation in this usually very informative event. If we do have a booth, Eric will be enlisting volunteers to carry equipment there, to set up and run the booth and for take down and carry home duties. Your help would be appreciated.

**Use of SIG Membership Lists.** A few members have suggested that SIG membership lists have been used for purposes other than official WAP business. I would like to hear from members if indeed this is the case. If you have received mailings from individuals or organizations using an address which you believe to be your official WAP address, please call or write me a note. At this time, I have no evidence that such mailings have taken place. However, I do want to point out that the use of SIG membership lists by anyone for purposes other than WAP business is not appropriate until such time as the membership should decide otherwise.

**Volunteers Needed**

**Volunteer Co-ordinator.** I would like to reinstate the position of Volunteer Co-ordinator. Although this position was eliminated several months ago, it has served a useful purpose in the past. The WAP only functions because of the many hours contributed to it by its members. The co-ordinator is just another volunteer who keeps a list of willing members and the skills they have to offer. Sometimes this skill is no more than a strong back at the right time! If you would like to serve in this capacity, drop me a line or contact the office.

**Tutorials Co-ordinators Needed.** We would like to find two people to take responsibility for the WAP tutorials, one for Apple ][ courses and one for Mac courses. If you are interested, please let us know! While we are discussing it, what tutorials do you want to see offered? Also, can you teach tutorials, either elementary, introductory ones or program-specific detailed ones? If so, we want to hear from you.

**Membership Directory.** It has been several years since we put together a directory of members. We are looking for people who would like to help us to assemble such a publication.

# Minutes—WAP Directors' Meetings, May–June, 1989

by Dale Smith and Tom Warrick

***The following actions were taken at the May 31, 1989 Regular Meeting of the Board of Directors of Washington Apple Pi, Ltd.:***

1. At 6:35 p.m., Robert Platt gave his opinion that this was an illegal meeting and walked out. With 8 directors present (a quorum), the Board continued to do business. The Board inspected the damage to the office from Bob Platt's altercation with Lee Raesly.

2. L. Dale Smith was elected Secretary. He appointed Tom Warrick as his assistant. The Secretary's minutes of the meeting beginning at 6:30 are to be the official minutes.

3. No one from the Election Commission was able to attend, so their report was postponed.

4. The Board approved a proposed bylaws change presented at the May 10 meeting that empowered the Board to appoint all Officers of the Corporation who were not elected by the members. This affected the Director of Group Purchases (Rich Wasserstrom was elected), Head Librarian (Jim Little, who had been fired by Robert Platt the day before, was elected), and the Editor (see below).

5. The Board amended and approved a proposed bylaws change that gave the Board the power to elect its presiding officer.

6. The Board amended and approved a proposed bylaws change that clarified that the scope of the President's powers are subject to the control of the Board.

7. Three substantive changes to the draft minutes of the May 10 meeting were approved: The vote in favor of suspending the rules and not adjourning the meeting was 8-4, not 7-4 as in the draft; the motion to call a meeting of the Board on May 31 was a call for a Regular meeting pursuant to Bylaws Article VII, Section 6; and a subsequent paragraph's reference to a vote was to Ed Myerson's original motion, not to Bob Platt's amendment, which was not seconded. Approval of the minutes as a whole was tabled until the June 14 meeting. Harvey Kaye read a May 13 memo from Robert Platt to the Board saying that the May 31 meeting was to be a Regular Meeting of the Board. Only a few directors received this (and the draft minutes) from Bob, however.

8. After extensive discussion, the Board decided that the June Journal will be reprinted without (a) the materials that violated the Board's resolutions regarding keeping partisan material out of the June Journal and (b) the materials that the Editor published without the permission of the authors. Nancy Seferian will supervise. A copy of the original version will be made available to any member who requests it before Sept. 1, 1989, the copy to be sent to the member via first class mail at no cost to the member with an explanation to be written by the Secretary. The reprinted version will contain a brief notice written by the Secretary explaining what happened and how members can get a copy of the original version.

9. Tom Piwowar was removed as Editor for his actions in violation of the Board's resolutions in connection with the June Journal.

10. Nancy Seferian was elected Editor. The seat on the Board that became vacant upon Nancy's election was not filled.

11. The Board approved a resolution that office staff cannot be discharged without the advance approval of the Board.

12. The Board approved a commendation for Nancy Pochepko for her handling of the labels and original copies of the June Journal.

13. The Board established a Bylaws Committee consisting of Tom Warrick (chair), Harvey Kaye, Charles Calkins, Ed Myerson, and Peter Combes (if he is willing to serve) or Chris Bastian (if Peter is not willing). All other proposed bylaws changes were referred to the Committee for more work.

14. Pursuant to the Board's powers over the affairs of the Corporation and the bylaws amendment clarifying the Board's control over the functions of the president, the Board delegated the following duties to the following people:

Presiding officer at Board of Directors meetings—Harvey Kaye

Supervision of the office—Bob Shaffer

Presiding officer at Membership Meetings—Eric Rall

Supervision of SIGs and Slices—Bob Shaffer

Ambassador to Apple and other user groups—Ray Hakim & Eric Rall

Supervision of Officers—Reserved to the Board

Supervision of volunteers and agents—Nancy Seferian

Sign checks as permitted by the bylaws—The president (but expenditures must be authorized in writing by the Treasurer)

Making a report to the membership—"President's Corner" will become "Directors' Corner" and the authors will rotate

Call special meetings as permitted in the bylaws—The president.

15. The Board authorized steps to secure the computerized

membership database from anyone with access to the office. The Board authorized the hiring of security guards to protect office staff. Bob Shaffer instructed Nancy Pochepko to change the locks.

***At the June 14 meeting of the Washington Apple Pi Board of Directors, the Board:***

1. Confirmed (or elected, depending on one's view of the status of actions taken at previous meetings, which were in any event confirmed at this meeting) L. Dale Smith as Secretary to complete Peter Combes's term.

2. Heard an announcement by Harvey Kaye that he and Andrew Lang had resigned from the Audit Committee. The chair of the Committee formally withdrew his interim report, which had been published in the original version of the June Journal without the authorization of the Committee or its chair. He said the new Board will have to appoint a new Audit Committee.

3. After extensive discussion in which all points of view were heard at length, the Board called upon Robert Platt to resign as President of WAP. After he declined to do so, the Board found, as required and permitted by Maryland law, that the best interests of the Corporation would be served by removing Robert Platt as President, and it did so, not affecting his status as a Director. Among the grounds cited for this action were intimidation of WAP office staff and other volunteers, violation of Board directives regarding control over the computerized membership database, and disruption of Pi meetings. (Details of this and other matters discussed may be found in the minutes of the meeting.)

4. A motion by Tim McGraw that Robert Platt be expelled was withdrawn.

5. To remove any doubt as to the validity of actions taken at meetings of the Board on May 10 and May 31 the Board ratified (or re-ratified) those actions. This included (a) reprinting the June issue of the Journal omitting material that was published without the permission of several authors and a number of one-sided pieces that violated the Board's directive that the June Journal not contain partisan material, (b) removing Tom Piwowar as Editor and electing Nancy Seferian as Editor, (c) approval of bylaws changes making all Directors elected by the membership, calling for a runoff election for President in the event no candidate gets a majority, giving the Board the authority to elect all officers not elected by the membership, giving the Board the authority to elect its presiding officer, and clarifying that the president's powers are subject to the Board's authority over the Corporation, (d) delegating functions to various volunteers, (e) authorizing the hiring of security for the protection of the office and staff, and (f) approving rules for the election.

6. Deferred action on several aspects of the MacWorld raffle because of a number of serious outstanding questions regarding the Pi's obligations.

7. Elected Tom Warrick President to fill out the term of Robert Platt.

8. Recessed the meeting until June 22.

***At the June 22 meeting of the WAP Board, the Board:***

1. Elected Dana Schwartz as a Director to fill the vacancy created when Nancy Seferian, an elected Director, was elected Editor, which has an ex officio seat on the Board. (Under the Bylaws, when someone holds both an elected seat and an ex officio seat, the person is entitled only to one seat and the Board may fill the vacancy to keep the number of Directors at 15.)

2. Designated Jim Little as Washington Apple Pi's registered agent.

3. Amended and approved the minutes of the May 10 and May 31 meetings.

4. Authorized the expenditure of up to $1,000 in printer's overtime to make up for the fact that the new Editor and her assistants were delayed in getting the Journal ready for the printers because, among other things, materials were withheld by the previous Editor.

5. Appointed Frank Potter to lay out the August issue of the WAP Journal for a remuneration of $1,500, subject to Frank's acceptance and the working out of some details. Further action, including the selection of a new Editor and paste-up contractor, will be deferred to the new Board.

6. Ratified actions taken prior to the May 31 meeting of the Board with regard to suspension of distribution of the June Journal and disposition of the mailing labels for the June Journal.

7. Authorized the Secretary to record a resolution in the form required by our banks and in conformance with the bylaws to remove Robert Platt from the Pi's accounts.

8. Placed a report of the TCS Long-Range Planning Committee on the agenda for the next Board meeting.

9. Appointed a committee consisting of Ed Myerson, Charles Calkins, Harvey Kaye and Tom Warrick to select outside counsel to advise the Board on (a) the problems with the lottery, (b) problems with the Labor laws, (c) the contract with Thomas J. Piwowar and Associates, Inc., and (d) any other matters, with the authority to spend such amounts as are necessary, with the authority to spend further amounts to be taken up again at the next meeting of the Board.

10. Appointed a committee consisting of Ed Myerson and Harvey Kaye, with assistants as they may require, to negotiate a resolution with Thomas J.

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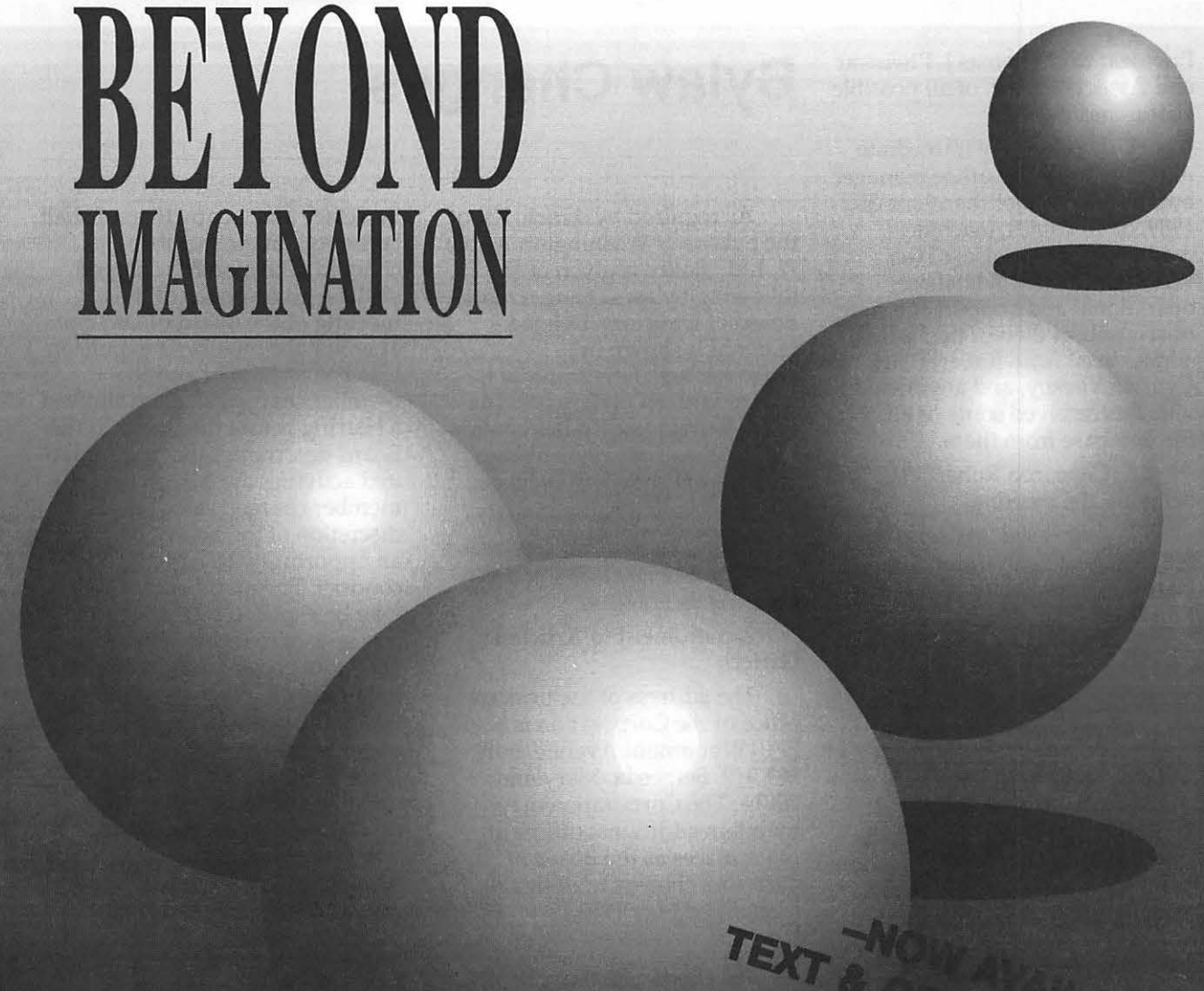

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Piwowar and Thomas J. Piwowar and Associates, Inc. of all possible claims and issues.

11. Directed the immediate return to the WAP office manager but in no case later than June 30, 1989, of all copies, machine-readable or otherwise, of the WAP membership database, operational and support software, or any subset thereof (including all SIG lists) from Robert Platt, Cynthia Yockey, and anyone else who has received some or all of the database from them.

12. Censured Robert Platt for delaying the meeting.

13. Expressed its thanks to the Election Commission: Jon Hardis, Chuck Sicard and Linda Van Zee.

14. Resolved that the election ballots shall be made available for inspection at a single time and place to be determined by the Election Commission or someone acting at their designation for an amount of time in their sole discretion, such inspection to be closely supervised by the Election Commission or their designate. Steps shall be taken, and funds may be expended, to ensure that the ballots are not tampered, altered, removed or otherwise affected during the inspection process.

15. Discussed challenges to the election and violations of election procedures. A complaint against Robert Platt for having access to the computerized membership database in violation of the election rules was deferred until the July meeting. It was announced that Manny DeVera, a candidate for Vice President-Macintosh and Director-at-Large, had challenged the results of the election for President.

16. Set the next meeting of the Board to the second Wednesday in July, July 12 at 7:30 p.m. (not 6:30, as has previously been the case).

17. Expressed its thanks to those who will not be serving on the Board for having served in the past year.

# Bylaw Changes

As required by Article XV of the bylaws of Washington Apple Pi, Ltd., notice is given of the following bylaws changes made Board of Directors. Deleted material is shown in ~~strikethrough~~; new material is shown with an underscore. The WAP Journal issue dates containing notices of previous bylaws changes are shown in brackets.

*This change was made at the March meeting to reflect the change in the location of the Pi's offices.*

**Amendment to Article IV, Offices**

The address of the principal office of the Corporation is ~~8227~~ 7910 Woodmont Avenue, Suite ~~201~~ 910, Bethesda, Maryland 20814. The Corporation may maintain additional offices at other places as the Board of Directors chooses to designate. [Amended May 1983.]

*This change was made at the April meeting to make it possible for the Board of Directors to reinstate as a member someone who had previously been expelled for cause.*

**Amendment to Article V, Membership:**

**SECTION 6. EXPULSION.** A member may be expelled from membership in WAP for (a) failure to pay the annual dues for more than thirty (30) days after the due date thereof, or (b) engaging in activities prohibited by these Bylaws or any rule or practice adopted by the Board of Directors of which notice has been given to members. Damaging WAP property or disrupting WAP services shall be ground for expulsion. Before any member may be expelled for engaging in prohibited activities, written charges specifying the alleged cause shall be filed with the Secretary and a copy thereof shall be served on the member charged. The member charged shall be given notice of the meeting of the Board of Directors at which the member's expulsion is to be considered and the member charged shall be allowed a hearing before the Board. If the Board determines that the prohibited activities are correctable, the member charged may, at the discretion of the Board, be given an opportunity to correct such conduct. The member charged may be expelled by the affirmative vote of two-thirds of those Directors present and voting at the Board of Directors meeting of which the member charged received notice, a quorum of Directors being present. The member charged shall receive prompt written notice of the Board's action. A person expelled from membership by virtue of (b) above may be reinstated as a member by a majority vote of the Board. [Amended March 1986 and July 1986.]

*This change was made at the May 10 meeting and confirmed at the June 14 meeting to make all Directors subject to election by the membership.*

**Amendment to Article VII, Board of Directors:**

**SECTION 2. COMPOSITION.** The Board of Directors shall consist of 15 members: the President, two Vice Presidents, the Secretary, the Treasurer~~, the Past-President, the Editor of the WAP Journal, the Head Librarian~~ and ~~seven~~ ten Directors-at-Large. The Directors-at-Large shall be elected annually pursuant to Article IX hereof. ~~The Past-President shall be the individual who last served as the President; provided, however, that if an individual is entitled to serve on the Board of Directors as an Officer or Director-at-Large, he~~

~~shall not also serve as Past-President. In that case, the Past-President shall be the predecessor to the individual who last served as the President. If an individual is entitled to serve on the Board of Directors by virtue of election or appointment to more than one position, then such individual shall be entitled to only one vote and one Director position shall be declared vacant.~~ This amendment will take effect with the Board of Directors whose term begins on July 1, 1989, after which this sentence shall cease to be a part of these bylaws. [Amended April 1984, February 1987 and June 1988.]

**Amendment to Article IX, Elections:**

**SECTION 3. BALLOTING.** An election shall be completed during the month of June. Only members in good standing on the last business day before the Regular Membership Meeting in May may vote in the election. A ballot shall be mailed or hand-delivered to each member in good standing. Each ballot may cast one vote for each office, except that up to ~~seven~~ ten votes (noncumulative) may be cast for Director-at-Large. Prior to each annual election, the Board of Directors shall establish a deadline for the receipt of ballots. [Amended June 1984.]

*This change was approved at the May 10 meeting and confirmed at the June 14 meeting to require that the President of the Pi be elected by a majority of those voting for President. This ensures that the President of the Pi is someone preferred by a majority of those voting, and, correspondingly, ensures that no President of the Pi will be handicapped during his or her tenure by the charge that a majority of the Pi's voters opposed him or her. It also neutralizes the divisive strategem of a person in one "camp" encouraging someone from the "other" camp to run for President in the hope of splitting the vote of that other camp. This amendment also fills a gap in the bylaws by providing that in the event of a tie vote, the Board of Directors breaks the tie.*

**Amendment to Article IX, Elections:**

**SECTION 3. BALLOTING.** An election shall be completed during the month of June, except to the extent that a runoff election shall be required by section 4. Only members in good standing on the last business day before the Regular Membership Meeting in May may vote in the election. A ballot shall be mailed or hand-delivered to each member in good standing. Each ballot may cast one vote for each office, except that up to ~~seven~~ ten votes (noncumulative) may be cast for Director-at-Large. Prior to each annual election, the Board of Directors shall establish a deadline for the receipt of ballots. [Amended June 1984.]

**SECTION 4. RESULTS.** In the event that any candidate for Director-at-Large is also elected as an officer, such candidate shall not be eligible for election as a Director-at-Large. The ~~seven~~ ten eligible candidates for Director-at-Large with the greatest number of votes shall be elected. The election tellers shall certify the results of the election to the membership prior to July 1 of each year. In the event of a tie vote, the other members of the Board of Directors elected in the election shall at the first regular meeting of the Board elect one of the tied candidates. In the event that no candidate for President receives a majority of votes cast for the office of President, a runoff election shall be held between the two candidates receiving the most votes. The runoff election shall be completed in July. Only members in good standing the day before the June Regular Membership Meeting are eligible to vote in any runoff election. [Amended April 1984.]

*This change was made at the May 31 meeting and confirmed at the June 14 meeting to provide that all officers of the Pi who are not elected by the membership shall be appointed by the Board of Directors. (Elected officers are the President, the two Vice Presidents, the Secretary and the Treasurer. The other officers are the Editor of the Journal, the Head Librarian, the Director of Group Purchases and the Telecommunications System Operator. The Board of Directors already appoints the Telecommunications System Operator.) The Board of Directors is held ultimately responsible for the actions of the Pi and its officers by the bylaws, by the members and in the eyes of the law. (Article VII, section 1.) The Pi's officers have the power to legally bind the Pi in the areas within the scope of their authority, and this bylaws change would make non-elected officers responsible to the Board as a whole.*

**Amendment to Article VIII, Officers:**

**SECTION 6. EDITOR OF THE JOURNAL.** The ~~President~~ Board of Directors shall appoint an Editor of the WAP Journal, who, subject to the general policy direction of the Board ~~of Directors~~, shall be responsible for ~~its~~ the Journal's editorial and advertising content and its publication on a regular basis. The editor may appoint one or more assistants.

**SECTION 7. HEAD LIBRARIAN.** The ~~President~~ Board of Directors shall appoint a Head Librarian, who shall organize the Corporation's collection of computer programs, computer media, books and periodicals ~~collections~~, subject to the general policy direction of the Board ~~of Directors~~. The Head Librarian may appoint one or more assistants.

**SECTION 8. DIRECTOR OF GROUP PURCHASES.** The ~~President~~ Board of Directors shall appoint a Director of Group Purchases who shall maintain a close and continuing interest in computer products and accessories. The Director of Group Purchases, subject to the general policy direction of the Board ~~of Directors~~, shall negotiate arrangements for the purchase of such equipment by members. The Director of Group Purchases may sign checks on behalf of the Corporation in amounts not in excess of $500. The Director of Group Purchases may appoint one or more assistants.

**SECTION 10. VACANCIES.** If the offices of President, Vice-President, Secretary, Treasurer, Editor of the Journal, Head Librarian, Director of Group Purchases or Telecommunications System Operator becomes vacant for any reason, the vacancy shall be filled by the Board of Directors. ~~If the offices of Editor of the Journal, Head Librarian or Director of Group Purchases becomes vacant for any reason, the vacancy shall be filled by the President.~~ Any officer elected or appointed to fill a vacancy shall hold office until the election and qualification or appointment of his successor. [Amended June 1984 and July 1988.]

***This change was made at the May 31 meeting and confirmed at the June 14 meeting to clarify the line of authority within WAP. Article VII, Section 1 provides that "The business and affairs of WAP shall be managed by its Board of Directors, which may exercise all powers of the Corporation and perform all lawful acts and things which are not by law, the Articles of Incorporation, or these Bylaws directed or required to be exercised or performed by or are conferred upon or reserved to the members." Notwithstanding this language, which tracks Maryland law, it has been suggested that Article VIII, Section 2, which names the president as "the chief executive officer" with "general charge of the business, affairs and property of the Corporation with general supervision over its other officers and agents," somehow requires the Board to change the bylaws in order to delegate any of the president's authority to another officer or agent of WAP. This amendment gives the Board of Directors the authority to delegate to the president those powers appropriate to the situation. In addition, the present bylaws arguably give the Board no effective means of sanction to enforce its resolutions on a recalcitrant president short of removal or expulsion.***

**Amendment to Article VII, Board of Directors:**

**SECTION 8. CONDUCT OF MEETINGS.** ~~The President, or in his absence the Designated Vice-President, shall preside at meetings of the Board of Directors.~~ The Board shall by a simple majority at its first meeting of its term elect a presiding officer from among its members who shall preside at meetings of the Board of Directors for the balance of the term. In the absence of the presiding officer, the Board may elect a temporary presiding officer from among its members by simple majority vote for the duration of the meeting or until the presiding officer assumes the chair. By a two-thirds majority vote, the Board may permanently remove a presiding officer for the balance of the term. A simple majority is then sufficient to elect a new presiding officer. The Secretary of the Corporation, or such other person as the presiding officer may appoint, shall act as Secretary of the meetings. A majority of the Directors currently in office (not counting vacancies) shall constitute a quorum. Meetings of the Board of Directors shall be open to all the Corporation's members, except that upon majority vote, the Board of Directors may enter executive session to transact business which the Board determines to be confidential. [Amended June 1984.]

**Amendment to Article VIII, Officers:**

**SECTION 2. PRESIDENT.** The President shall, subject to the Bylaws and control of the Board of Directors, ~~be the chief executive officer of the Corporation and shall~~ have general charge of the business, affairs and property of the Corporation with general supervision over its other officers and agents. Subject to the Bylaws and the control of the Board of Directors, t~~T~~he President shall ~~preside at all Membership and Board of Directors meetings and shall see that all resolutions of the Board of Directors are carried into effect. The President shall have the general powers and duties of supervision and management usually vested in the office of president of a corporation.~~ oversee and coordinate such programs, activities and other duties as may be designated to the President by the Board of Directors. The President shall submit an annual report to the Board describing the past year's activities of the Corporation ~~to the membership, either in person or through the WAP Journal~~.

Our apologies to Rich Sanders, who was the author of the article in last month's Journal entitled "Checkmate's Memory Saver for the Apple IIgs." A lot of things got...sort of moved around...in the transition process, and his name was one of them. We hope, but won't absolutely cross-our-hearts-promise, that it won't happen again.

WAP is looking for qualified competitors for the position of permanent editor for the Journal. If you feel that you have the necessary qualifications and that you might be interested in the position, you are urged to contact David Morganstein or the Pi office and let us know of your interest. A search committee is in the process of organization even as you read this.

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  - PL 20i/30i/50i/70i Turbo (1:1 interleave, internal for SE only) . . . 525/649/775/925
  - PL 100i II Turbo (100 meg, 1:1 interleave, internal for Mac II only) . . . 1149
  - Infinity (10/40-meg removable disk, reads IBM floppy disks) . . . 849/1149
  - TurboFloppy 1.4 (1.44-meg floppy, read/write Mac & IBM disks, SCSI) . . . 329
- CMS 20-meg SCSI . . . 539
  - 60-meg SCSI . . . 789
  - 30-meg internal (SE only) . . . 459
  - 45-meg internal (SE only) . . . 695
- Rodime 100-meg (internal, Mac II only) . . . 1049
- Video Technology 800k floppy . . . 199
- DaynaFile (360k floppy, reads and writes IBM disks) . . . 489

### 68020 / 030 ACCELLERATORS

- Dove Marathon 68020 accelerator (for SE) . . . 589
  - 68030 accelerator (for Mac II) . . . 1025
- General Computer Hypercharger SE (0-K, 16-mhz 68020) . . . 715
  - Hypercharger SE (0-K, w/68881 math chip) . . . 999

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- Cornerstone 15" Single Page Display (for SE & Mac II) . . . 739
- Sigma Pageview 15 (full-page display for SE) . . . 759
- NEC MacSync (14" analog color maonitor for Mac II) . . . 589
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- Dove MacSnap & SIMM memory upgrades . . . (call)
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- Suitcase II . . . 55
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# WAP Journal Authors' Guide

We hope that this reference guide[1] will answer any questions that you may have about writing for the Journal. However, if you have a question that isn't answered here, please do not hesitate to contact any of the editors or the Journal office. We look forward to receiving your article, and hope that you have fun writing it.

## *Article Format*

All material must be supplied in machine-readable format and, at least where graphic material is to be included, with a hard copy printout:

## *Apple*

*Disk Format:* 3 1/2" Unidisk (5 1/4" disks by arrangement with the Apple editor. Do not send 5 1/4" disks to the other editors, unless you have made prior arrangements.)

*Text Format*: AppleWorks or ASCII text.

*Graphics Format*: print on paper using a new (but not brand-new) ribbon. We are looking for format conversion software, but so far no luck. If you have a good graphic, we can scan it in and it will look almost as good as the original. Frequently a xeroxed copy will scan better than one out of your printer. We can handle GIF files, however.

## *Mac*

*Disk Format*: 3 1/2" disk 400K, 800K or 1.4MB.

*Text Format*: Any reasonably standard word processing format should work. Although the Journal is produced in PageMaker, we would rather that you did not use the program to produce the article unless you have cleared it first.

*Graphics Format*: MacPaint, MacDraw, PICT, TIFF, EPS.

Large TIFF files are hard to handle and may not get used. Keep it to 100K, please.

## *Other Computers*

We are not absolutely locked into Apple computers for receiving material. If you have something to say that you think will be interesting to Journal readers, but do not have access to Apple equipment to write it up, please contact the office and let us know. We'll work something out.

## *Submitting Articles*

In order to produce and distribute the Journal on time every month, the editorial review board has a schedule of deadlines. We ask that you work with us to meet those deadlines by submitting your articles according to the dates listed in the Journal. The calendar section of a recent issue of the Journal will identify writers' and editors' deadlines, usually for the next two issues. You may notice that the writers' deadline is one week before the editorial deadline, and that the editorial deadline is two weeks prior to a general meeting. This is because each issue of the Journal is distributed at the general meeting (usually on the fourth Saturday of the month) during the month prior to the month on the cover of the Journal. Since it takes three weeks to publish the Journal, you must get your submission to the appropriate editor three weeks prior to that meeting—usually the first Monday of the month of publication. If you don't know who the right editor is, call the office for information.

In extreme situations, we can bend these requirements a little, but would prefer not to have to. Our hope is to publish all articles that are submitted to us, and we will try to accommodate late articles when possible. But keep in mind that the editorial review board is staffed by volunteers who have other obligations and commitments.

There is an upload board on the TCS. If you can submit your material through this board, it will make everyone's lives immeasurably simpler and more elegant. If you do use the TCS, please be sure that you contact or call the appropriate editor to tell him or her that your article has been posted and how to find it. And to repeat, if your article has graphics, it will be important to have it in hard copy so that we can tell where you want your graphics to show up.

Please identify any disk you submit so that we can return it to you. (Disks are returned quarterly.)

## *Useful Material to Include*

Your name.
Your address.
Your telephone number.
A suggested title.
A sentence about yourself to follow the article (optional).
Which types/models of computers your material relates to.
Graphics: drawings, screen shots, appropriate (public domain) clip art. We love graphics. More to the point, so do readers. If you do include graphics, please prepare the article with graphics in place, and then add the graphics in a separate folder as well.
Suggested placement of any graphics. Please mention if you specifically refer to a graphic in your text.
A printout of your text and graphics.
Special information, i.e., time-critical nature of the material.

## *Journal Styles*

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

Except for common abbreviations and acronyms, a long name should be spelled out the first time it is mentioned in the article with the abbreviation or acronym after it in parens.

Numbers, including money, should be written with commas where appropriate: 1,000 or $13,450.

If a number series occurs within a paragraph, number the series using "(1)," etc.

Do not indent by adding spaces or tabs. If this is a problem, don't bother to indent—let us do it.

One space only after punctuation marks. Two spaces after periods confuses typesetting practice and gives us a mild, if nonlethal, case of heartburn. It works for typewritten copy. No space at all before punctuation marks.

Do not use an extra return between paragraphs.

Periods and commas *always* go inside quotation marks. Other punctuation marks go outside, unless they are part of the quotation. When you quote a person or text, please be sure to get the quote exactly correct. We don't have the time or, usually, resources to check it ourselves.

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

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

Use en dash for phone numbers (–) (Option/Hyphen).

Use em dashes (—) (Shift/Option/Hyphen) within text—like this. No space before or after.

Add subheads where you think they might be useful.

Italicize all publication names (*except* WAP Journal).

Place "" (Shift/Option/K) at end of articles. If you are not using a laser font, not to worry—we can do it, and we try to catch them all.

Avoid use of ALL CAPS and quotation marks, unless part of trade or product name.

Beware of editorializing. If in doubt, ask us.

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

The only place that "spell checkers" are used are in games like Wizardry; word processing programs use spelling checkers.

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

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

### *Article Length*

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

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

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

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

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

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

## *Legal concerns*

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

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

### *Software Reviews*

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

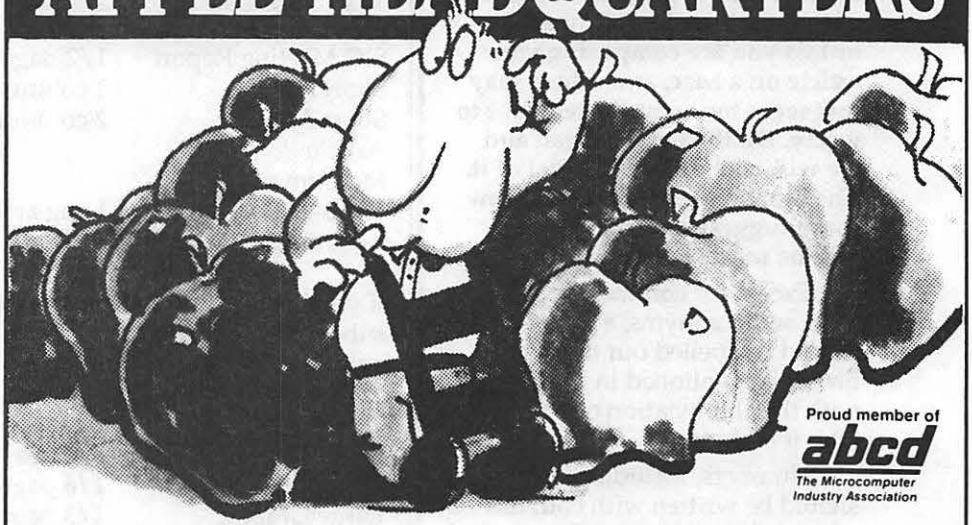
- Name of Program (and version).
- How much have you used it? A few hours? A few weeks?
- Short description (word processing, page layout, 3D graphics, etc.)
- What does it do?
- How well does it do it (if possible, contrasted with similar programs)?
- What do you like most about it?
- What do you like least about it?
- Do you recommend it, and for whom?
- Ease of use?
- Quality of documentation?
- Help files available?
- Name & address of publisher
- Telephone number (800 number if possible)
- Copy protected?
- Compatibilities, if known (kind of computer, MultFinder-compatible, memory demands, what else is required, etc.)
- List price and street price, if known.

### *Glossary*

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

[1] This Guide builds on work done earlier by Tom Piwowar, Peter Cook and others. For their assistance, we are grateful; any mistakes we made on our own.


APPLE HEADQUARTERS



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# Dr. No's... ...Rambling Prose

by Phil Noguchi

## *Introduction*

Some time ago in a place not far away, there was a newsletter of some repute. One portion of that journal was an irregular column of some dispute, aptly named the same as this column. The purpose of this column will be to discuss items of interest and utility. One hopes the Ramblings from me will not turn to Rumblings from you...

## *Beginnings*

Utilities have always fascinated me. No matter how clever the people who design applications or system software, there seem to always be additional requirements that are not provided. Consider Apple's System Software. Compared to other computer platforms, the Macintosh Operating System (OS) has marvelous capabilities for extension and customization for the end user. But for many of us, not enough. For example, Desk Accessories (DAs) provide enormous capabilities such as word processing, drawing, filing etc. But the standard Mac OS allows only 15 such DAs. One major feature of Mac Word Processing software is the range of different fonts that are available—but again, the standard OS allows only a limited number of fonts. And so on.

Early in the game, many authors offered different approaches to overcoming these deficiencies. Fontsie and Other... by Lofty Becker were perhaps the best known of these early attempts. Then a few years ago, word began spreading through Macdom about a utility to end all utilities code-named DA Mob, written by the well-known programmer, Steve Brecher. When the betas had finally been put to rest, it emerged as the monster hit Suitcase, a utility that could automatically add extra FONTs and DAs above and beyond the Mac OS limits. Even before it was released commercially, however, AlSoft released a similar utility called Font/DA Juggler, written by Paul Cozza. During the past two years or so, Steve and Paul have engaged in an informal competition to improve their respective products; the current products, SuitcaseII™ and MasterJuggler™ go far beyond the original concept and surely represent some of the finest programming yet done on the Mac.

During this and the next few columns, I will be exploring MasterJuggler in depth and using it to comment on such things as font families, FONDs, NFNTs and other arcane areas.

One caveat applies: I have been a beta tester for Paul Cozza for MasterJuggler and other of his programming efforts, so many of my comments should be taken with this in mind, especially if you are considering whether to purchase MasterJuggler vs Suitcase. For a comparison of the two, a number of reviews are available in the various Mac magazines.

## *MasterJuggler Overview*

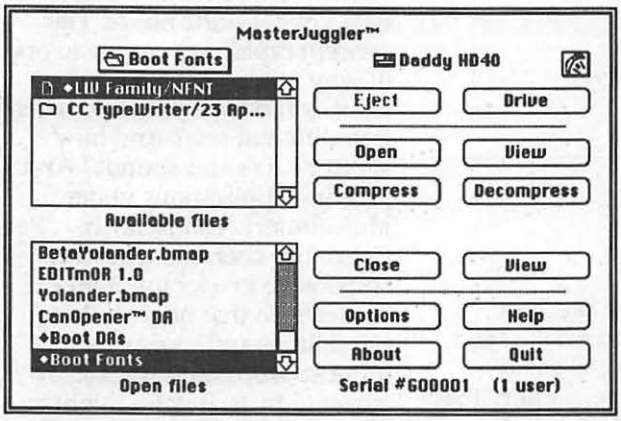
The original concept of the original Font/DA Juggler was to "juggle" sets of DAs and FONTs. For example, if you needed a certain kind of FONT or DA in your word processor, and perhaps a different one in your database application, you could switch between sets to accommodate your specific needs. This concept rapidly gave way to one of why not just load all the FONTs and DAs you need, even if in different sets? And how about FKEYs and sounds? And juggling applications under Multifinder? And so forth.... Paul Cozza has been exceptionally responsive to user input and requests, so that now all these capabilities and more exist. A more appropriate name for the current MasterJuggler might be Master Control Manager.

## *Main Dialogue*

MasterJuggler is an INIT that you place in the System Folder and activate by rebooting. Once you do this, the Apple menu has MasterJuggler installed at the top with a heirarchical menu, listing a number of dialogues that are used for configuration and application

By selecting Master Juggler, the dialogue box on the next page shows up. Though somewhat complex, this dialogue allows tremendous flexibility in configuring one's Macintosh.

Two scrolling fields are visible: the top shows the available files that can be opened, while the bottom scrolling field shows the files that have already been opened by MasterJuggler. Standard files that can be opened include FONTs, DAs, sounds and FKEYs. In version 1.16, the maximum number of files that can be opened is 12; this limita-




tion has been pushed to 120 in version 1.5, which should be shipping at this time. By setting an option under the Options button, one can also open ALL files; this might be useful, for example, if you wanted to examine a FONT in a particular application. This option is not really for the inexperienced, however.

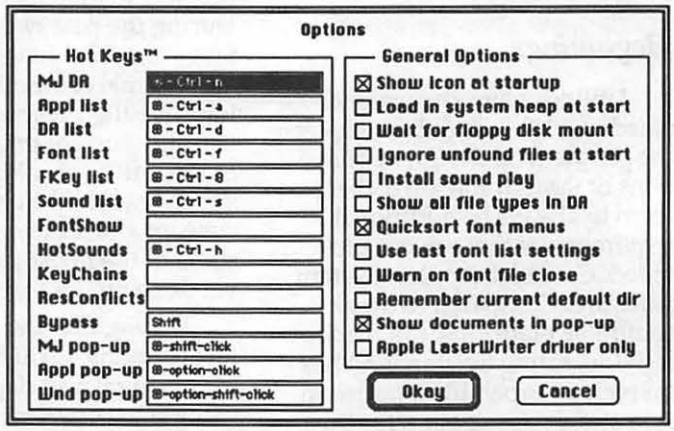
Two sets of buttons are associated with the scrolling fields that invoke specific functions. For example, Compress and Decompress are available in the top set of buttons. Selecting a FONT or sound file and pressing the Compress button will cause the file to be compressed by 20 to 40%; decompress will reverse the process. For example, my Boot Fonts file was compressed from 1038K to 696K by this method, a 33% reduction.

The View buttons in both the top and bottom half allow you to examine a particular file. For example, in the boxes below, the View button was pressed after selecting the file Boot Fonts. Note that FONT names, sizes and actual faces can be viewed depending on the radio button selected.

In a similar manner, one can view FKEYs and sounds. With Sounds, by holding down the option key and clicking on a sound name, MasterJuggler will play the sound for you.

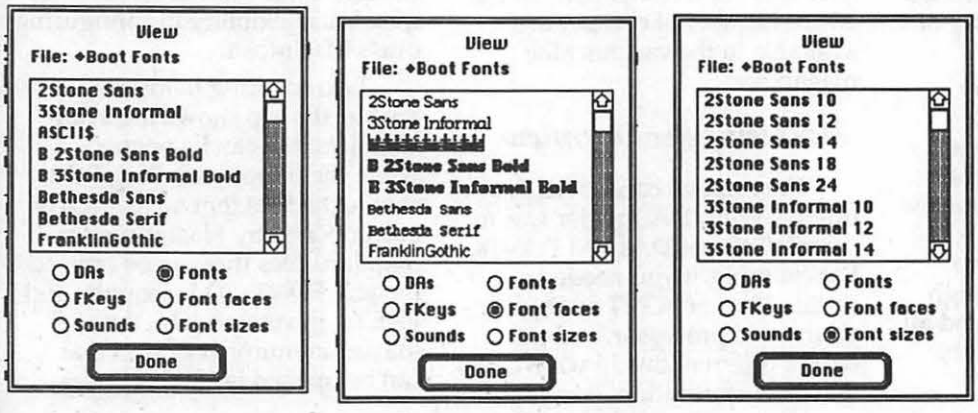
Going back to the main MasterJuggler dialog, clicking on the Options button will give you the box in the right-hand column, with another range of capabilities.

On the left half of the dialog are a number of fields for defining Hot Keys by invoking various functions of MasterJuggler directly from the keyboard. Like Microsoft Word, almost everything that can be done with a mouse can also be done with the keyboard. For example, since I have an extended keyboard, I have set many of my Hot Keys as cloverleaf-option-<letter>. The right side shows a number of check boxes that set more general options which I won't discuss here and now.



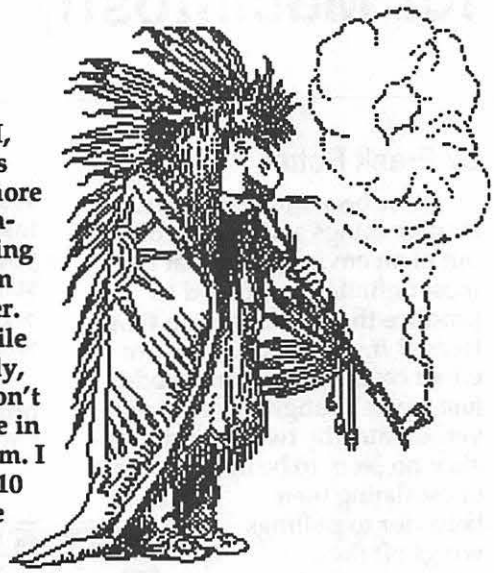

## *Next Time...*

We have covered the main dialog of MasterJuggler in this installment. Next time, what's this thing called System 7.0, and how close can you get to it right now with MasterJuggler's List capabilities?



# Q&A

by David Morganstein
and Marty Milrod



**I just bought Suitcase II, the Font/DA extender that is supposed to let me access more fonts and DAs by just 'opening' them once and not having to install them in the System file with the Font/DA Mover. Even though I built a font file with the whole Times family, from point sizes 9 to 36, I don't seem to have them available in my word processing program. I say that because only sizes 10 and 12 appear in the outline form (the other sizes appear in the standard Chicago font in the font menu). Am I right that they are not available and if so, why not?**

First, you are right. Only those font sizes that appear in outline form are available. Of course you can select other sizes but they will have to be "created" by the Mac for display on the screen and printing with an imagewriter. If your output is to go to the LaserWriter, don't let this bother you since the LaserWriter creates the requested font size anyway. However, for Suitcase (and Master Juggler) users, there is a solution to your quandry.

Suitcase does indeed let you access a font file without having to install the fonts in the System file. This has some major advantages which almost every Mac owner should consider. For one, you never risk damaging the all-important System file by expanding it using the Font/DA Mover program. Second, fonts can take up a lot of space and adding a dozen fonts each with a bunch of sizes can double the size of the System file. In fact, it can make it bigger than 800K so you can no longer back it up to a diskette.

The problem of the "missing" fonts may be caused by your retaining the original Times 10 and 12 point sizes in the System file. A quirk of Suitcase (and Master Juggler as well) is that if it finds a font family in the System file (e.g. the original sizes 10 and 12 Times), it looks no further for other Times point sizes in the alternate file you have designated. The solution is simple: don't mix sizes of the same family with some in the System and some in the "external" file you identified with Suitcase. Store all your Times point sizes in one place, either the System or as we recommend in the external font file. Start up the Font/DA Mover program and look in your System file. If, as we suspect, you see a 10 and 12 point Times there, select them and remove them. We'll bet the other Times sizes will now appear in your font menus!

**I work at home a lot where I begin rough drafts or edit copy. When I go to the office to print my files on the LaserWriter, the format of my documents changes. Lines and pages break at different places and so on. Why is this and what can I do about it? I check Page SetUp and the margins are the same. Is this because I use a Mac Plus at home and a Mac II at the office? Do they have different systems?**

Yours is a common problem and fortunately there is a simple solution. In the System folder at the office you will find two files, LaserWriter and Laser Prep. Take copies of these files home and place them in your System Folder. Go to the Chooser and you should now see an icon of the LaserWriter. Click on the icon. Wait a couple of seconds and click to the right of the icon at the top of the box where the name of your office LaserWriter normally appears, the box labelled Select a LaserWriter.

Even though no LaserWriter appears in the Chooser (since you have no LW hooked up at home), you are telling the Mac you want it to format documents for printing on an LW. You will immediately see the line and page breaks change and they will match those that appear at the office.

The only remaining inconsistency can arise when the fonts you have at home don't match the ones at the office. Make sure the same families and sizes you want to use are installed in both places. Also make sure they are the same

versions! Unfortunately, not all Times 12 screen font files are identical. The differences may be small and subtle but will show up as a word wrapping in a different place. The best way to be sure is to take a copy of the fonts used on one machine and install them on the other.

**I am trying to use the Apple Backgrounder and Print Monitor programs to spool my output but print out doesn't appear? What's going on?**

First, these two programs only spool output to the LaserWriter and only when you are using MultiFinder. Assuming that is your situation, let's continue. Place the Backgrounder program in the system folder, re-boot and then go to the Chooser. After selecting the LaserWriter driver by clicking on the icon of the LaserWriter, click on the button that says Background Printing On. Now—print something. You won't see anything happening but you will be returned to your application very shortly after clicking "OK "in the Print Dialog Box. If you want to find out what files are "in the queue" waiting to print launch the Print Monitor application. We use the OnCue INIT to create a menu containing our favorite programs. The Print Monitor application is one we include.

If you find that your output is not appearing, go to the Finder and look at the "About the Finder" menu under the Apple. If you only have a few K of RAM, say 40K or less, you have a problem. If you launch Print Monitor it may warn you that you don't have enough RAM; otherwise, you will get no warning of the problem (this is what we call a "feature"!). If you don't have enough RAM your choices are simple: 1) buy more, 2) quit an application that is loaded into multifinder or 3) permanently lower the amount of RAM required by your favorite application under MultiFinder.

*Review*

# SAM (Symantec AntiVirus for Macintosh)

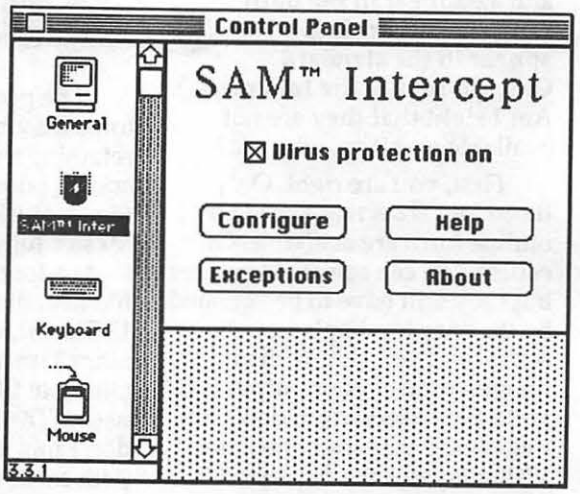
by Frank Potter

Ever been bitten by a virus-strange things and noises coming out of an environment that is most definitely supposed to produce those noises or do those things? If you haven't, you are either careful, lucky or the odds just haven't caught up with you yet. Created by twisted individuals who seem to be in the process of escalating their behavior to pullings wings off flies, viruses appear in many guises, all of them offensive.

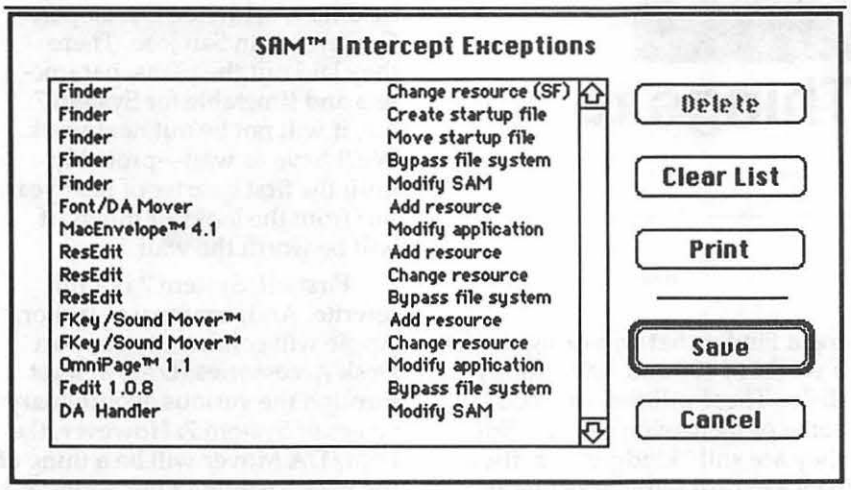
Several programs have been created to warn you of the presence of suspicious events, prospective or present, and to help you recover from those occasions where safe computing was not enough. Perhaps the best of these is SAM, written by Paul Cozza (a local programmer of some repute, whose credits already include MasterJuggler) and produced by the folks at Symantec (the people who brought you SUM). It's not cheap, but it works and if it saves you from serious unpleasantness, it will pay for itself instantly, or maybe even before that.

The disk has two main features: SAM itself and another program called SAM Virus Clinic. SAM will warn you about trouble coming and SAM Virus Clinic will help you recover without putting too much strain on your nervous system. SAM is an INIT/cDEV to be installed in your system folder. The first time you install it and reboot your Mac, you will be treated to a one-time startup screen that tells you that SAM is on the job, and then you won't see it again.

Opening the Control Panel brings you to SAM's working environment:

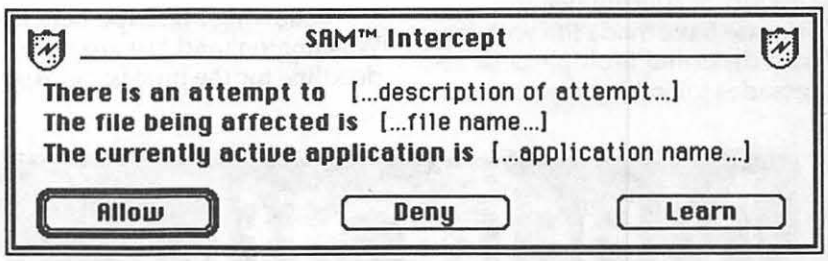



The *About* button does what you might think: it tells you about the program. The *Help* button calls up a screen that describes your options in greater detail, and the *Configure* button lets you decide just how you want to use SAM. You can set it to bypass SAM, tell it what to look at when it is operating (the System Folder is almost always the first point of infection), tell it what to scan (if anything) when shutting down, when to scan floppy disks (probably the most likely vector for infection) and set your levels of protection. All of these options can be changed, depending on




your needs and the degree to which you are willing to live close to the edge. Each button has additional help within the screen that it calls up. You are not likely to get lost or confused.

And that's it. SAM will faithfully do what you tell it to, when you want it to do it, and you'll never have to worry about viruses again. If you should attempt to call up a disk that contains a virus, or one that SAM thinks might harbor a virus, you will receive a terse message, telling you that your life has suddenly become more interesting (there has been an attempt to modify SAM itself or an application:




You can allow it this one time, you can deny it or you can tell SAM that it's okayto learn it—you are in control and you know what you are doing and SAM doesn't need to bother you with this again. And this will happen from time to time—using Font/DA Mover or doing other innocuous things to your system will set your junkyard dog to barking loudly, riveting your attention to the screen and giving you a mercifully brief session of hot flushes and palpitations.

You can ask SAM what exceptions you have allowed by clicking on the Exceptions button at the top of the page. This will recite those steps that you have told SAM to learn in the past.

If the list gets to be unmanageable, you can always clear it and go on from there. Or, if you are really careful about what is happening (as most of us ought to be, and few of us are), you can print out the list and save it.

SAM doesn't recognize every virus that has ever been created, but it recognizes every known virus in the Macintosh world. If new ones crop up, as they almost certainly will, Symantec has promised to upgrade it, at a small cost to the user. So far, this hasn't been necessary.

If, God forbid, you find yourself with a virus already at work, you can scan your suspected carriers with SAM Virus Clinic, which will give you a full diagnostic report on the situation and allow you to repair the applications that have been attacked.This will allow you to avoid the more common method of dealing with these problems (before SAM0 of simply trashing every application that you think might ever have been within shouting distance of the virus, and reinstalling them from the original disks.

SAM seems to be bug-free, but you should be aware (Truth In Packaging Time) that I was one of a vigorous and picky group of beta testers, communing daily on The Twilight Clone, and another group, of which I was also a member, working with Symantec.If there are problems, I haven't heard of them, and if Paul hears of them, they will shortly thereafter be history.

There are other virus detecting and eradication programs out there, and I have heard good things about some of them. My experience does not permit me to compare them, however; once I had access to SAM, they no longer seemed very relevant. SAM is not cheap, retailing at $99.95 list and perhaps $65 mail order. But if your life is just too short to have to worry about occasional virus invasions of the Bugs From Hell, SAM will give you the kind of peace of mind that few of us can resist.

As you will have gathered, I am a Believer: SAM is one of those programs that I would not think of leaving home without. And I am a tough grader.

Publisher: Symantec Corporation, 10201 Torre Ave., Cupertino CA 95014–2132; (415) 964-6300. Not copy protected. It runs on all Macintosh computers, so far as I can tell.

*Macinations*

# The Shape of Things to Come

by Robb Wolov

I've said in the past that the heart of the Mac is its operating system (OS). After all, without its unique interface the Mac would be just another 680XX box—another pretty face. Apple MUST think the same—after all they are taking Microsoft to court over it.

But the old OS has been getting a bit long in the tooth. Users have been demanding more and more from it and third party developers have been satisfying those urges with nifty utilities. Such "add-ons" as On Cue, Disktop, MasterJuggler and Suitcase have made life with large hard disks and multiple desk accessories tolerable notwithstanding a Finder that was designed for a world of 400 and 800K floppy disks. These utilities are good, some of them even elegant. But they are still "kludges"—software hacks to deal with tasks that the OS should be handling itself.

We all knew that eventually Apple would have to address itself to a major redo of the OS—not just the maintenance upgrades of the past. We just didn't know when. Well, now we know, and the view looks exciting for all Mac users.

Following MacExpo here in Washington (and just after the deadline for the June issue) Apple held its Worldwide Developers' Conference in San Jose. There they laid out the plans, parameters and timetable for System 7. No, it will not be out next week. We'll have to wait—probably until the first quarter of next year. But from the looks of things, it will be worth the wait.

First off, System 7 is a full rewrite. And, contrary to rumor, Apple will continue to support Desk Accessories (DAs) at least through the various evolutionary stages of System 7. However, the Font/DA Mover will be a thing of the past. Enabling DAs, fonts and sound resources will involve placing them in the system folder—period. DAs will continue to appear under the Apple menu, as always. The Chooser will be history—incorporated into a new desktop help system.

Control panel devices (cDevs) and DAs will be accessed just like applications—by double-clicking on their icons. You will be able to add applications and attached

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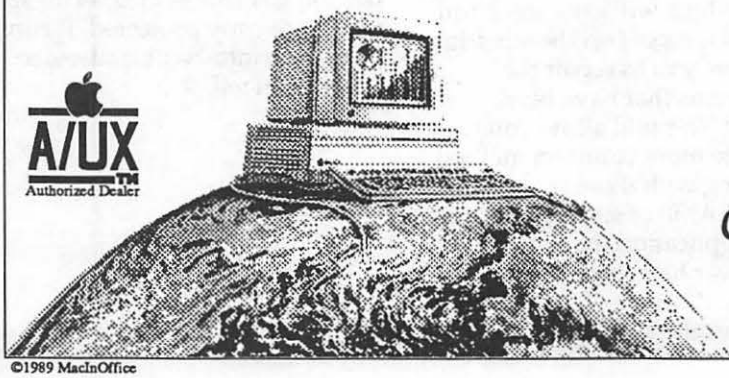

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documents to your main menu bar, much like On Cue does today.

We have spoken before of the use of the Desktop Manager from an Appletalk network on a single machine. This is a popular, though not Apple-sanctioned, modification to create a faster "B-tree" directory system when using large hard disks or CD-ROMS. Well, guess whose new system will use a B-tree directory with a built-in Desktop Manager?

Virtual memory, the use of hard disk storage to simulate RAM, will be available to those machines with paged memory management units (PMMUs), either 68020s with 68851 chips added (Apple did put the socket in, remember?) or 68030 machines where the PMMU is already part of the CPU (central processing unit) architecture.

"Interapplication Communications" is Apple's way of saying that there will be a more powerful standard way to allow applications to exchange data in real time. Different applications could function much like interlocking modules and share services, data and capabilities with each other through "hot links."

The newly announced font technology is exciting. Back in January, '88, I reviewed the General Computer Corporation's Personal Laserprinter. Soon followed by Apple's own LaserWriter II SC, this was the first laser printer to use QuickDraw as the page description language instead of Adobe's Postscript.

Unlike Apple's product, the GCC PLP uses outline fonts supplied by Bitstream to describe each letter as a collection of mathematically-defined curves which can be printed to any size with Postscript-like smoothness. I predicted then that such printers as well as other QuickDraw devices (including Imagewriters) would encourage the further development of QuickDraw. As QuickDraw developed, these printers would "automatically" become more capable. Do I hate to say I told you so?—Nah!

System 7 will utilize a new, more powerful QuickDraw that uses scalable outline technology for both the printer and the screen. The parallels between Postscript and Display Postscript (for screen display) and the new QuickDraw are more than passing. GCC and others have already announced support for the new system. Once a user has a new driver for his PLP, IISC or Imagewriter, he will be in business. Some large typeface companies like Bitstream and American Type Foundry have already announced plans to support the new system, and we can anticipate a host of additional high quality typefaces for QuickDraw devices when System 7 is in place. Screens will be more readable as we say good-bye to bitmapped screen font approximations of printer output. Insiders suggest that people at Adobe are already




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| 21 Introduction to Macintosh | 22 Introduction to Quark XPress (v 2.1) | 23 Introduction to PageMaker | 24 Hard Disk Management | 25 Beginning Excel (v 1.5) |
| 28 Anti-Viral Strategies* | 29 Introduction to MacDraw II | 30 Intermediate PageMaker Skills | 31 Introduction to Aldus Freehand | |

*Includes free software

starting to lose sleep over this development.

A layout manager will automatically handle kerning (the controlled squeezing together of letters for better appearance and readability) and ligatures ("fusing" fl and fi, so that it will no longer look like "fl" and "fi").

A database access manager will provide a standard interface to mainframe systems that support the SQL connectivity standard. I can't begin to explain the importance of this except to say that this is hot stuff to those folks who have to network Macs with mainframes.

This touches just the highlights of coming events. The news is not all good for all Mac owners. System 7 will needs at least 2 Megs to run, and that will mean memory upgrades—but prices of SIMMs have been moving downward. Pluses and SEs will not be able to utilize virtual memory (68000s can't utilize PMMUs) but most everything else will be accessible. You will hear horror stories of old software crashing. Apple, as usual, is giving the company line to programmers to the effect, "If you followed the rules in 'Inside Macintosh,' you won't be hurt." That will remain to be seen.

It appears that with relatively little expenditure on new hardware there will be the promise of significantly expanded capabilities. Things will be certainly be getting more interesting.

Until next time...

*Review*

# Managing and Designing Forms

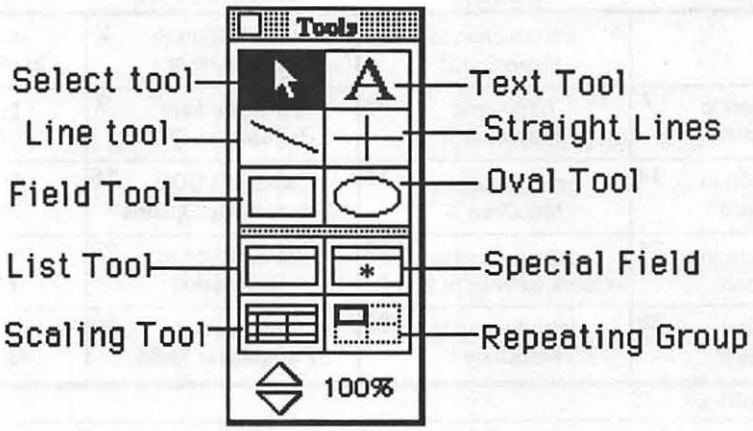
by Martin Milrod

Claris, the quasi-independent offshoot from Apple, has perpetuated, acquired and actually developed a variety of software for the Mac. Some of it is "old stuff" such as MacWrite and MacPaint (both of which will continue to be supported by Claris but only through June, 1990). Some of it has been "acquired" from other companies (such as FileMakerII, which Claris bought from Nashoba) in newer and better software rewrites—MacPaint2.0, MacDrawII 1.1 v2, MacProjectII 2.0, etc. But Claris has produced some new types of software, two of which are Claris CAD1.0v3 (reviewed in the July, 1989, issue by Frank Potter,) and two new programs: SmartForm Designer™ and SmartForm Assistant™.

These two programs are actually a single product with dual "heads." SmartForm Designer, as its name implies, designs or creates blank forms and the Assistant program permits a user to run or enter data into a "designed form." It constitutes a much needed program for the Macintosh. In essence, it permits you to scan-in an existing form or to create a form from scratch, to have each entry point within the form constitute a small database entry base and to have a host of "intelligent" editing, data-entry and calculations worked upon derived entry items in the form. Very neat! Once the "intelligence" or "smarts" of its name is entered by the form developer, the saved forms may be used in a run-time mode by multiple users each of whom must have a copy of SmartForm Assistant in order to enter data. (SmartForm Assistant copies run from $49 list for one copy to $5000 for 1000 users.)

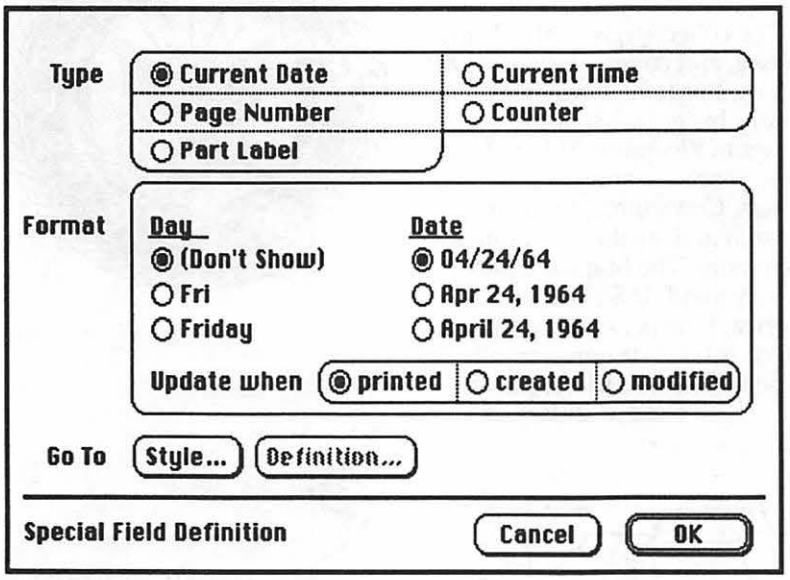
HyperCard tutorials, which are quite good, exist for each of the dual-programs. The tools palette gives you a sense of the flexibility available to "designers."

Corners may be rounded, objects may be grouped or "pinned" (i.e., locked in a specific place.) Fonts may vary, fields are named and may be created with tab formats or with repeating



entry groupings — as in lists. Rulers are fully adjustable.

In addition, you can predetermine date/time formats and acceptable abbreviation ranges so that data-entry can be made as easy as possible.




Above all, you may establish specially-defined fields or entry points to calculate things, or control field entries. A good example of this is an incrementing invoice number, which you would normally not want the user to control.

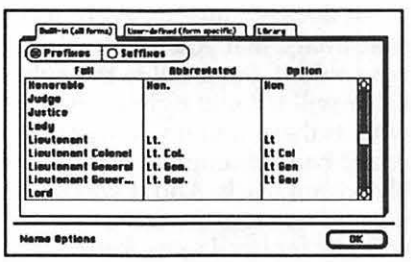
Naturally, one can also choose pen patterns, fills, line attributes, and adjust "views" on screen.

In addition, help items can be associated with any data item so that a puzzled user can easily learn how data are to be entered into this particular cell.

Smartform Assistant, in addition to enabling you to run saved forms, permits you to export data. This is a critical aspect of this program without which multiple entry points would not make sense.

Overall, the program needs a little time to learn, but is easy to run once you have mastered it. The Assistant portion of the program is designed to be "idiot-proof" (i.e., to be run by a person with little understanding of the program) and to collect common data from one form from many data-entry points.

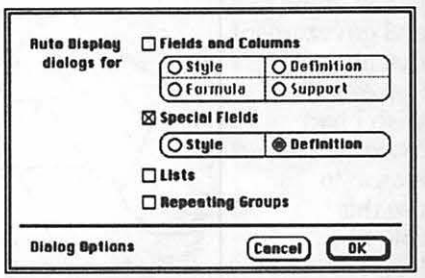
While my conclusion is that this is a solid program well worth the price for business organizations, it has little use for individuals. True, I know of a multiple dwelling owner who has pined for some time now for a boiler-plate contract into which she can enter data without distorting or changing the form or its format. Problems involve the fact that one needs to be consistent in fonts and printers used or horrid distortions occur. Of course, this is not very important if the "exported"




entered data is collected at a single point. The program supports color and networking to some degree.

I would like to see a crosswalk to a DBMS structure directly, perhaps using FileMaker II in a real-time mode, and the ability to use any graphic format within a designed form. A separate company (Antic Software, 544 Second Street, San Francisco, CA 94107 (415-957-0886)) sells two "volumes" of template forms for a list price of $89.95 per volume—which I find to be outrageously expensive (but then I also think that most template costs, such as those for PageMaker and Quark XPress, are also outrageous in price).

SmartForm's manuals are tedious, boring and merely adequate. The program is neither intuitive or easy-to-use. As a Version 1 program, it would be nice to see point-of-entry sales capability added for future versions (perhaps tied to a solid inventory control, mail-order business, accounting and payroll




programs?). In short, this program while unique in many ways, has much room for further development in order to become an intuitive, easy-to-use, robust program. Claris has done well by this product and it holds a rather unique place in the Mac world despite the fact that TrueForm preceded it in concept, albeit in a much more limited and polished version. It deserves your serious consideration.

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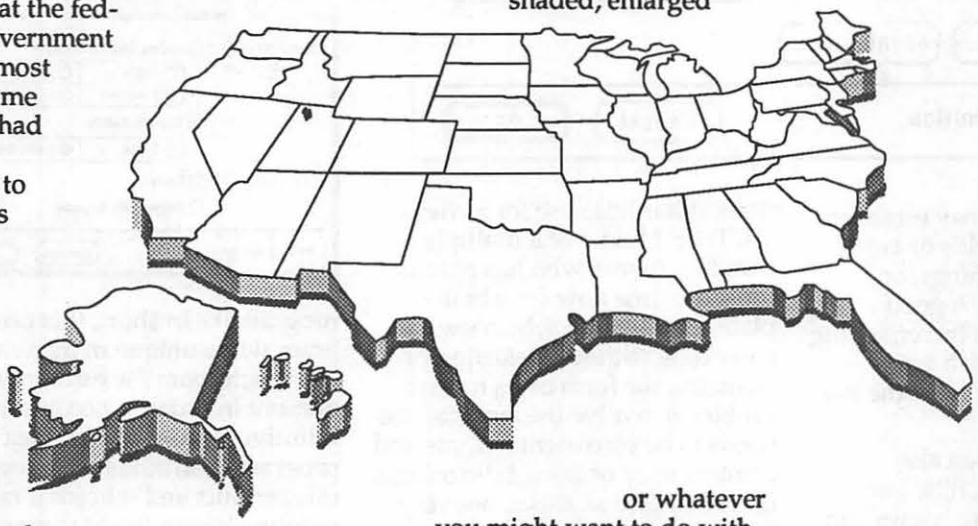
$395 list for the Designer

# Federal Clip Art

by Frank Potter

I am not what you would call a big fan of clip art. Most of what I have seen is kind of amateurish—done by people with perhaps a particular need for an image, but done with no real attention to detail. Worse still, much of what showed up in the past few years has been sort of—you know, cute—and it didn't wear well. So allow for my bias.

I am here to confess error. I have seen a collection of clip art aimed at the federal government that almost makes me wish I had more reason to use this collection. Entitled Federal Clip Art, it is produced by a local company that has devoted time, energy and patience to getting it all right, and to producing a series of illustrations of which no one need ever feel ashamed to use in a document to be sent to the President or anyone else, up or down, as the case may be.

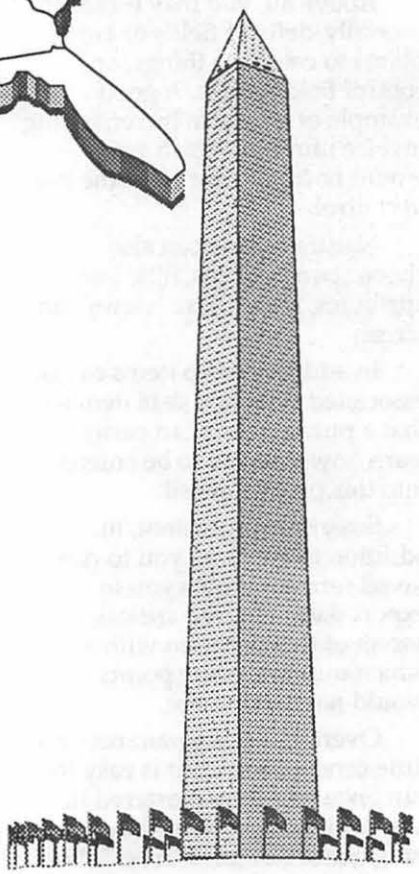


The collection is available either in Macintosh or MS-DOS format, and needs an output device (techie talk for a printer or screen) that can handle PostScript, such as a LaserWriter. It includes a color matching system, for those who have such requirements, and will allow precise matching of "official" colors.

The collection is available on 13 disks, and covers such areas as: Aircraft, Borders, Army Items, Military Insignia, Missiles, Pentagon, Weapons, Military Bases, Space, Communications, Printers, Computers, Medicine, Research and, as they say, much, much more. The Maps are particularly good: U.S., World, Latin America, Europe, Africa and Asia; each country is drawn carefully and separately, so that it may be shaded, enlarged or whatever you might want to do with it.

It does not include every possible image that you might wish, nor could it. But a call to the publisher will tell you right away what is there, and if you want an image badly enough, it is probably within reach. And if you need it badly enough, the collection will pay for itself remarkably quickly, I should think.

The Mac and IBM collections both list for $225, but there is a government price, if you can get your agency to spring for it. For more information, check with the publisher: One Mile Up, Inc., 7011 Evergreen Court, Annandale, VA 22003; (703) 642–1177.



# Cum Grano Salis...

by R. Soon Now

Apple is cracking down! Employees who admit that Apple is developing new products will be fired. Apple security police are purging Cupertino trash cans of any discarded blueprints and source code. Why? ... Partly it's to protect trade secrets from competitors. But another important reason is to prevent rumors of new products from inhibiting the market for products now available. From time to time this column will share rumors and opinions about what lies in the future of Macintosh computing. Please take them "with a grain of salt."

## What's a girl to do?

Everyone who is thinking about buying or upgrading computers worries that something faster, cheaper, and not quite compatible will be announced right after its too late. Although Apple can always surprise us—the tea leaves are rarely wrong. Today's reading says that Apple's future Macintosh lines will be divided among compact, modular, and portable units, and that the new products won't totally obsolete the current line.

The Mac Plus and SE are examples of a compact: everything—including monitor—in one box. The Mac II family is modular: you can mix and match monitors, and add all sorts of hardware in the nuBus slots. There is no portable, battery operated, Mac ... yet.

Apple seems to remain strongly committed to software compatibility among all of these machines, based on the Motorola 680x0 processor architecture. Talk of a hot new computer from Apple using some other chip and running incompatible software is probably just hot air. Apple is exploring the powerful new RISC (reduced instruction set computer) technology, such as that of the Motorola 88000 chip, but it is extremely unlikely that this will lead to a new processor within the foreseeable future. More likely, RISC may be used for high-speed graphics or sound processing in add-on cards for the Mac II family.

*Although Apple can always surprise us—the tea leaves are rarely wrong.*

## A "Mac/IIGS?"

Perhaps the hottest rumor this month is one about a new Macintosh, for under $1000, that can also run IIGS software—available "real soon now." I can't confirm that rumor. What I can do is repeat it. And point out that it makes so much sense it is probably true. Additional evidence comes from recent Apple mailings which steer developers of educational software—long an exclusive Apple II domain—towards the Macintosh.

Such a computer would probably use a plain-Jane 68000 processor—like the Plus and SE—rather than Apple's current high-end favorite, the 68030. This will keep costs down and Apple can squeeze a penny harder than anyone in Silicon Valley. The more expensive chip adds speed and the ability to act like it has more memory than it really does. Neither of these features seem terribly important to the education/home market compared to price.

What does this mean now? My guess is that the Mac/IIGS is a year or more away from market. If you really need a budget-friendly computer now, go ahead and buy either an Apple II or a Mac—whichever meets your needs. If you can't decide between the Apple II and the Mac, it might help to know that the Mac seems to have been anointed as Apple's future platform for education. If you are a buying for a school system, and you have the luxury of waiting a year, it might be wise to wait and see.

## Compact Macs

If you are looking at Macs, money is an object, and you can't wait for the Mac II/GS, you may wonder whether buying a Mac Plus now would be a big mistake. I don't think so. The Plus can't reasonably be upgraded to color or all the fancy new features of Apple's high-end machines, but it is serviceable and compatible.

Consider the following: Apple has announced that its future operating system (version 7.0) will support the Plus. The Plus's memory can easily be expanded to take advantage of most of the mammoth new software now being written. The Plus has a SCSI port, just like all of Apple's newest products for connection of hard disks, scanners, and other devices. If you keep a sharp eye out for discounts—look for a package deal with a 20 or 30 Meg hard drive—the Plus can be a best buy these days. Even so, Apple may reduce prices somewhat in the fall if rumors of future machines or competition with cheap MS-DOS

clone computers begin to impact sales.

Aside from the likelihood that the Plus will eventually be discontinued, there are no clear indications of what Apple has in mind for the compact line. The high-end SE/30 is still new and apparently selling well. The older SE seems over-priced, and I wouldn't be surprised to see the price come down close to where the Plus now sells eventually. Also look for the SE to sport Apple's new FDHD 3.5" disk drive soon. This drive can read MS-DOS format disks in both 720K and 1.4M sizes. If you don't have to buy an SE immediately, your patience is likely to be rewarded.

One interesting speculation is that a color version of the SE/30 is in the works. That might make a lot of sense but only if the price is very competitive with the IIcx.

### *Modular Macs*

Apple has focused a lot of attention on the modular Macintoshes recently, and the end is not in sight. The venerable Mac II is economically obsolescent. For roughly the same price you can get a IIcx and enjoy the latest disk drive and memory management technology. Although for a price you can upgrade a Mac II to have the same functionality as a IIcx, I would recommend that you buy a Mac II only if the price is terrific. Last time I checked, the prices were not yet terrific. But the fire sale will come—probably soon—and you may luck into a bargain.

One of the rumored machines most likely to appear within the next few months is the souped-up 25MHz version of the IIcx. Its performance will be a real boon for those who need it. That includes CAD users and folks doing a lot of color work. But the price is likely to be high. The slower IIx and IIcx won't become obsolete. Wait for this one if you can, rather than buy a current model and an expensive third-party accelerator.

### *Portable Macs*

Every Spring since I can remember the trade press has predicted that Apple will introduce a laptop, battery-operated Mac in August. By early summer, we begin to hear rumors of delays into the fall due to—screen, battery, mouse, memory, disk drive, all of the above—problems. Soon after August it becomes clear that the portable has slipped 'till next year. So far, 1989 has been no different. But (as I write this) it isn't August yet.

—RSN

*R. Soon Now (who sometimes writes as "Michael Yourshaw" or "MacNerd") raises children, vegetables, and dogcows on an Arlington, Virginia ranch.*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| Aldus Persuasion | 1.0 |
| Apple File Exchange | 1.1.1 |
| AppleLink | 4.0 |
| BackFAX | 1.02 |
| CADMOVER | 2.20 |
| Calendar Maker | 3.0 |
| Claris CAD | 1.0v3 |
| Claris MacDraw II | 1.0v4 |
| MacDraw II 1.1 | 1.1v2 |
| Claris MacPaint | 2.0 |
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| Mac | 7.2 |
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| Cricket Presents | 2.0 |
| dbaseMAC | ???? |
| Digital Darkroom | 1.1 |
| Disk First Aid | 1.4.2 |
| Disk Fit | 1.5 |
| Double Helix | Rel 2 |
| FileMaker II | 1.0 |
| Finder | 6.1 |
| Font/DA Mover | 3.8 |
| FoxBASE MAC | 1.1 |
| (2.0 announced) | |
| FullWrite Prof™ | 1.1 |
| Hypercard | 1.2.2 |
| ImageStudio | 1.5 |
| Inter•Poll | 1.1 |
| (need to verify) | |
| LaserPrep | 6.0 |
| LaserWriter | 6.0 |
| Mac Tools | 7.2 |
| Mac286 | 2.0 |
| MacLink Plus™/NBI | NBI 4.01 |
| MacLink Plus™/Translators | PC4.01 |
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| Microsoft PowerPoint | 2.01 Microsoft |
| Word | 4.0 |
| Microsoft Works | 2.01 |
| MockPackage Utilities | 4.4 More II |
| 2.01 | |
| MyDisk Labeler | 2.9 |
| Navigator | 2.1 |
| Nisus | 1.01 |
| Omni Page | 1.1 |
| (2.0 announced) | |
| PageMaker | 3.02 |
| Pixel Paint | 2.0 |
| Pyro | 3.3.1 |
| Quark Express | 2.1.1 |
| QuicKeys | 2.0 |
| QuickMail | 2.0 |
| Pyro | 3.3.1 |
| ReadySetGo! | 4.5a |
| Red Ryder | 10.3 |
| ResEdit | 1.2 |
| SAM(Symantec AntiVirus forMac) | 1.0 |
| SAM Virus Clinic™ | V1.00 |
| Soft PC | 1.3 |
| SmartCom | 3.1a |
| Spellswell | 2.1 |
| StickyBusiness™ | 1.0.3 |
| Stuffit | 1.5.1 |
| Suitcase II | 1.2.5 |
| SUM(Symantec Utilities for Mac) | 1.11 |
| Super3D | 2.0 |
| SuperCard | 1.0 |
| SuperLaser Spool | 2.0 |
| SuperPaint | 2.0 |
| System | 6.0.3 |
| TOPS Mac | 2.1 |
| TOPS PC | 2.1 |
| VersaTerm | 4.0 |
| Virex | 1.4.1 |
| Virus Rx | 1.4a2 |
| WingZ | 1.0 |
| WordFinder | 2.0 |
| WriteNow | 2.0 |
| WordPerfect | 1.02 |
| ZTerm | 0.8 |

This compilation of program versions is provided as a means of notifying WAP members about program revisions. It is intended to provide information only about popular products which are shipping. Corrections, comments or additions should be passed on to the Editor.

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*Book Review*

# The Macintosh Bible

## (Second Edition)

by Ray Hobbs

Arthur Naiman's successful Macintosh Bible is now in its second edition, with the same kind of useful information for novices and Mac Hacks as the first edition had, written in the same interesting and often whimsical style. For those of you who have not yet become acquainted with the Mac Bible, it is a collection of useful tips on using your Mac, along with hints on getting the most out of many popular software packages.

The book is about 750 pages long, and is organized into 16 chapters on generic subjects like "General principles," "Printers," "Word Processing," "Page Layout," etc. The subject material reflects the author's unabashed bias toward desktop publishing, with almost 200 pages devoted to word processing, fonts and page layout. That does not mean that other topics have been neglected, however: the Mac Bible is chock-full of tips on Desk Accessories, utilities, telecommunications, Hypercard, database management, hardware, integrated programs, plus a mop-up chapter devoted to "other miscellaneous packages". As an "average" user, I found a useful tip about every 10 pages. A novice will probably discover something new and useful on every other page, while the ultra-power user (read: Marty Milrod) *[Ed—Marty Milrod?]* probably has committed ninety percent of the information to memory by now.

What else of interest does the Mac Bible contain? First there is a good common-sense discussion of Macintosh hardware configurations, including memory and storage options. Then there are a 43-page glossary and a 15-page listing of publishers and their products. Finally, a quote from the book:

"The Swiss use a Latin name so as not to favor any of their four official languages—German, French, Italian and Romansch—over the others. Helvetica comes from the name of a Celtic people, the Helvetii, who inhabited Switzerland during the time of Julius Caesar. I don't know how they came by their name, but tell me, what other computer book gives you trivia of this caliber?"

Indeed. The Mac Bible contains a wealth of information and belongs on every Mac user's bookshelf. It also comes with a mail-in coupon for two free updates of the book—enough to keep it up-to-date for years. The Macintosh Bible (Goldstein & Blair, $28 list) should return its value in time saved and frustration avoided within a month of purchase.


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*Hardware Review*

# A LaserWriter Alternative

by George M. Lewis

I'd like to share my recent experiences with other Mac users who are dissatisfied with ImageWriter output, who can't afford a Postscript laser printer, and who are looking for a relatively low cost alternative to achieving high quality, moderate volume printing. You've probably seen the Orange Micro ads touting " laser-quality printing for under $1,000" using their Grappler LS and an HP DeskJet printer. I was impressed with their demonstration of this combination at MacWorld Expo DC and decided to break open my wallet to experiment with this printing approach.

First the good news: it really works. The HP DeskJet produces high-quality output that is nearly indistinguishable from that produced by a LaserWriter. For about $80 at discount, Orange Micro provides a serial cable to connect your Mac to a DeskJet or DeskJet Plus printer, and software that translates output from the Mac's ImageWriter LQ printer driver into code that drives a DeskJet in 300dpi graphics mode. The Grappler package also includes a print spooler that allows your documents to be printed "in the background." I've tested it with a variety of documents from pure text to pure graphics to combinations of both, and it performed flawlessly. Examples include documents printed from MacWrite II, Superpaint 1.1, Excel 1.5 and Filemaker II.

The downside is that printing with the Grappler is S-L-O-W. While the spooler lessens this inconvenience, my patience wore thin while I was waiting for the final product. I have a Mac+ with 4MB of RAM, and I'm told there is a noticeable speed improvement when a 68020 or 68030-based Mac is driving the DeskJet. Nevertheless, I expected better overall performance since I had purchased HP's new DeskJet Plus with "greatly increased printing speed" rather than buying a regular DeskJet. In talking to Hewlett- Packard, I found that the increased speed of the Plus model is due to an improved paper-handling mechanism rather than enhanced electronics, and that drivers written for the regular DeskJet function equally well with the Plus. Both models of the DeskJet are designed for the moderate volume typically found in home or small business use, but they're not an acceptable substitute for a LaserWriter in high-volume desktop publishing applications.

After my initial disappointment with the Grappler's printing speed, I started looking for a better set of DeskJet printer drivers and I located two: DataPak Software's Printer Interface III and GDT Softworks' JetLink Express. I contacted both companies, compared price and features, and selected the DataPak PI III for testing against the Grappler. To my delight, the PI III improved my overall printing speed about 43%: 30% to 35% on documents with high text content, and 50% to 55% on documents with high graphics content, printing at 300dpi resolution. (Printing speed with either is roughly comparable to the ImageWriter printing at lower resolution.) I have not tested the GDT driver since I'm more than pleased with PI III, and too frugal (make that cheap) to invest in more software offering only marginal potential for even better performance.

***First the good news: it really works. The HP DeskJet produces high-quality output that is nearly indistinguishable from that produced by a LaserWriter.***

The secret to PI III's increased printing speed lies in a basic difference between it and the Grappler. The Grappler isn't a true printer driver, it's a "translator" that takes ImageWriter LQ driver output and translates it into code that's accepted by the DeskJet. PI III on the other hand is a true printer driver that generates native code for the DeskJet on the fly. Also, while the Grappler uses the DeskJet only in its 300dpi graphics mode and doesn't take advantage of any of its other built-in capabilities, PI III allows you to use the DeskJet's built-in fonts and several other cartridge fonts that can be inserted in the DeskJet. It also allows you to do percentage size reduction on document printing in a manner similar to the LaserWriter.

I've made no direct, methodical comparisons of printing time between the DeskJet, ImageWriter and LaserWriter, although I've now had experience with all three. Intuitively, I feel that the DeskJet with PI III driver combi-

nation is at least on a par with an ImageWriter, probably slower at printing text than a LaserWriter, and faster than a LaserWriter at printing full page graphic documents. Overall performance in terms of printing speed is adequate for the average home or small business user.

While PI III is much faster than the Grappler, it has one drawback—no print spooler. DataPak said that they've tested several, but have not found one that works with their driver, and they gave me no indication that they're committed to developing one of their own. Given my personal printing needs and the dramatic speed improvement offered by PI III, the lack of a spooler is only a minor inconvenience to me.

If you want top-notch 300dpi results with either the Grappler or PI III software you will need font sets that include fonts 4 times (4X) the size of the font used in your document. The Grappler package includes 3 such font sets—Dutch, Swiss and Courier—that have a wide range of font sizes from point 7 to 72. Dutch is similar to the standard Times font, and Swiss is similar to Helvetica. These 200K+ font files are rather large and you'll need to have more than 1 Meg of RAM to install several of them in your system.

So what's the bottom line? With the help of DataPak's PI III, my Mac+ and HP DeskJet Plus are a great combination, providing higher quality output than I ever expected for the price. Today you can buy a regular DeskJet from a number of local HP dealers for $450 to $500, or a DeskJet Plus for around $700. (I bought my DeskJet Plus from Clinton Computer in Alexandria.) The PI III driver costs $125, and DataPak also sells the necessary cable (a standard Mac-to-ImageWriter I cable) for an additional $20. In other words, for a total investment of around $600 to $850 you can have printing capability equivalent to that provided by a far more expensive laser printer.

I highly recommend that you give this option serious consideration. I'm certainly happy that I did.

Product Information

DataPak Software, Inc., 14011 Ventura Blvd., Sherman Oaks, CA 91423; 1-800-327-6703 - Printer Interface III v2.2 - $125 + Shipping.

GDT Softworks, Inc., P.O. Box 1865, Point Roberts, WA 96281; Inquiries - 1-604-291-9121 - Orders - 1-800-663-6222; JetLink Express - $149 + Shipping.

Orange Micro, Inc., 1400 N. Lakeview Ave., Anaheim, CA 92807; 1-714-779-2772 - Grappler LS - List $149.




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WAP

# 4D 2.0—Finally!

by Bob Pulgino

This column is something I've wanted to do for a long time now, to give me a sounding board for some of the ideas and opinions I have picked up as a result of my experiences working in this town as a Macintosh consultant. I hope it will generate a lot of feedback and input from others, be they other consultants and developers, those who have to deal with consultants on the job, or anyone out there with interests overlapping the topics I might discuss. I encourage anyone with questions or complaints to contact me, and I will respond in future articles whenever I can. I can be reached most easily and quickly by way of e-mail on Paul Heller's Twilight Clone BBS, CompuServe (76174,3377) or phone (301/474-0634). I do not get to the WAP office very often and I never use the WAP TCS, so those channels are not encouraged.

## *Can It Be True?*

It looks as though the long-awaited and much ballyhooed upgrade to 4th Dimension is finally at hand...almost. The new release is already shipping in France (where it is tagged as version 4.0), and ACIUS officials have publicly stated that they are "99.9% sure" of a shipment in the U.S. by the end of August. The rumor mill is buzzing with information about the new features, possible new add-on products and the upgrade policy.

Since 4D is probably the most popular and in many ways the most powerful database tool for corporate developers and consultants, I figured that a good way to start off this column would be to try and consolidate all the information I've been able to glean on the upgrade and present it here for everyone to chew on.

The information can be grouped into three categories. Some is public knowledge—old news to anyone who has seen one of the live demonstrations ACIUS has been giving for over a year now (WAP members got a very thorough demo at the general meeting a few months ago). Some of it has been obtained directly from ACIUS by way of documents or visits to their office. Still more of the information will fall into the category of Hearsay And Innuendo, scraped from hints and slips made by ACIUS on their tech-support forum on CompuServe. Under no circumstances should you assume that I know what I am talking about.

Now that the standard disclaimers are out of the way, let's talk about the product. 4th Dimension 2.0 is without a doubt going to prove to be one of the most significant upgrades you have ever witnessed. Very few aspects of the original program have "survived" the revision process without experiencing some sort of improvement, and while some of the changes are minor, most are not. The changes can be grouped into three main areas: redesign of the database engine's file structure and capabilities, added power features for layouts and procedures, and improvements to the capabilities of the User Environment. My discussion assumes that the reader is familiar with the current release—I wouldn't be able to cover nearly as much otherwise—so if you aren't a 4D aficionado, I apologize. Let me know what interests you, and I will write about them another day.

## *Database Engine*

**File structure:** The most visible and significant change is in the format of the files created on disk for your database—the zillions of separate files for all the indices, data, structure and program code have been replaced with a format that enables all databases to be stored with only two files. A "Data" file will be created to store all database records and indexes, and a "Structure" file, for the program code and layouts. Several benefits flow from this format. First, the performance of disk-based operations will benefit dramatically—much of 4D's current performance problems come from the need to maintain all those separate index files, opening and closing them via the Macintosh operating system with each record update, search and sort. As a result, imports and exports, sorts, searches, deletes and data-entry are all reported to be from 10 to 40 times faster in the new release.

The data file no longer has to be in the same folder as the structure file—when a database is opened by double-clicking on the structure file and a data file is not in the same folder, the user will be invited to select a data file elsewhere, or create a new one.

***4th Dimension 2.0 is without a doubt going to prove to be one of the most significant upgrades you have ever witnessed.***

The functions of the current 4D Tools application have been built into version 2.0—damaged data or indexes are detected automatically at startup and repaired, and bad blocks are mapped out at run time.

**Relational capabilities:** Many new features have been added to make 4D more relational, and the need to write code to perform relational operations has been greatly reduced. Links can be defined as "automatic," which means that whenever a record in a link is loaded, its matching record in the linked or linking file is loaded without an explicitly request. Automatic links can be extended across multiple files.

Since an automatic link is always established, it will now be possible to search or sort records in one file on the basis of values obtained from linked files. Other operations, such as updating and summarizing linked data, can be done without the awkward programming required by 4D 1.0. Links no longer need to be built or rebuilt—they are created instantly on a record-by-record basis whenever a record in the relationship is loaded or modified.

Links can be both one-to-many and many-to-one (i.e., bidirectional). While this sort of relationship can be defined in the current release using subfiles and two separate link definitions, along with a ton of coding, in version 2.0 it can be done with a single link definition and no programming at all.

**New field types:** 4D will now offer long-overdue Boolean and Time field types, avoiding many programming hassles and storage inefficiencies faced by current 4D users. Times are stored as an integer, representing the number of seconds since midnight, and layout facilities are provided that allow times to be displayed and entered in either 12- or 24-hour formats without programming. Boolean fields eliminate the need to use two bytes (integers or alpha fields) for each record to store 1-bit true/false values. Booleans can be displayed as checkbox/radio buttons in layouts, again without writing any code.

## *Layouts*

**Multiple-page layouts:** The need to easily create and display multi-page layouts for files with too much information to easily display in a single window has been answered handily. A simple command in the Layout Editor window enables the developer to create as many "pages" for the layout as desired, and buttons can be placed on the layout to navigate between the pages, without requiring any additional coding.

**Field tabbing sequence:** The developer now has complete control over the order that the fields in a layout will be highlighted for data entry when the user presses the Tab key. Rather than being limited to a strict left-to-right and top-down sequence, logically related clusters of fields can be edited in their proper sequence.

**Layout menus:** Menu bars created in the standard Menu Editor can now be associated with a specific layout, enabling 4D to insure automatically that the menu commands are displayed whenever the layout is displayed, even in the User Environment. Menus in the menu bar are appended to the current menu, and the menu items' associated procedures are activated without the need for complex event-loop programming.

**Layout editor:** Improvements to the layout editor will include such graphic-editing aids as grouping objects, "nudging" with the cursor keys, and constraining lines, circles and squares. Object dimensions can be explicitly defined via a dialogue box, for cases where such precision can't easily be obtained with the mouse. Eight-bit color assignments can be made for all graphics, fields and other layout objects. A new graphic object called a "grid" can be used to create and position an array of variables for spreadsheet-like data display and entry.

**Data-entry validation:** Fields and editable variables (which can now appear in the same layout or dialogue) can also be assigned automatic validation attributes:

- A default value and upper and lower limits can be specified for each field or variable. A default value is automatically entered each time a new record is displayed. The value can be a constant or a derived value such as the current date or a sequence number.
- An "entry filter" similar to dBASE's picture functions and templates, can be specified to screen data entered on a character-by-character basis, useful for giving the user immediate feedback on data-entry mistakes for specially-coded fields. It can also enable formatting characters such as the dashes in social-security number to be displayed, eliminating the need to type them or store them in the database. Entry filters and formats can be created in a special window called the "Styles Editor" and stored for reuse throughout the application.
- The list concept offered by the "standard choices" style field has been greatly enhanced. Lists for standard choices, mandatory choices and excluded values can be created for each field in a List Editor window. Lists created in this manner can be accessed and manipulated in procedures.

**Buttons and "action objects":** In addition to the currently available checkboxes, radio buttons and standard buttons, new types of user-interface controls include popup menus, invisible buttons, radio-pictures, thermometers, rulers and dials.

Popup menus, a popular

addition to the Mac user interface standard, present the user with a list of value choices to select with the mouse.

Invisible, Highlight and Radio-Picture buttons have been added to allow you to create buttons that appear as icons or to make part of a graphic "hot." The buttons are placed over graphics that the user sees on a layout, and when the user clicks on the graphic an associated action is performed.

"Thermometers," rulers and dials are variations on the standard scroll-bar control, allowing the user to enter a numeric value by dragging the shaded portion of a graphic along a bar or arc that represents its range.

All interface control can be assigned a keyboard-equivalent which can make use of all function keys on an extended keyboard, plus any combination of the modifier keys: Command, Shift, Option and Control.

Buttons can be created to automatically perform common layout actions, such as moving the user to the next, previous, first or last record in the file, deleting the current record, flipping the pages in a multi-page layout, and opening, adding or deleting subrecords. This feature alone will probably reduce the amount of overall coding needed for most applications by 20-30%.

Borrowing from a popular feature of Hypercard, 4D 2.0 allows you to create a "script" procedure for each button, field or other user-interface control in your layout. The script will be executed whenever that control is clicked or modified by the user. No longer will the user have to wait for lengthy layout procedures which have to test for validation of all layout fields and controls each time he or she hits the tab key—each object in the layout can be programmed individually, so only the code related to the last object modified will execute at a time.

**Included layouts:** Included layouts for other files or subfiles can be generated automatically. Included layouts can be autosized and specified as enterable, double-clickable, or both.

### *Procedures*

**New loop structures:** 4D's set of Pascal-like control-structure statements have been rounded out with the addition of the "For ... End for" and "Repeat ... Until" structures. A For structure will loop over a block of statements from a specified starting value to an ending value by an increment. A Repeat structure is sort of an upside-down, backwards While loop—the controlling conditional expression is placed at the bottom of the loop and tested at the completion of each cycle (which means the loop will always execute at least once, regardless of the condition), and will stop executing the block of code when it evaluates to a false value.

**Macro capabilities:** The macro capabilities of the 4D language have been improved immensely by the addition of specialized macro variables called "pointers." Pointers can be assigned the names of files, fields or layout objects and used in lieu of these names in procedure statements and functions, thereby performing operations which currently require the very inefficient and clumsy EXECUTE statement. Along with a slew of new statements and functions which give your program access to a complete description of the files and fields in the database, your ability to write reusable code is improved.

**Arrays:** Real arrays are now supported, along with a set of new functions and procedures for quickly loading them from file selections or layout lists, searching, sorting, deleting and inserting rows and for saving the array contents to a database file.

A group of arrays displayed as scrollable lists in a layout can be concatenated into a single multi-column list and controlled with a single visible scroll bar. Different fonts, font sizes, styles, formatting and color attributes can be assigned to each column (array) in the concatenated list.

**Transaction management:** 4D 2.0 will bring this technique, previously available only in powerhouse mainframe database systems, to the Macintosh. In DBMS terminology, a "transaction" is a sequence of database updates that together make up a single logical function, such as a payroll run or a purchase-order posting. What's so important about these individual updates is that they have to be validated step-by-step as they are performed, and if any one of the steps fails for some reason, all the previously completed steps in the sequence must be somehow undone. The new transaction management features in 4D make this easy to accomplish. The START TRANSACTION command is executed before the first update is performed, to tell the database engine to keep track of the updates that follow so that they can easily be rolled back if necessary. As updates are performed, validation tests can be performed; if any of the tests fail, the CANCEL TRANSACTION command can be called to restore the database to its state immediately prior to the start of the transaction. If everything performs as it should, the sequence of updates is made "permanent" by calling the VALIDATE TRANSACTIONS statement.

**Printing:** Reports can now contain multiple break headers and areas, and different headers and areas can be assigned to each sort level. Variable-frame printing can be used with text and picture fields, which means that the areas for these fields on the report will expand dynamically to accommodate the amount of data in the field.

**Searching:** All the features of the Search Editor are accessible procedurally, including the ability to concatenate several search criteria using the And, Or and

Except operators.

### *User Environment*

Far too many changes have been made in the User Environment to discuss here in any depth, but I will try to briefly touch on the important ones. Selecting the current file and layouts to use is simplified with a nifty "List of Files" palette-like window. Switching to another file is as simple as clicking on its name in the list. Icons next to each file name provide popup menus from which the file's input and output layouts can be selected.

A new search command allows you to use an input layout for a "query by example" style search. Mailing labels can now be printed without creating a layout, using a special Label Format Editor dialogue, and the Quick Reports feature has been significantly improved. Importing and exporting can also be performed without a layout by means of a sophisticated control dialogue.

The password access-control system has been completely redone, doing away with the rigid hierarchical structure in favor of a flexible group-definition system. While each user still has his or her own password assignment, access privileges are assigned to "groups" to which users belong. Groups can belong to other groups, thereby sharing access privileges, and users may belong to more than one group. Two automatically defined users, the "SuperUser" and the "Administrator" allow the developer to prevent clients from accessing the Design Environment but still permit them to modify access privileges.

### *Summary*

The main goals for this release were to increase performance (probably the most criticized aspect of the current product), eliminate the need to write programs in order to perform routine tasks, and increase the power of the system for advanced programmers. While this list of aspirations looks like any standard marketing drivel forthcoming from any software publisher, I have to tip my hat (and eat many of the doubtful words I have previously expressed)—ACIUS has come much closer to achieving these goals than I would have ever believed.

4th Dimension 2.0 is hot, and likely to generate as much excitement and revenue for the company as the first release did two years ago. Is it so great that it will enable them to win back the many disgruntled customers that fled the camp in favor of speedier alternatives (such as FoxBASE+/Mac)? Would the customers that paid such high prices for the product have been better served by a less ambitious release a year earlier?

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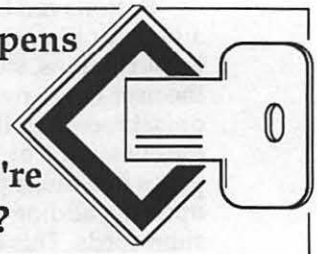

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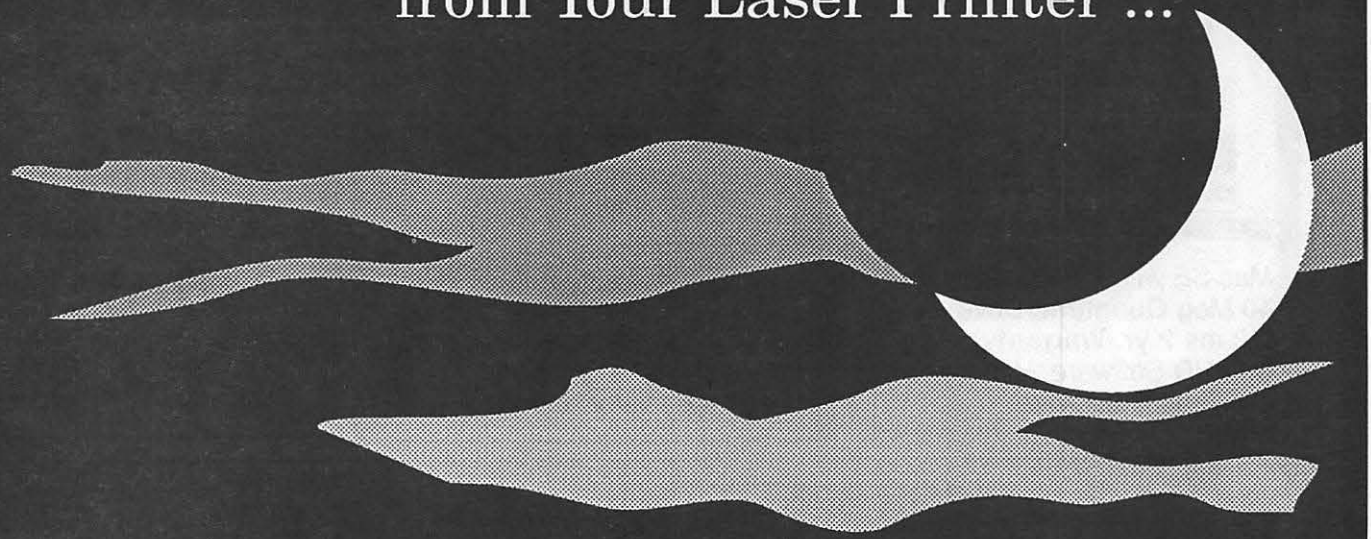

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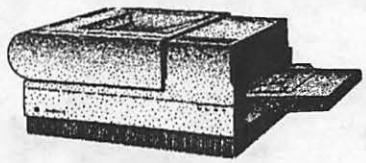

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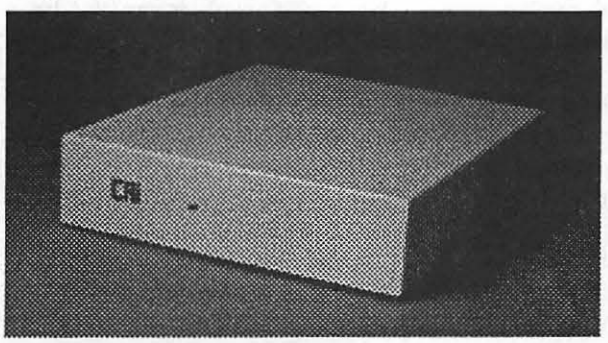

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# AppleWorks 3.0:
## The Shadow of Things To Come

by Ray Settle

After spending some time at the National Educational Computing Conference playing with Appleworks 3.0 and asking many questions of the Claris and NAUG representatives introducing the version, I am convinced that AppleWorks will be the productivity program of choice for Apple II (and GS) users for years to come. We owe a debt to Elisa Takata and John Kinder for pushing for this product and to Beagle Brothers (specifically Randy Brandt, Alan Bird, and Rob Renstrom) for massaging Robert Lissner's elegant program. (A bit of trivia—AW 3.0 was programmed on a Macintosh! So now we can feel a new sense of kinship with our Macintosh little brothers since their machines now have a legitimate purpose in the Apple II world.) It is an exciting package.

Significant enhancements of the program include:

1. Even though the program is larger, it will still run on 128K machines although 256K seems to be more convenient; on the other hand, the desktop will be reduced to 40K (76K with 256K) instead of its present 56K. It runs on a one-drive machine, and will only access the disk to run the spelling checker. The program now takes two sides of two 5.25 inch disks, but you do not need to load everything—it can be configured to load only the WP module, in which case it will load from one side of one disk. OA-P no longer causes a disk access if the system has enough memory to load SEG.PR on bootup.

The 3.5 inch disk will load automatically without the date entry if a clock is present. The program can be configured to load only one module or any other number, including none for an extra-fast startup.

If they intend to use AppleWorks 3.0 regularly, however, 128K users should give serious consideration to upgrading their memory and disk systems. They will find that AppleWorks 3.0 is an absolute delight to use with a slightly enhanced system. My personal recommendation, based on previous experience, is 512K of additional memory (prices are better now than they have been in a long while) and a 3.5 inch disk (the Lazer 3.5 disk with its universal controller, which allows both 3.5 and 5.25 disks to operate from the same slot, is a relatively inexpensive option). Such a system would allow AppleWorks to challenge many competing word processors for versatility, speed, and ease of use.

2. The program will come with an enhanced version of Bird's Better Bye and will recognize all the popular memory boards for automatic loading. Again the configuration option will permit several variations on the loading.

3. All previous AppleWorks files will be supported, but previous versions of AppleWorks will not recognize 3.0 files unless none of the new features are used in those files.

4. The printer menu now contain 22 custom printers from the ImageWriter LQ to a JUKI 6100 daisy wheel. (Other accessible printers are: APPLE Daisy Wheel, Dot Matrix, ImageWriter I, II, & LQ, Scribe, and Silentype; BROTHER HR 10, HR 20, HR 25, & HR35; DIABLO 26API & 630API; EPSON MX, RX, FX series; JUKI 5500 series, 6100, 6200, 6300, & 6400; OKIDATA 82A, 83A, 84,92,93,192, & 193; PANASONIC KX-P1080, KX-P1091, KX-P1092; QUME Sprint 4 & 11; and just about any other printer that is Epson-compatible.) Up to 3 custom printers can be configured at the same time. AW 3.0 still only allows 3 printers to be selected, but given the ease in selecting printers, that is not a flaw. Up to 6 custom printer codes can be accessed directly in the document, so italics mode from Epson printers can be used and a custom printer will no longer be a necessary. Color and bit-image graphics can also be accessed via these custom commands. AppleWorks will allow up to 255 copies to be printed.

5. Regular use of subdirectories is now a reality, even for the novice user. Opening subdirectories from the file menu is as easy as selecting a file. Keyboard commands allow the user to move up and down directories, move to a new disk, move through file lists and save the file to its original subdirectory even if

*...now we can feel a new sense of kinship with our Macintosh little brothers...*

the subdirectory is no longer the current selection. Control-Reset now returns to the Main Menu rather than resetting the system.

6. An enhanced and enlarged clipboard enables direct copying from one module to another. Conversion is automatic.

7. Appleworks can now import files more easily from other programs and other machines and export files that other machines and BBS's can use.

8. OA-DELETE will now delete the character under the cursor.

9. The program now keeps track of how many files are on the desktop and will only allow the user to select files up to that number. All files up to the desktop limit can be selected in a file directory with one key stroke.

The word processor module features the following:

1. A built in improved version of QuickSpell is accessed with an OA-V command. It understands phonetic misspellings and is invoked with a keyboard command. It contains 90,000 words on a 3.5 disk but only 53,000 on a 5.25 disk.This spelling checker is phonetic, so suggestions for misspelled words are more easily found. The new checker will use any custom dictionary from QuickSpell and will even offer the option of picking one.

2. Real tabs are now possible. Right, left, center, and decimal tabs can now be set at any point in the document by copiable rulers. Right justification is also an option.

3. Many of the more used print format commands such as centering and normal justification can now be entered with Control key commands:

CONTROL-P starts a new page,

CONTROL-A adds a token,

CONTROL-N restores normal justification,

CONTROL-F begins full justification,

CONTROL-R begins right justification,

CONTROL-C begins center justification,

CONTROL-B turns boldface on/off, and

CONTROL-L turns underline on/off.

Each control code can be represented on the zoomed screen by a caret; the message line at the bottom of the screen will indicate what command that caret represents.

4. Special printer codes can be invoked within the document to enable printer-available options as italics and mouse text. A range of pages (such as from page 4 to page 7 in a 12 page document) can be printed through an option on the OA-P menu. Date and Time stamps can also be included in any document.

5. Footers and headers are easily invoked and can take any number of lines up to a half-page.

6. The screen display will be more WYSIWYG since the OA-Z command will now hide all the print formatting commands.

7. New document size is 16,250 lines, memory permitting. Practical sizes are 680 lines (12 pages) for 128K and 248 lines (37 pages) for 256K.

8. Boldface and underline commands will remain until turned off.

9. Word processor printouts will now offer the option of tabs and can substitute spaces for tabs.

The database improvements are impressive and include the following:

1. 1-24 across labels. Now you can use those sheets of 3 and 4 across mailing labels!

2. The scrolling left-right screen in the all-records layout now enables the user to see all the categories and can even retain a left-hand title column for easy tracking of categories.

3. Twenty report formats are now available; report formats can be made automatic by copying the screen layout and vice-versa.

4. Sorts can now be done on up to 3 categories simultaneously and will be done in the priority order specified by their selection.

5. Finds can specify one or several or all categories.

6. Current time and date entries can be automated. A @ entered in a date category will print the current date.

7. Category titles can be displayed in inverse.


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8. 16250 records per file (memory permitting). 400 records is the practical number for a 128K machine while 1800 is the limit for 256K. Both files would have to contain less than 100 characters per record.

The spreadsheet has several enhancements:

(1) 26 new functions (5 arithmetic, 9 trigonometric, 6 financial and 6 logical functions).

(2) Copy and move blocks via the clipboard to other spreadsheets and other modules.

(3) Print larger spreadsheets in segments so they can be cut and pasted together. Appleworks 3.0 prints a column that can fit on one page, then prints the excess columns on the next page—no more printing the excess on the next line or dropping it altogether. (You will still need Sidespread to print sideways.)

4. A spreadsheet can now have 9,999 rows by 127 columns, given sufficient memory. (3,000 cells is a practical size for 128K machine with 10,000 and 15,000 cells a practical size for a 256K IIGS or IIe respectively.)

5. Logical functions now work with strings, allowing a teacher to set up a grading system to calculate the letter grade as well as the numerical grade, or anyone to include a message with a calculation. The @LOOKUP, @CHOOSE, @IF, @AND, @OR, @NOT functions all work with text strings in their formulas.

6. Move from column A to the last used column in the spreadsheet with OA->, and OA-< returns to column A.

7. Spreadsheets can be created from TAB-delimited spreadsheets and databases.

Perhaps the biggest enhancement to Appleworks is that now the program is much easier for the casual and/or inexperienced user to learn and use. As one who has taught many adults how to use it, I feel that Appleworks 3.0 will be easier for new users to learn and for marginal users (those who just use a few of the features because the others seem too difficult to learn or remember) to fully exploit. Rather than making it more difficult to use, as one would suspect an enhancement to do, version 3.0 is simpler to use and quickly learned. Experienced users will notice little change unless they wish to use the enhancements and then the changes will be readily accessible and immediately usable.

*Perhaps the biggest enhancement to Appleworks is that now the program is much easier for the casual and/or inexperienced user to learn and use.*

AppleWorks 3.0 still has room for enhancements. For one, macros were not included because that would have made the program too big for 128K machines, but Claris does include a 50% discount coupon for Beagle's Ultramacros with the program—the first enhancement that Appleworks users should add. Other enhancements available will be: Sidespread, SuperFonts, Paint, Graph, Filemaster, Spreadtools, Desktools and PowerPack. Beagle Buddies will be receiving their Time.Out upgrades well before 3.0 ships, so upgrading the Time.Out series will relatively easy for WAP members, since we have eight Beagle Buddies currently in the club.

There will be little need for the Applied Engineering enhancement disk unless the user wants more than 16,000 lines in the word processor and more than 16,000 records in the data base and a continuous time display on the screen. The time display would be a useful patch for someone out there to engineer. AE is reportedly working on a new enhancement disk for their memory cards. Most present patches will not work on 3.0.

The upgrade path to Appleworks 3.0 is as easy as ever. If you are a registered Claris Appleworks owner (if you upgraded to 2.1 or purchased your copy in a Claris box and sent in the registration, you are a Claris registered owner), you will receive the upgrade information automatically in the mail in August. If you are not a Claris registered owner, call Claris at 1-800-628-2100 for an update kit. Upgrade cost is $79.00. If you are an Appleworks user without an original disk, you can get a copy of Appleworks 3.0 by sending in the coupons in the July editions of the National Appleworks Users Group Forum or A2-Central. That upgrade will cost $99.00.

The total package of enhancements is impressive; while previous upgrades offered a few add-ons and some bug fixes, version 3.0 is a real upgrade. Those who were reluctant to upgrade before should not hesitate this time; this one is really worth it. Try it—you'll like it.

[AUTHOR'S NOTE: In addition to my all too brief experience with Appleworks 3.0 at its announcement at NECC '89, I used material from the NAUG Forum and A2-Central articles in preparing this preview article. References to specific desktop sizes were from the NAUG Forum. Any serious Appleworks user should belong to NAUG to discover all the power the program holds. NAUG Forum, Box 87453, Canton, Michigan 48187 ($27.00 per year). Any serious Apple II user should subscribe to A2-Central to better understand the Apple II. A2-Central (formerly Open Apple), P.O. Box 11250, Overland Park, Kansas 66207 ($28.00 per year).]

## AppleWorks 3.0 - SOON

by Gary Hayman

AppleWorks3.0 is almost here. In fact, Claris has advised that it should be released this month (August 1989). Perhaps you have been reading the excellent articles in the A2-Central, NAUG Forum, and InCider publications. I have taken some of the discussed features and placed them into a quick reference list which you can refer to. The general feeling among those that I have spoken with is that this version is a "must have".

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- Some former print options by control key

Print range of pages
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Right justification
Six new printer codes
Total word count

DATA BASE
16,000 record data base
Horizontal scrolling
Left side titles
Selectable user defined layouts
Multiple category sorts
Single category finds
One key entry of current date and time
20 report formats
Multiple label across page reports
Multiple record screen formats from report formats
- and visa versa

Improved sorting capability
Category names in inverse if desired

SPREADSHEET
9,999 row by 127 column spreadsheet
Smart reference (value or label)
Logic prints labels
5 new arithmetic functions (@MOD, @PI, @EXP, @LN, @LOG)
9 new trigonometric functions (@DEG, @RAD, @COS, @ACOS @SIN, @ASIN, @TAN, @ATAN, @ATAN2)
6 new logic functions (@TRUE, @FALSE, @ISERROR, @ISBLANK, @ISNA, @NOT)
6 new financial functions (@IRR, @FV, @PV, @TERM, @PMT @RATE)
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Clipboard to SS overwrites, not inserts
Built in graphing capability
Intelligent printing of spreadsheet

GENERAL
No size limit clipboard (can use all memory)
Automatic format of data on clipboard for AppleWorks module
Select subdirectories and files by point and shoot
Select ASCII text files
Change pathnames easily
3 custom printers allowed
Built in support for more printers
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Desktop enhancements (file navigation)
Smart save; No key start-up
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New Configuration Menu - preloading, spelling checker
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# II➳Mac or not II➳Mac?

by Lou Pastura

...That is the question. Whether 'tis nobler to suffer the slings and arrows of the power users or jump right in and drop a bundle on the latest in gee whiz, hi-tech wizardry (with apologies to Mr. Shakespeare!).

Tough decision! Technology is moving forward rapidly and relentlessly. Is it time to upgrade? Should I enhance my current system or should I go (for) broke on a new one? Is newer better?

This article will not provide any pat answers to these questions, but may identify some questions you can ask yourself to help you make the decision that best fits your personal situation. Sorry to disappoint the machine chauvinists out there in Journal land, but, despite the title, this is not an Apple II—Macintosh issue. This discussion applies to any decision about enhancing a current system versus switching to a new one, regardless of brand or model.

There are three major considerations in the decision-making process:

- motivation
- alternatives
- cost/benefit and financing

## *Motivation*

What has motivated you to consider a change at this point in time? Is there something you want to accomplish that you cannot accomplish today? Is there something you need or want to do better, faster or more easily? Are you looking for something new to capture or recapture your interest? Lastly, (be honest, now) are you lusting after the latest, greatest, fastest and most powerful gadget and hoping that the need for the super power and monster applications will follow?

Having recently gone through my own "crisis of confidence," let me respond to these questions myself. There is nothing I can think of that I need or want to do that I can't accomplish in one form or another on my current system (IIe, lots of memory, hard disk and accelerator). I would like a higher-power document formatting and desktop publishing capability and the ability to produce higher quality printed output. High resolution color would be nice as well. I must confess that I would like a new "gadget" to attract and hold my interest, and I must also confess that the latest and greatest offerings in both the Mac and the IBM/compatible worlds, with all the color, speed and power available, warm the cockles of my shamelessly greedy heart.

## *Alternatives*

Depending on your answers to the questions in the motivation section, you need to examine the hardware and software alternatives available to respond to your perceived needs. There are three alternatives available to the dissatisfied user:

-New hardware for the current system.

-New software for the current system.

-A new system (hardware and software).

Each of these alternatives should be carefully examined to determine which will best meet your need(s). In my case the alternatives are too numerous to be described adequately in this brief article. Suffice it to say that my own examination of alternatives will likely be ongoing for some time to come!

In evaluating the various alternatives available, it is important to keep your timeframe in mind. Are you in the market for a short-term fix or are you looking for a solution that will allow a broader base from which to support future enhancements and new applications as they are developed? If the former is more important, a less expensive enhancement to your current system may be best. If you are seeking a longer-term solution, this may suggest a more dramatic change.

## *Cost/Benefit and Financing*

All you attorneys out there with large sums of other people's money to spend can skip this part and cut to the chase. (Just kidding, barristers!) For everyone else, here comes the bottom line... When you have defined the alternatives available to meet some or all of your needs, you need to calculate the cost for each alternative so that you can decide if the benefit to be derived is worth the expense. Keep in mind that more drastic changes will generate additional cost, not only in hard-earned dollars but also in the time and effort needed to transfer data from old formats and applications to new ones. Also, don't forget the learning curve on a new operating system and new applications. (Note: go back and look at your motivations. If you're looking for something new to play with, this may be an advantage.)

When considering the cost of keeping and upgrading your current system, don't forget to include the likelihood of breakdowns and what service may cost. Consider the age of your system—it makes better sense to upgrade a 3 year-old system than to upgrade a comparable system that happens to be 7 or 8 years old.

When considering what a new system may cost, include the cost of new software. Also, don't forget to include whatever funds you might be able to generate by selling your old system. The semi-annual WAP garage sale is a great place to accomplish this. (It only hurts for a little while!) Other alternatives are the WAP Telecommunications System or the classified section of the Washington Post.

Having identified the cost of each of the alternatives that seems to meet some or all of your needs, it's decision time! Look at each alternative and compare the costs and benefits. Is the cost reasonable for what you hope to achieve with the change? Do any alternatives stand out as especially good or bad, considering the bang you estimate you will get for your buck (and considering the bucks you have to work with)?

### *Finally*

Take heart. Look on the positive side. There is no clearly right or wrong decision. There is someone out there right now who is just as happy with an Apple II+ with 16K of memory as someone else with a 2 Meg/80 Meg warp speed IIgs! There is as much pleasure and satisfaction in getting the most out of your aging 128K Mac as there is in watching your latest brilliant spreadsheet design whiz by on a shiny new IIx. Be careful about following too closely the advice of others. Each situation is unique and the best solution for you may not be the same solution someone else has chosen.

Most of all, learn and have fun.

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# COMMAND.COM

by Jim Pendarvis

COMMAND.COM is a new program from HyperDyne Software and Pinpoint Publishing. It is a collection of utilities, programs, or commands designed to emulate the MS-DOS operating system on Apple II's. While COMMAND.COM looks like MS-DOS, it does run under ProDOS. COMMAND.COM allows you to create 'environments' that act like Prodos or even Unix.

Many of the commands are internal; the rest are external, to be loaded from disk as needed. The external commands may be renamed to suit your tastes and users may write their own. It is also compatible with Pinpoint's Desktop Accessories. The flexibility allows one to "mix and match" to achieve almost any objective.

### *What does it do?*

You can use its command line interface to perform most disk utilities. These include copying files, formatting disks, comparing files, and so on. "Big deal," you say. After all, all of us have some form of disk utilities, even if it is only ProDOS Filer. And most of them try to shield us from having to type subdirectory and file names. What sets this program apart is its combination of simplicity and flexibility.

Suppose you have Appleworks stored in a subdirectory of that name. To copy it to a Ramdisk, all you need do is type: Copy AppleworksR: . What could be easier? In addition, wildcards are permitted. And you may use optional 'switches'. Examples include: -D to prevent overwriting an existing file, -P for a prompt for confirmation, and -Q to turn off the display while copying. Many commands may be redirected. For example, a disk catalog may be sent to a text file.

More importantly, at least for me, is the batch file capability. You can use their text editor, TED, Appleworks, or most other word processors to create text files of a list of commands. When the file is invoked, COMMAND.-COM will execute them as though they had been typed in from the keyboard.

*The flexibility allows one to "mix and match" to achieve almost any objective.*

The batch file commands are somewhat like a programming language. These include: For/Next, If/Then (with a wide variety of conditionals), Getkey for specific responses, Goto, windowing and error checking. What you can do with these is limited only by your ingenuity.

The batch file example in the manual shows a method for doing client billing for AppleWorks. It asks you for a client's name, creates a text file of that name, writes the time and date to the file, runs AppleWorks, returns to the batch file and writes the new time to the file. The time difference would be the amount of time spent on that client.

### *How do I use it?*

I use COMMAND.COM to control loading and deleting files from a Ramdisk, and to start up certain applications. One in particular is Quicken, a check-writing program from Intuit. A bad habit of Quicken is that it insists on trashing slot 3 Ramdisks. It does inform you that it wants to do this and asks you if it is OK. I cannot imagine it ever being okay, so if the program goes to the trouble of providing a warning message, it should do something to prevent the problem in the first place—but that is another story.

COMMAND.COM to the rescue. My Quicken batch file is started from my program selector. (The system file is IO.System and the program file is the batch file.) It first looks to see if the checking account data exists on /Ram. If not, then it makes sure that the data disk is online and provides a prompt if necessary. Once the data file has been copied to /Ram, the next step is to verify that the Program disk is on line. Then Applied Engineering's Slotchanger is run to redirect /Ram. This prevents /Ram from being destroyed and makes it available to Quicken. (Slotchanger has been modified to act like a switch. Each time it runs, it alternates between slots, without intervention.) Quicken is then started up. On exit, you are returned to the batch file and the /Ram slot is restored by Slotchanger. "Finally" is a prompt for backing up the check data—very straightforward and fully automatic.

### *Recommendations*

Obviously, I like it. I find it useful, even though I am sure that I have not even begun to exploit its full capabilities. This is one of those programs that you do not hear that much about, but should. The fact anyone can use it to easily customize their operating environment is reason enough to buy it.

# InnerDrive

by Dan Slaven

Applied Ingenuity is now shipping their internal hard disk for the Apple IIgs. Inner Drive, as it's called, comes in both a 20MB and 40MB version. This review looks at the 40MB drive.

For someone with limited desktop space (MY desktop, not the computer's) 40 megabytes of internal storage for under $600 was irresistible. Actually, the bill came to $609—$599 for the Inner Drive and $10 shipping and handling. UPS delivered a package only slightly larger than a shoebox just two days after AI told me my unit had been tested, approved and shipped. Inside was a very well packed Inner Drive hard disk unit with its integrated power supply, cooling fan, wiring harness, controller cable and controller card. A two-page, typewritten (well, two pages of processed words) instruction sheet and warranty registration card is packed with the drive as well. The hard disk itself is new 3.5" technology from Western Digital. The fan is a 2" TRW unit.

Inner Drive has so far proven to be no more difficult to install, configure and use than the average floppy disk, with the exception that it is installed inside the computer, rather than attached to the outside.

Actual removal of the Apple power supply, which ID replaces, and installation of the new unit can be accomplished in 10-15 minutes, with no tools other than those at the ends of your arms. It does help to have someone help move the monitor and other items, so that the top can be removed from the CPU. The instruction sheet, while not totally clear to the inexperienced as written, was still fairly easy to follow.

Inner Drive fits quite easily and neatly in the space vacated by removal of the factory IIgs power supply. It does not block any slots. I installed the controller card in slot 7.

My Apple IIgs is configured as follows: CPU, RGB monitor, 2 Apple 3.5" drives and 1 Apple 5.25" drive daisy-chained to the smartport, CH Flight Stick, GS standard keyboard, Kensington Turbo Mouse ADB, ImageWriter II, Kensington System Saver IIgs and Bose Roommate speakers. Internally, I have: Inner Drive, then Slot 1—empty, Slot 2—AE Datalink 2400, Slot 3—Fingerprint Gsi, Slot 4—empty, Slot 5—empty, Slot 6—MDIdeas Super Sonic stereo card, Slot 7—ID controller, Auxiliary Memory—AE GSRam 1.5MB. At power up, I held the option key to access the control panel and reset my startup slot to 7.

Since the drive comes with GS/OS installed, my actual "down time" was 25 minutes cover off to up and running. Inner Drive also has all necessary utilities for configuring, reconfiguring, backing-up, parking heads, etc. installed. The instruction sheet instructs the user to make copies of these files BEFORE doing any thing else—a wise precaution.

The 40MB drive comes already partitioned into 2 20MB volumes, named HD1 and HD2. The defaults, using the AI.UTILITIES function for partitioning, appear to be either 1 40MB volume or 2 20MB volumes. Of course, you can reconfigure to about any size(s) you want using the appropriate utility.

I first saved the files from "HD1" onto a floppy, then proceeded to re-partition the disk to suit my own needs and tastes. Since partitioning the disk also erases the disk, I took the opportunity to run the "verify disk" utility as well, to check for bad blocks. I was delighted to see "no bad blocks" at the end of the verification procedure. I only wish suppliers to Uncle Sam would do as well.

Once the disk was repartitioned and the volumes renamed (P16 and P8, in my case), I simply copied the files I had saved from HD1 onto P16 and it was time to begin testing. I have had the unit running almost constantly for 12+ hours per day for 5 weeks now. (Almost constantly, because some of the testing involved shutting down repeatedly to get some average "frigid boot" times.) It would be 24 hours per day, but I don't have a UPS yet. This was also a good check on the reliability of the power switch.

For anyone who might be worried about heating problems with Inner Drive, I can report that overheating does not seem to be a problem with the unit. I still have the Kensington System Saver in place, since it also provides some spike protection. This means I am actually running with two fans. Both the System Saver and the Inner Drive fans are quiet enough that I do not find them distracting at all. This is important to me, since I often listen to music while I am at the keyboard. In fact, as I sit here typing this, the noise I make on the keyboard is much louder than that of the fans. I should also point out that, in order to insure good airflow, I run with four of the slots on the back of the CPU open and covered with a washable filter material.

I had formerly found my little computer room to get warm enough to use a fan, even with

my air conditioning set for 72 degrees in summer. Although Washington D.C. winters aren't as severe as elsewhere, I had also come to count on the computer, and especially the monitor, to heat the room in winter. Since installing Inner Drive, the combination of that fan plus the System Saver fan is keeping my IIgs several degrees cooler than before. I can't provide an exact temperature difference. Subjectively, however, I do find myself looking for my sweater much more often with the two-fan combo.

Occasionally there is a small "chirp" from the drive during read/write operations, but if not for that, I would not know the drive is there.

### *Time Trials*

Of special importance to us speed freaks is the speed at which any hard drive performs certain operations. Probably the most important is "how fast are its zero-to-"start hacking"-times"? Using a hand-held Seiko chronometer, I measured a "zero-to-Finder" average of 00:32.16 (32 sec), averaged over 30 power-ups. This was right out of the box, with the 2 20MB volumes, the files supplied by AI, no added CDAs and only the GS/OS disk cache NDA.

Configured as I noted above, with all my favorite applications loaded and the icons for those applications placed on the Finder desktop—more than 20 icons—I measured the "zero-to-Finder" average of 00:44.37.

While this is not greased lightning, and text-based program selection utilities such as ProSel will undoubtedly turn in much better times, for someone who has been running exclusively from floppies, it ain't half-bad.

My average time from Finder to the Appleworks GS desktop, after double-clicking the icon, is currently 00:25.37. Quitting from AWGS's desktop back to Finder is averaging 00:04.28.

### *Negative Points*

As with any product, there are negatives to consider as well. First of all, Inner Drive is not SCSI-supported. Apparently AI is considering making a SCSI version in future, but I understand that they expect this to add $100 or more to the price.

While easy to install and operate, if an internal drive does fail or need servicing, it means dismantling the computer to remove the unit and replace the original Apple power supply while your hard disk is in the shop.

Inner Drive does not appear to support DOS 3.3 or other operating systems.

Applied Ingenuity is not currently selling through dealerships, so if repairs, service or warranty work must be performed, the unit must be returned to AI. For users who prefer having a dealer close to hand, this may be a consideration.

Applied Ingenuity is a small company. This means that there will inevitably be backlogs on orders and perhaps occasional extended waiting time, especially if everyone rushes out to order immediately.

### *Positive Points*

Since Inner Drive was designed specifically for the Apple IIgs, being a non-SCSI drive may not be such a terrible thing after all.

Applied Ingenuity offers a 15-day free trial period, as well as a 1 year warranty on parts and labor, should the unit fail.

There is technical support available by telephone. I haven't needed it, so I cannot comment further on that subject. However, the staff at AI that I have dealt with by phone have been very friendly and easy to work with. It is obvious that they believe in their product.

Inner Drive should also be tested using other selection programs such as ProSel by Glen Bredon or Quality Computer's EasyDrive. Time permitting, I may be able to do that early next year. However, I will probably continue to use Finder. Why? Simply because my 4-year-old daughter, who is just beginning to read, can use Finder to start up her favorite programs (she's fond of Deluxepaint II and also uses Stickybear programs, talking Reader Rabbit, and First Letters and Words). My wife, who reads quite well, still prefers the "point-and-shoot" ease of using the Finder, and since she now uses AppleWorks GS to prepare her Greek lessons, it is important that she also be comfortable with the user interface.

### *Bottom Line*

If dollars are a consideration for anyone looking for a hard drive to use with their Apple IIgs, the Inner Drive is certainly worth looking into. Likewise, if you are limited, as I am, for desk space, Inner Drive will give you a considerable increase in storage space and computing speed without increasing the footprint of your IIgs. For less than the cost of 2 Apple 3.5" disk drives, Applied Ingenuity seems to have produced a better mousetrap.

How good (and reliable) is Inner Drive? I really can't say, yet. It's too early to tell. But, I don't really know how good my Toyota is yet either—it doesn't have anywhere near 100,000 miles on it. All in all, I believe Applied Ingenuity has made a fine start on supplying important peripherals for the IIgs.

Disclaimer

To dispel any doubts, I am a communications specialist with the State Department. I am not employed by or otherwise associated with Applied Ingenuity, Western Digital, or their staffs, except as a paying customer. I have not received any special consideration that I am aware of from these organizations.

# Publish It!2 and Ramworks

by Jim Pendarvis

I have just received Publish It! version 2. One of its significant features is that it is supposed to work with expanded memory cards, including Ramworks. And it does. However, according to the manual, it cannot recognize this type of Ramdisk, so it simply overwrites it and takes all of the memory for itself. In other words, you lose whatever was there and that is not good. This is exactly the type of situation that can and should be avoided by professional programmers.

Fortunately for Ramworks users, you can patch Publish It!2 to work with expanded memory and keep your Ramdisk. That is the good news; the bad news is that users may have to experiment to make it work with their system. But here is an explanation of how it works and how I did it for my system.

After bloading DTP.System at $2000, the location of the code that searches for Ramworks memory banks is at $4AB9. What it is intended to do is set up a "bank table" starting at $68A0. This first byte ($68A0) is the total number of banks. It is followed by a list of available bank numbers and will end in $FF. The $FF is the end of table marker. This is outlined in the Ramworks manual and the actual Publish It!2 code is quite similar to that in the manual.

I know how many banks are on my card (1.5 megabytes has 24 banks). Since I use a 960K Ramdisk, there had to be 576K available for outside use. This is equal to 9 64K banks and that is the number to be put into $68A0.

The hard part is determining which banks are available for use. Applied Engineering refers to this as locking out banks. If you have used their partition program, to lock out banks, then you can bload prodrive at $2000 and check what is in locations $2003, $2004, and $2005. The values in these locations determine how banks are locked out from the Ramdisk. They work in 512K blocks so that if your card contains 1 megabyte, then you only need to be concerned with $2003 and $2004. For larger cards, just keep going. This is also sort of explained in the Ramworks manual.

For my card the values were $01, $00, and $FF. This means that bank 0 on the main card and all of the banks on the 512K expander card were available. The $00 means that all of those banks are in use with the Ramdisk. The Ramworks manual explains the formula for calculating these values.

All that is left is to set up your own bank table in Publish It!2. This is how mine works:

4AB9 A9 09 LDA #$09 loads # of banks in accumulator 4ABB 8D A0 68 STA $68A0 (9) and stores it in $68A0 4ABE A9 00 LDA #$00 stores bank 0 in $68A1 4AC0 8D A1 68 STA $68A1 4AC3 A9 10 LDA #$10 first # of banks $10 thru $17 4AC5 8D B0 68 STA $68B0 store for loop 4AC8 A2 00 LDX #$00 x determines location in table 4ACA 9D A2 68 STA $68A2,X store banks in table 4ACD E8 INX counter 4ACE EE B0 68 INC $68B0 next bank # 4AD1 AD B0 68 LDA $68B0 get # 4AD4 C9 18 CMP #$18 last bank +1 4AD6 D0 F2 BNE $4ACA loop back if not 0 4AD8 A9 FF LDA #$FF load end of table marker 4ADA 8D B0 68 STA $68B0 store marker 4ADD 60 RTS all done

When I run Publish It!2 the table will look like this:

09,00,10,11,12,13,14,15,16,17,FF

Once DTP.System has been bloaded, you can use the monitor to type your numbers in the indicated locations (addresses) and then bsave DTP.System.

Change the $09 in $4ABA to your number of banks.

The $00 in $4ABF ensures that bank 0 is available.

What happens next is highly dependent on individual systems. As presented here banks 16 ($10) thru 23 ($17) are stored in the table. As long as yours are contiguous, you can use this loop. The number of the first bank goes in $4AC4. But remember that you have already used bank 0, so do not start with it here.

If you have fewer or a greater number of banks, then change the $18 in $4AD5 to equal the number of banks plus 1.

The end of table position here is $68B0. This will also change if the number of banks changes. Start with $68A1 and count the number of banks, then add 1 for your end of table location. Substitute this value for $68B0.

It may not be elegant but it works. There should be enough information here to adapt it to any Ramworks system. Do not be afraid to experiment. Aafter all, that is how I figured this out in the first place, but remember to use a disposable copy. Good Luck!

***It may not be elegant but it works. There should be enough information here to adapt it to any Ramworks system.***

# Publish.It!2

by Gary Hayman

I am currently reviewing PUBLISH.IT! 2 (Beta version B2.02) at the request of Timeworks, its publisher. A number of corrections have been already made in the beta version that may be of interest to potential users. These include:

Number Space followed by Delete is fixed

Support for 24-pin printers is added

Support for Apple Scribe printer is added

Text Print Print-It interface now supports serial as well as parallel modes

Fixed bug in filled circles

Grid lines are now gray instead of solid black

Align Objects (range and formatting) bugs fixed

Applied Engineering's RGB card is now supported

ImageWriter printer driver modified to accommodate compatibles such as Okidata and C.ITOH

If you have come across some other problems or bugs in Publish.It! 2, or have some ideas for modification and/or improvement, please let me know by calling me at 301-345-3230 so that I can include them in my report to Timeworks. Perhaps we, as a user group, can influence the direction of Publish.It 2.

# SIDESPREAD - LPP HINT

If you are printing your AppleWorks spreadsheets with the use of TimeOut SideSpread, the default font (Monoco 9) permits 58 lines per page.

SideSpread permits not only Monaco 9, but seven other Monaco fonts and eight Courier fonts as well. A printout of what these fonts look like can be found on page 43 of your manual.

Missing from the manual are indications of how many LINES PER PAGE (LPP) are permitted when using each one of the allowed fonts. I have prepared the following chart which you may find of value in determining how many lines per page will be printed, when compared with the chosen fonts for your particular spreadsheet.

| FONT SIZE | MONACO | COURIER |
|---|---|---|
| | LINES PER PAGE | |
| 6 | 80 | — |
| 9 | 58 | 58 |
| 10 | 53 | 53 |
| 12 | 40 | 53 |
| 14 | 37 | 42 |
| 18 | 29 | 35 |
| 20 | 25 | 33 |
| 24 | 21 | 27 |
| 28 | — | 23 |

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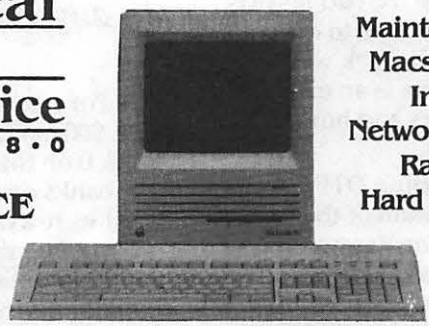

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# Apple II Q&A

by Robert C. Platt

**What is an "algorithm?"**

An algorithm is a step-by-step procedure for accomplishing a particular result. Frequently, there is more than one way to get a result. For example, some sorting algorithms can run ten times faster than others. Because of the limited resources on microcomputers, it is important to use the algorithm that is best suited to your needs.

**I am a Pascal programmer. Where can I find algorithms for numerical techniques?**

I recommend *Numerical Recipes— the Art of Scientific Computing* by William H. Press, et al (Cambridge Univ. Press; 800 pp.) It includes both Pascal and FORTRAN source code and a description of each algorithm in such areas as matrix manipulation and numerical techniques. (In case your loyalties extend beyond the Apple II, source disks are available for the Mac and MS-DOS machines.)

**What are "tech notes" and how can I get them?**

Apple Tech Notes are brief write-ups of various system features written by Apple's Developer Technical Support Department. They cover items in greater depth than the manuals and are written when the technical support staff receives several questions on a particular point. Recently, the Apple II technical notes have been completely reorganized along subject matter lines.

You can obtain tech notes from several sources: 1) You can download them from Apple Link (either the personal edition or the one for dealers and developers), 2) They are sent to Apple Partners and Apple Associates (i.e., certified developers), or 3) Your can purchase them from APDA. (Call 800-282-2732).

**I am trying to use GS/OS with my Epson printer. I have installed the Epson parallel printer driver, but things aren't working. What's wrong?**

First, check to see if you have "installed" the driver correctly. To install a driver, run the INSTALLER program from your SYSTEM.TOOLS disk. Click on "Epson Printer" in the left hand scrolling window and a System folder in the right hand scrolling window. Click on install. This will copy the Epson printer driver into the DRIVERS subdirectory of your SYSTEM directory.

Second, is slot one of your control panel set to "Your Card"? Is your printer properly connected to your card and your card properly inserted in Slot 1?

Third, is your printer supported? The Epson printer driver supports the RX-80, FX-100, FX-850, FX1050, LQ-850, LQ-1050 and LX-800 printers.

Fourth, is your controller card supported? The Epson driver was designed for The Practical Peripherals Graphic Card. The driver checks the ID byte of the ROM on the parallel card. To patch around this check, try the following on a copy of your driver: Bload PARALLEL.CARD,A$2000,T$BB. In the monitor (CALL -151) check whether $22FD has the value $14. If so, change it to $31 (22FD:31). This is the code for the Super Serial Card which is also found on many other cards. BSAVE PARALLEL.CARD,A$200,T$BB and copy the new version into your /SYSTEM/DRIVERS directory of your startup disk.

**What is a "path name?"**

Any ProDOS disk file can be identified by specifying its full "path name." The path name of a file includes the name of the disk followed by each directory and subdirectory containing the file. In the last question, file PARALLEL.CARD might be found in the DRIVERS subdirectory in SYSTEM directory on the disk named MYSTART. Its pathname would be: /MYSTART/SYSTEM/DRIVERS/PARALLEL.CARD, with slashes separating each name.

**What is a "Prefix?"**

In order to avoid all of that typing each time you reference a file name, ProDOS provides you the ability to store as much of the path name as you wish in a Prefix. This Prefix string is automatically added to the front of each file name you reference. Thus, setting the Prefix using the ProDOS command, PREFIX /MYSTART/SYSTEM/DRIVERS, will allow you to type just PARALLEL.CARD to refer to that file until the Prefix is set to something else. Note that this allows old Applesoft programs (which do not refer to files by full path names) to run under ProDOS easily. If the files accessed by the program are located in a different directory, just set the prefix before running the program instead of modifying all input/output commands within the BASIC program which refer to the file names.

**ProDOS 16 supports multiple Prefixes. How can I use them?**

**A.** You can refer to these nine prefixes by the convention of typing a number 0 through 7 followed by a slash. A special prefix */ will always be the prefix of the startup disk. For example, if prefix 5 is set to MYSTART/SYSTEM/DRIVERS, then 5/PARALLEL.CARD will refer to the file. If none of the prefixes are specified by this convention,

prefix 0/ is assumed.

**How are Prefixes changed?**

When you boot your Apple under either ProDOS 8 or 16, the prefix is set to your startup disk. This prefix remains the same until modified by a PREFIX command. (Note that some programs issue their own PREFIX commands or make a machine language call to the SET_PREFIX routine ($09).)

However, on a IIgs, switching between ProDOS 8 and 16 can make things complicated. In general, prefix 0/ will not be changed, except that when you specify an new application to launch from either the ProDOS 8 or 16 QUIT routine (that is the screen which asks you to type in a pathname of your next program), the 0/ prefix could be set to that volume. (For a precise list of rules, see page 69 of the ProDOS 16 Reference Manual.)

ProDOS 16 will also set the other prefixes according to certain conventions. Prefix 1/ will be the full pathname of the directory containing the current application, and 2/ will be the pathname of the "application library directory." (For example, if your startup disk is MYDISK, prefix 2/ will be /MYDISK/SYSTEM/LIBS.)

The bottom line is that you should avoid modifying prefix 0/ in your programs to prevent confusion to the user, and that you should take full advantage of the multiple prefixes available under ProDOS 16 and GS/OS.

*Reviews*

# Wordbench

by Bob Oringel

In the October 1988 issue of "Open Apple," Tom Weishaar muses that "For the past several years I've been convinced that one of the last things the Apple II world needs is another word processor." He goes on to say, among other things, that AppleWorks will do 90% of what you want to do, but concludes that for writers who need that other 10%, Wordbench is the way to go.

When it became apparent to me that Wordbench was more than just a word processor, I felt that it needed closer scrutiny. Wordbench calls itself "The Tool for People Who Write," and I not so humbly number myself among those people.

The Wordbench package includes two 3.5" and four double-sided 5.25" disks. The disks are not copy protected. The package also includes a tutorial, a user's guide, and a reference manual. All three of these books have glossy covers, and are extremely well written and easy on the eyes. The docs were prepared for Addison-Wesley by Technology Training Associates, of Cambridge, Massachusetts.

The choices on the menu are: Outliner, which is a writer's project organizer. You can use it to make a list of writing topics and subtopics, and rearrange them often as necessary. Notetaker is a rolodex-card-like memorandum saver where you keep all of those notes that you will include in the text. Writer is the word processor. It includes a spelling checker and a thesaurus. There are also three "managers"; Add-In Manager is the place where the user accesses other applications. The other application currently included in the package is Brainstormer. Other applications are promised for the future.

Folder Manager takes charge of the program's basic storage unit, the folder, and Print Manager, like most other word processing programs, controls what is sent to your printer. It does more, though—using double hi-res graphics, it displays on screen whatever you want to be printed on paper, like underlining words, or adding subscripts. It can automatically create a table of contents as well. For printing to paper, however, it returns from graphics mode to text mode.

Wordbench supports and includes macros, which it calls "shortcuts."

Wordbench's folders, where text is stored, are kept in a subdirectory. When a particular folder is selected for work, a menu provides access to the information in the folder, including options for adding text or printing.

A few of the folders already contain material at the outset; the Library folder, for instance. Two other folders contain the tutorial material. A good method of sampling a program is to use its tutorial, and I did.

Perhaps if I were not spoiled by the simplicity and the transparency of AppleWorks, I might have given Wordbench the extended time and effort that it needs to be learned and appreciated. It has a long learning curve, but it also has a lot going for it and a lot to offer to the writer. It is convoluted, in my opinion, and you must do things its way. Text is created in the Writer module, but edited indirectly in its Edit mode. I find that awkward, but I must admit that the more often you do it, the easier it gets. A college student just starting to use word processing might find Wordbench to be just what was needed, but someone who has worked extensively with AppleWorks will find it much harder to say "I choose you to be my writing program."

# Family Matters

## *Keeping Track of the Family with the Apple II*

by Bob Oringel

Family Matters is a standalone database program for users who don't want to construct the framework of a database, but need one to organize their family and household information.

This program is by Springboard Software, Inc., the folks who brought you Springboard Publisher, and it has the "look and feel" of a Springboard program. It is text-based, however, and thus is a much faster operating program than if it were graphics-based.

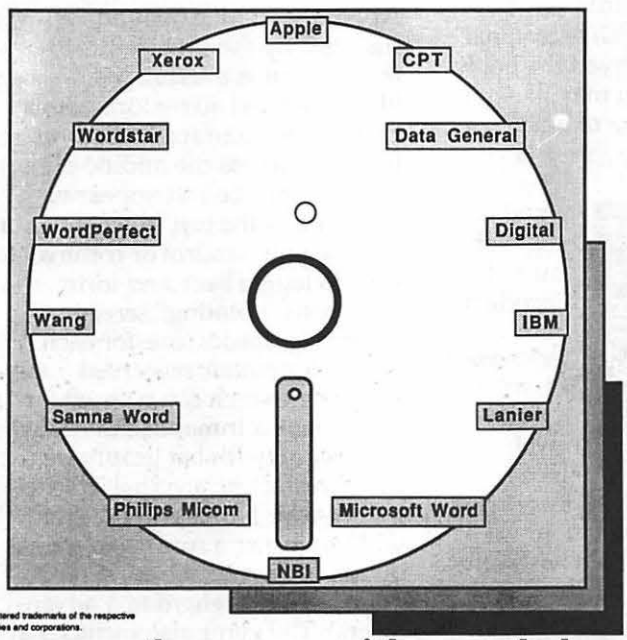
Five major information categories are included in the program. "Family Members" tracks medical records, employment, education and general information of each family member. "Household" provides a history of your home, including repair and insurance records, and a household inventory. "Financial" includes credit card information, the location of stock certificates and the contents of safe deposit boxes. "Vehicles" covers license numbers, and repair and insurance records. "Pets" contains medical and breeding information.

Once you have entered the information, Family Matters lets you move quickly from the five main categories to perhaps hundreds of subcategories, to retrieve needed information rapidly. I entered a sampling of information about my own household and found it simple to retrieve information. If you need a household data organizer, this program might just fill the bill.

*[Family Matters extends the concept of the Housekeeper program for Macintosh by including family records categorized several ways. As with all household information databases, the value of the package is amplified by keeping a copy of the database in a safe place and sending a listing of household inventory items to your insurance carrier, since a fire in the house can easily destroy the disk on which your records are kept at home - ed.]*




**Can all these word processing systems interchange formatted documents?**

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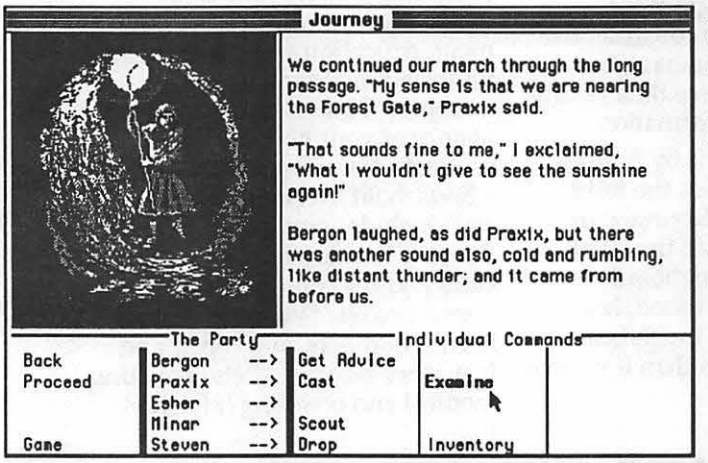
# The Play Room

by Steven Payne

I'm still working on a future column about gaming and telecommunications, but the big gaming news this month is the demise of Infocom as we know it. Recently the parent company, Mediagenic, decided to close down Infocom headquarters in Cambridge, Massachusetts, and offered a number of the personnel the opportunity to move to the home offices out in California. Evidently some of the administrative people are going, but most of the familiar game designers and developers are not. For the moment, folks like Steve Meretzky are free agents!

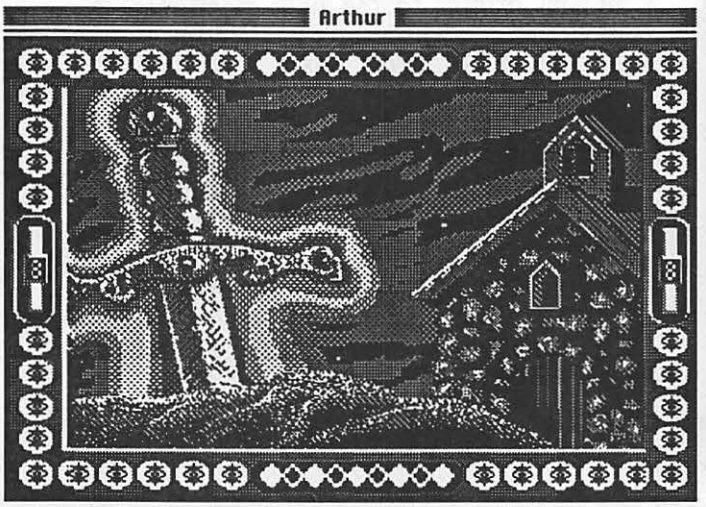
The word is that Infocom will continue to work with third-party developers to produce new games. Whether they will eventually have a new in-house development staff, and what will become of all our former Infocom heroes, remains to be seen. Apparently there has recently been much discussion of these matters on CompuServe (though this reporter is too poor to subscribe!).

Meanwhile, I've had the chance to try most of Infocom's latest releases for the Mac, including **Shogun**, **Journey** and **Arthur: The Quest for Excalibur.**



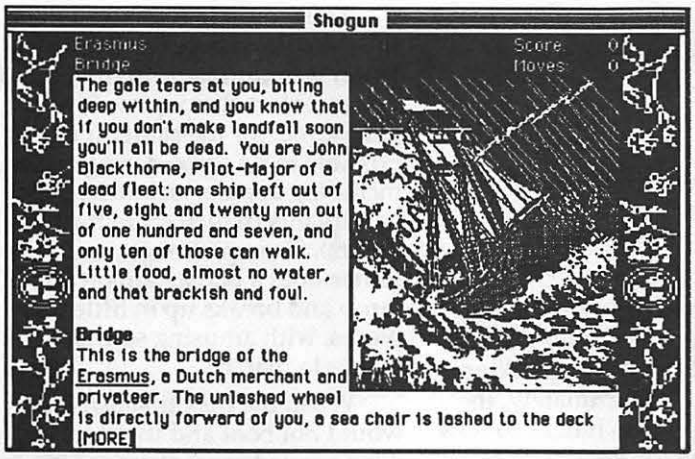

These will presumably get full-scale reviews in future issues once we receive review copies, but here is a brief (and opinionated) assessment of my own.

**Shogun** is essentially a text adventure divided into short dramatic scenes, with occasional pictures. If you enjoyed the book and miniseries, you may like it. I found the game enormously frustrating, since progress is determined by how well you can reproduce John Blackthorne's behavior from the novel; since I never read it, it was constantly having to resort to on-line hints.




**Journey** represents new departure for Infocom, dubbed "Role-Play Chronicles." Here you and a party of three (sometimes four) other characters are on a quest for seven stones, which will overcome the forces of evil and save the world (naturally!). What's different is that the possible commands for each move are determined by the game itself and listed in a menu at the bottom; all you have to do is click on the command you choose. Almost every location has a different graphic, and the available commands vary from scene to scene.

My current favorite is **Arthur: The Quest for Excalibur,** by local talent Robert A. Bates (author of **Sherlock** and President of Challenge, Inc. in Vienna, VA). It should be out for the Amiga, Apple II and Mac (maybe even the IBM) by the time you read this. **Arthur** is a traditional illustrated text adventure with a brand new interface. The status line runs across the middle of the screen, with the text appearing below it. At the top, however, you can use your control or command keys to toggle back and forth among six "rotating" screen options: graphics (one for each scene); automatic on-screen mapping (which can be used for movement commands); inventory; score (with bar graphs of your attributes); a verbal description of your location (available without losing a turn); and a final option of the traditional all-text interface (for diehard text adventurers). The game also includes a "smart" hint menu, which deals




ing expanding this game into a trilogy to cover later parts of the Arthurian legend (beyond the "sword in the stone" theme of this game).

We're hoping to invite Bob Bates to the GameSIG sponsored main meeting in August. Meanwhile, a few screen shots are included for your enjoyment (they look much better, of course, in color on the Mac II).

only with puzzles you have already encountered (so that there is less temptation to read ahead and spoil the fun). **Arthur** represents a major advance over **Sherlock**, and Bates is consider-

*Reviews*

# Dive Bomber

by Jim Wellman

**Dive Bomber** pits you against the Germans in this 1941 simulation of a World War II Avenger Class Dive Bomber. You get only one chance in your plane. You take off from the deck of H.M.S. Ark Royal. Your mission: Sink the Bismark!

Sounds easy? Not so! You must master the plane before you even think of sinking the ship. To do this you can practice takeoffs, flying, landings, and even raids on the Bismark.

**Dive Bomber** is done in a style similar to **Sea Battle** and **Destroyer** (Epyx): you must be the pilot, navigator, front and rear gunner, while releasing the torpedoes as well. To do this you are given different screens. The Pilot's Screen (cockpit) is where you fly your dive bomber, operate the forward guns and release the lone torpedo to sink your target. The Engineer's Screen is where you start the plane. All the gauges and controls are here. Forget to lock your wings prior to takeoff and you'll be going for a swim! The Navigator's Screen is where you create your flight plan. You may not be able to see the Bismark on your present screen since it may be on an adjacent one. Finally, you have the Tail Gunner's screen, where you may need to go in order to shoot down approaching aircraft.

The overall mission is to sink the Bismark. To do this you must first remove the enemy targets close to the Ark Royal without losing sight of the Bismark. You must protect your ship from submarines, attack craft and mines. If you fail to do this you will have no place to land your plane, reminiscent of the punch line to an old joke: "How long can you tread water?"

I found this game interesting and full of action. The only problem is having to man all the stations. This will keep you very busy going from one screen to the next as you also try to find and sink the Bismark. I therefore lowered the score card accordingly, since the game is not easy to master and frustrating when you are shot down out of the skies. However, **Dive Bomber** will give you many hours of enjoyable playing time.

| RATINGS: | |
|---|---|
| Animation | 10.0 |
| Disk Accesses | 10.0 |
| Documentation | 10.0 |
| Ease of Mastery | 7.5 |
| Fun | 7.5 |
| Graphics | 10.0 |
| Meets Promise | 10.0 |
| Playing | 7.5 |
| Playing Time | 7.5 |
| Price vs. Product | 7.5 |
| TOTAL SCORE | 8.8 |

**Dive Bomber**

Apple II series with 64K, joystick required, color monitor recommended

LIST PRICE: $34.95.

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# Skate or Die

by Tim McGraw

You've seen them at the end of the street: skateboarders creating mayhem in the parks and alleys, oblivious to the dangers of this not-particularly-noble sport. Now you can "rake" with the best without so much as scraping an elbow. **Skate or Die** from Electronic Arts will take you through several of skateboarding's most challenging events.

First you're introduced to the burly owner of Rodney's skate shop. "Like my 'do?" Rodney asks, seeking approval of his blue mohawk. In the skate shop you can sign up to compete, select a board color and pick up tips on how to increase your scores.

Now you're back on the streets, looking for thrills in any of five events: The Freestyle Ramp (a U-shaped wood and steel "half pipe"); the High Jump (also on the half-pipe); a Downhill Race in a flower-covered park; a Downhill Jam through a crate-filled back alley; and a Pool Joust in an empty backyard swimming pool. The latter two are surely a couple of the most violent events ever conceived. They also allow for simultaneous two-player action: one using the joystick and another using the keyboard. In the Jam you score points by knocking your opponent off his skateboard. You can score more points by running over soda cans and kicking the targets on crates.

If you don't have an opponent the game supplies "Lester" to go up against you in the Jam. In the Pool Joust, where you use a "boffing stick" to take out your opponent, you have a choice of less-threatening opponents.

Two-player play is one of the great features of **Skate or Die**, and if the trend continues hardware manufacturers may want to consider making Apple Desktop Bus joysticks. Unfortunately, the documents gave no hint as to how to manipulate the keyboard, but once I learned that the GS keypad controlled joystick directions and the shift key worked like the joystick button, it actually allowed for more precise control. It is practically impossible to manipulate the skaters with any precision using the mouse.

You can sign up as many as eight players to compete. And the more the merrier, because loading each event can take about a minute. With the "Compete All" option, you can go through each event. However, in a recent Compete All session, one player spent five minutes waiting for events to load and nine and one-half minutes actually competing. You can choose to practice an event continuously without reloading it, but the scores won't make Rodney's bulletin board.

The Freestyle Ramp requires the most dexterity. The documentation was confusing at first, but if you just start clicking away and get the feel for the skater it is possible to do some daring tricks, including aerials, kickturns and handplants (which score the most points). Slip up, though, and your skater does a body slam on the ramp and breaks up in little pieces, with amusing sound effects to match.

When the disk first arrived it would not boot and the mechanism needed repair because it was of such poor quality. If game publishers insist on copy protection they should use higher-quality disks.

Overall the game has excellent graphics, provides some action-packed arcade play, great sound effects and some pretty radical background music that alone is worth the price of the game.

**Skate or Die**
Apple IIGS, 512K RAM, one 3.5-inch disk drive; joystick recommended, copy-protected
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# Apple II ... X-10 Powerhouse

by Ray Hobbs

For eight years I have dreamed of a computer-controlled home—automatic lighting, cooking, telephone service, housekeeping—and I have read numerous articles concerned with making gadgets to accomplish these ends. I never got around to doing anything about home control for my Apple II+ for a couple of reasons. First, the gadgets described in the magazine articles were all designed to control something specific (a light, an appliance or something else), and would not do the whole job; and second, whatever the gadget was, it would tie up my Apple II+ in order to do it. I wanted home control, but I wanted to use my computer, too.

X-10 Powerhouse has changed the rules of the game. Unlike the other gadgets described in the various articles that I read, X-10 does not tie up the computer, which is used to program the X-10 initially, but then can be disconnected. X-10 will run by itself thereafter—you *can* have your cake and eat it, too.

X-10 connects to the Apple through the serial port interface. Once connected, the X-10 software can configure the unit for control of your home. Appliances and lights (other than flourescents), as well as wall switches, outlets, thermostats and burglar alarm systems, can be controlled by the X-10 system. The main unit (the one that connects to your computer) costs about $40, and can control up to 256 different things by means of unit modules (unit modules allow control of one item each, and cost from $10 to $25 apiece). There is no wiring to be done—the X-10 sends its signals across your home electrical wiring to control modules, essentially acting like a miniature local area network. Each module has a code number to which it responds, and X-10 sends its signals coded for its target modules.

My own system consists of two light modules, two appliance modules, a wall switch module and a wall socket module. With that setup, I can control four lights and four appliances in six different locations in the house. I can program up to 256 timed events for each module, on a daily or weekly basis. Moreover, I can set up different programs for home control, stored on disk. To change programs, I simply reconnect the X-10 to my Apple and download the desired program into the X-10 main unit. Currently, I have two programs: one for daily use (make the coffee and start the CD player in the morning, cut the lights when I leave for work and start them up again when I get home, and shut everything down when I go to bed) and one for when I am out of town (cut lights on and off to simulate movement through the house in the evening, plus turn the TV on and off, etc.)

There are a couple of drawbacks to the X-10 system. The most serious is that the X-10 software does not always call the operating system routine to accomplish input/output operations. While this does not adversely impact a stock II+, IIe or IIc, it plays havoc with a IIgs, because the serial input/output addresses are not the same as with the older II series. The result is that the X-10 software is rendered useless with the IIgs. There is a solution to this problem (in a moment).

The second problem is one of speed. The X-10 software presents a beautiful graphics screen for setup, which it insists on redrawing at every opportunity. In this case, an opportunity may be defined as any time that anything changes. Thus, when the user selects a lamp module for a room, the screen is redrawn. Then if another lamp module is added to the room, the screen is redrawn again. If five modules are assigned to a room, the screen will be redrawn five times. The drawing is not quick. The solution to the second problem is the same as the solution to the first. KADO Systems (605 Parkview Drive, Pflugerville, Texas 78660) produces a menu-driven program, **Fasthouse**, to drive the X-10 hardware. It has no graphics screens, but instead displays a menu of options for setting up the X-10 system. Using Fasthouse, I set my X-10 system up in less than 15 minutes. Fasthouse costs about $30, and is worth it. KADO Systems can be reached between 10:00 AM and 6:00 PM at (512) 990-2390.

*I wanted home control, but I wanted to use my computer, too.*

Mac ... X-10 Powerhouse

The X-10 works on the Mac, too. Read the above description of the X-10 system, excluding the last paragraph!

# Atlas Explorer

by Steve Grimm

Atlas Explorer is a geography tutorial/game program that spans the globe in an effort to get a modicum of geographical knowledge into the heads of Americans—possibly the world's worst students of the subject. Unfortunately, AE's approach to this worthy task reflects the common attitude toward geography—that it's just memorization of a handful of dry and unpalatable facts and figures.

The program handles the graphic representations of its numerous maps adequately, if not stunningly. The opening screen, a spinning globe, is nicely done, but the remaining maps are merely outlines, where the Mac is certainly capable of displaying more detail, even to relief maps. Clicking the mouse stops the globe from spinning and produces a standard map of the world, centered on North America. Clicking anywhere on the map zooms in on that area. This operation can be done three times, down to a given foreign country, or to a U.S. state. Clicking the close box on a map will reverse the process, one level at a time, until the world map is again reached. No names or features are indicated on any map.

After the user tires of zooming in and out (about three minutes, probably), one of the two main functions of AE can be invoked: Tutorial and Quiz. The tutorial enables a dialogue box for each map, containing facts about the area covered by the map. For the world map, the dialogue box produces mainly astronomical facts, whereas continent maps contain the continent name, area and population figures. Country maps do better, adding the capital city, language and currency of the country. The quiz mode is given in multiple-guess format, with four possible answers for each question. Unfortunately, the quiz confines itself to questions about the population of cities and the area of states or foreign countries. Questions on the physical location of cities can also be invoked. Points are awarded for correct answers and beeps for wrong answers; a score is kept. The user can review the question-and-answer session, since a log of the proceedings is kept. However, since the number of questions concerning population, area and location of two or three cities is limited, the quiz quickly becomes both easy and boring.

Perhaps we really are that insular here in the United States, but I would hope that the study of geography could be made more exciting than AE's approach suggests. For example, I took the quiz on Bolivia (no, I'm not going to say where Bolivia is—look it up!) and quickly ran through the locations of the four cities cited, plus the populations and the area of the country. But there's a lot more to this little-regarded country than a few facts on population and area. First, Bolivia is the only country in the world to have two capitals! The major capital of La Paz sits on the crests of the Andes, over 12,000 feet up! On a clear night on the heights surrounding the city, stars can be seen at eye level—you don't have to look up. From the mountains, the country drops down to rain forest as it bumps into Brazil. It is the only South American country to be entirely landlocked (how would the development of the United States be affected if we had absolutely no ports?) and it's had so many revolutions that if a holiday were declared for each one, there would be more holidays than work days.

In a program which requires a megabyte of RAM to run, it would seem that at least some of these tidbits might be included to make the study of geography more exciting. Don't get me wrong. Any attempt to educate Americans in geography is to be commended, and AE doesn't bomb—what it does, it does properly. However, the program itself seems to me to be unfinished. AE would have done well to have included on the design team someone who is both well-versed in world geography and excited about teaching it.

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# 1989 Meetings

During the Summer months Anne Arundel Community College is closed, and meetings will be at other locations.

NOTE THE DATE AND TIME CHANGE.

On 12 Aug 1989 (the second Saturday) we meet at the Broadneck Public Library meeting room from 9 a.m. to noon.

DIRECTIONS to the Broadneck Public Library

Broadneck Public Library, is near the Eastern end of College Parkway. From Annapolis/Parole/Crofton/Washington D.C., take Rt 50 East to Cape St.Claire. To do so, turn left (left 2 lanes turn) at 2nd traffic light on Route 50 on the east side of the New Severn River Bridge. (Move over when you see the Windmill restaurant on your right). Turn left onto College Parkway, which is the FIRST traffic light on Cape St.Claire. Turn right at the next traffic signal off of College Parkway (Green Holly). Follow the signs to the Library (it's off to the Right just before the Broadneck High School campus).

From Glen Burnie/Baltimore/Marley Station, take Rt. 2 South past Severna Park to College Parkway, which is approximately 3 traffic lights south of the major entrance to the Severn Park Mall (Caldor/Giant/Horn & Horn/etc.) and turn left onto College Parkway (left 2 lanes turn) headed east. Once on College Parkway, turn left at the 5th traffic light, onto Green Holly (one light past SuperFresh Shopping Center). Follow signs to the Library. (It's on your right, a half-block from the light.) If you go past Green Holly you will soon come to the end of College Parkway, so just turn around.

The second Saturday of each month is the General Meeting of the Annapolis Apple Slice. We meet at the Anne Arundel Community College from 9:30 a.m. to noon. during the months of September to May. (During the summer the campus is closed.)

DIRECTIONS to Anne Arundel Community College

Anne Arundel Community College is on the north-western end of College Parkway. To get to College Parkway from Annapolis/Parole/Crofton/Washington D.C., take Rt 50 East to Rt. 2 North (first major exit after crossing Severn River Bridge). Turn right at second traffic light (not counting Fire Station signal before first full traffic signal). The sign lists College Parkway and AACC.

From Glen Burnie/Baltimore/Marley's Station, take Rt. 2 South past Severna Park to College Parkway, which is approximately 3 traffic lights south of the major entrance to the Severn Park Mall (Caldor/Giant/Horn & Horn/etc). Do NOT take the first entrance to the school. Pass it up, and proceed beyond the traffic signal on College Parkway. Take the next right, which is the second entrance to the school. You pass a barn on your left and a grass playing field on the right as you go up the hill along side of several parking lots. Turn left before you pass the lot on the right. Pick a spot to park. The meetings are held in the lecture hall of the Careers Building, enter from the left side or front doors. The speaker will be at the ground floor level. You can enter the back of the hall from the second floor level.

If you DID take the first entrance to the school follow the road as it loops around the entire school in a counter-clockwise fashion. Continue on the road completely around the school. The Careers building is the last building on the loop and has a sign on it.

MAC-SIG (Special Interest Group) directions and 1989 meeting dates:

The Macintosh Special Interest Group (MacSIG) of the Annapolis AppleSlice meets on the third Thursday of each month. The meetings are held in the Anne Arundel County Library on West Street in Annapolis from 7 p.m. to 9 p.m. Meeting dates for the balance of 1989 are: August 17, September 21, October 19, November 16, and December 21.

The purpose of the MacSIG is to provide a forum for Macintosh users to learn and share with fellow Mac users. Each meeting consists of a presentation or discussion on software, hardware, or techniques of interest as well as question and answer sessions and group discussions.

The Apple ][ SIG meets at various locations and times as announced in our CRABAPPLE (Annapolis Apple Slice newsletter).

Call our Annapolis Apple Slice BBS...CRABBS BBS...at (301) 974-0221.

# June Meeting

by Paul Tarantino

Having missed the last two monthly SIG meetings because I was busy spending your tax dollars traveling for the government, I was glad to be back inside the Beltway (no, really!) where I could once again be a part of a lean, mean, cost-effective organization.

Anyway, Gary Hayman, our new Maximum Leader, had a lot of Neat Stuff to share with the assembled multitudes at Dolly Madison Library in McLean, starting with a set of Yamaha DM01 amplified speakers, which he had plugged into the headphone jack of his GS and proceeded to demo with selected takes from Bill Basham's DiversiTune, cleverly switching songs quickly enough to prevent impromptu singalongs from taking over the meeting. Gary acquired his Yamahas at Applefest for $85; they are also available by mail order from Bill Basham and who knows where else. The sound was fine, even without a stereo card, and the power output was enough to break a lease in any apartment, more than ample unless you like to generate your computer music at midfield in Kennedy Stadium. While nobody brought any Bose speakers to allow a side-by-side comparison, it was noted that the Yamahas allow more control of tone and volume than Bose Roommates, and cost quite a lot less. A good deal as well for those of us who want to hear those dungeon doors creaking open and shut.

Do you want to make Real Money with your computer? Would you like to be a genuine published software writer, with groupies and all that? An excellent avenue for the beginner (and for many veterans) is submission of your homebrew software to one of the monthly Apple magazines-on-disk, like Softdisk or Uptime. Gary demo'ed a few of the educational/recreational quiz programs he had written in Applesoft Basic, complete with music and visual effects, and had gotten published in Softdisk over the last couple of years. Softdisk has paid Gary $100 per published program, in real currency, which could get you started toward that 20-gigabyte, 15-nanosecond hard disk you've had your eye on, to say nothing of the prestige, the peer recognition, and other benefits of fame. (Did I mention the software groupies?) Games, utilities, educational programs, and graphics are all potential candidates for publication.

The big news at this meeting was a demo of Appleworks 3.0, the subject of much discussion of late on the TCS. Through cunning, connections, luck or whatever (he didn't say), Gary had a pre-release copy of the software to demonstrate, and it sure looked slick! *[For a more detailed description of this program, please see the article, entitled XXXXXXX, elsewhere in this issue.—Ed.]* The program is supposed to be released by Claris in August, at the same list price as 2.0/2.1, with a $79 upgrade fee for registered 2.0/2.1 owners. A more impressive offer, available to subscribers to Tom Weishaar's A2-Central (formerly Open-Apple) who may have lost their original disks (the dog ate it, or whatever) will provide the complete AW 3.0 package for $99! This is a genuine, certified Good Deal which will surely bring many heretofore unregistered Appleworks users back into the sunlight, to say nothing of what it will do for Mr. Weishaar's subscription lists in the next few months.

There seems to have been some horsetrading going on between Claris and Beagle Brothers while this package was being assembled (lots of the enhancements in AW 3.0 sound like TimeOut add-ons). We were told that, when the dust settles, Beagle Brothers will own rights to many of Claris' old StyleWare issues (like TopDraw and others, but NOT, of course AWGS), and that Beagle Brothers will be prepared to upgrade your TimeOut Appleworks mods so they will work with AW 3.0. (Talk to your WAP Beagle Buddy about upgrade procedures!)

Under deadline pressure from the library, our meeting closed with a discussion of how to improve the IIGS section of the disketeria. In response to a general request for more GS disks, President Emeritus Ted Meyer pointed out that, while there is no shortage of candidate material for GS library disks, the labor-intensive work of getting a new disk compiled and documented is often a bottleneck. For this we need VOLUNTEERS. It was also suggested that some GS disketeria disks are not as user-friendly as they might be, and that making some old Journal how-to articles available, in reprint or compiled on disk, would help our members get the most out of the disks already available to us.

Our next SIG meeting will be held on July 24, the Monday following the regular WAP meeting, at 7:00 pm in the cafeteria at Thomas Pyle Intermediate School in Bethesda. Announcements will be made at the WAP main meeting, and can also be found on the TCS (check the Meetings board on conference 1 or the IIGS Miscellaneous board on conference 2). On August 28 we will return to the Dolly Madison Library in McLean. Please join us!

# July Meeting

by Chris Bastian

Charging ahead into the summer (and losing a few stray members in the balance, having changed the meeting date too late for publication), the WORKSig gang broke new ground by delving into the mysteries of The Best Answer, a linear programming template written by the folks at Heizer software. In the process of fathoming its capabilities and functions, we came to the conclusion that there's nothing this program can't do that a good statistics textbook can't fix.

Clever readers (who peruse something other than Ray Hobbs' crossword puzzles) are probably saying, "hmm...that sounds familiar." Indeed it should. Two months ago, our illustrious new President penned a review of linear programming software, including TBA. Through sheerest coincidence, a new WORKSig member had acquired a copy of the same program (which also runs with the Works spreadsheet), and was looking for help in understanding how it functioned. Ever up to a challenge, we assembled on June 12 to run it through its paces.

First step was launching the program, loading one of the sample files, and discovering we couldn't change a single cell. No, we had to back out, open Works, and open the file there first. Still no luck. How about IMPORT...ah, there it is. And that was the easy part.

The guts of linear programming is finding the most efficient way of selecting from a range of resources (in our example, hired help), with certain costs (salaries and minimum hiring periods), to achieve a specific goal (keeping payroll to a specified amount) given any number of constraints (discussed later). The program calculates all possible combinations of resources and settles on the combination which meets the needs of the model while minimizing or maximizing a specified value. In our case, it also involved shuttling back and forth between TBA (where the help screens tried to explain adjustable variables, constraints and objectives) and Works (where we entered cell values and struggled with with proper placement and and text of formulas for phrases such as "Only 2 more TEMP employees than PERMANENT employees on any one day") and back to TBA to run the program. After about 1.5 hours, we finally managed to successfully satisfy all of the program's demands for properly identified value ranges, formulas and objcetives, and were able to actually GET A RESULT (the program, lightning fast, figured out the right mix of staff for each day to meet the minimum daily requirement while minimizing the payroll). How, you ask, did this miracle occur? That's where a Statistics text would come in handy. If you've got a copy, give me a call and explain it to me. (Given sufficient trial and error, I'm sure it's all as simple as Pi, but since each 'what-if-we-change' adjustment involved re-loading, re-saving and re-running the spreadsheet, we decided to declare victory and go home at 9 PM.)

From here on in, WORKSig is back (Yes!, Absolutely!, I swear!) to the THIRD Wednesday of the month, 7:00 PM at the PI office. Call me at (301) 530-1935 for all the details.

A final note: (Hold it! Don't turn the page; I know you're still reading this). Having bowed to The Will Of The People in accepting the position of PI Secretary for the next year, I'm going to start having reams more writing to prepare. Someone else, I sense, is going to have to take over the preparation of these little essays. I can still get them into the mail, but if you're game to have your name in Hot Lead (yes, I know it's all electronic now, but it still sounds nice) every month, let me know.



by Robert C. Platt

**SIG News.** Even during the heat of summer, the HyperCard SIG continues to meet after the main meeting. Our next meeting will be held in conjunction with WAP's Sept. 23 general meeting at USUHS. We hope to have SuperCard available for a demonstration by that date. Because of the GameSIG extravaganza, there will be no main SIG meeting in August.

**Disk Library.** Our collection of Stackware continues to grow. You can purchase them at our monthly meetings or at the WAP Offfice, or by mail order using the form in the back of the Journal. Our library now contains 25 disks of stacks and four disks of externals. These disks are summarized in the new Mac Disk Catalog. Dave Condit, our head Stackware Librarian, needs volunteers to sort through about 40 megabytes of material waiting to be processed. If you can review and document some stacks, please call him at (703) 349-8752.

**HyperTalk SubSig.** John Chin is now the chairman of our

HyperTalk SubSIG. It meets on the third Wednesday at 7:30 p.m. at the Fairlington Community Center, 3300 S. Stafford St, Arlington VA. To reach the meeting, take I-395 to the Shirlington/Quaker Lane exit. Go south, one block past the first traffic light and turn right onto 33rd Street. Stafford St is one block west of Quaker Lane, and the Center is at the corner of 33rd and Stafford.

**Tutorials.** We wish to offer a repeat of our advanced HyperTalk tutorials if interest warrants. Please call the office if you are interested in taking a HyperTalk class.

## *Excel SIG*

by Larry Feldman

Almost all of the June meeting was given over to a demonstration of WINGZ by Bob Schaffer. Talk about setting up a group of people to experience ambivalence. I mean this was a room full of people all of whom have this enormous investment of time, not to mention sentiment, in approaching some level of excellence in Excel. And here they are drooling over all these inarguably neat powers of this handsome new program.

The grass is assuredly greener in at least some parts of that field over yonder but... But, for one thing, I bet that if I sat down and actually made a list of the all things that I know about Excel that only mean something in the context of that one program, it would have over 1000 items. Or more. Who knows? Who counts? Its a big damn treasure trove of things known that one is loath to leave behind.

Then there's the other hand. If you use spread sheets or spread sheet data to generate presentations that legitimately have a high graphic component, then you need to at least consider WINGZ. Hell, should I ever get to the hardware threshold that you need to handle it (an 020 processor and 2 megs bare minimum and realistically you really can toss in a big screen) I'd be tempted to spring for it for the three dimensional graphics alone.

July's meeting will be given over to Excel 2.2 courtesy of demo master Tom Cavanaugh. A report on that will follow in due course.

IN AUGUST, I'm putting on a tutorial on common but perplexing operating problems in Excel. That is to say, I'm going to cull my old files for the dozen or so application design or macro code problems that I've encountered in the last two plus years which are most likely to be generally instructive. I figure that since I've gone from an absolute standing start two and a half years ago (as in never having operated any computer anywhere) to at least a loping stride in Excel, the stuff I barked my shins on the hardest along the way ought be of some wider interest. Anybody and everybody is welcome.

### *Other SIG News?*

**Reports from the various SIG meetings have fallen by the wayside. We need help—help in seeing that the reports from each of your groups is promptly passed on to the Journal, and special help in seeing that these reports are organized properly. The job requires unusual aptitudes—part editor, and part sheep-dog, but it is an important one, if the SIG activities are to be adequately supported by the club.**

**If anyone out there is interested in volunteering for this position on the Editorial Board, he or she is urged to contact the office and to let us know of your interest. They, and we, can be immensively supportive, but first we need something to support...**

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drive is supposed to be here. If your Journal arrived on schedule, it probably was. The point of all this is not that you need to lean on people to make things happen. The point is that, as it turns out, Apple has a serious quality control problem with its disk drives, and that its support for users is suffering. There had been reports in the trade press about problems with the 40MB drive, but it now appears that these problems are deeper than we knew.

So be warned and be wary. Apple's embarrassingly short 90-day warranty period is bad enough (particularly when you consider that the same equipment, installed by other manufacturers or dealers may be warranted for up to two years). But to need warranty protection twice within just a little more than two months adds injury to insult.

## *Letter to the Editor*

Sir:

The old line mothers gave their kids was 'Think of all the poor people starving in China," as a plate of unappetizing food was passed to them. This is perhaps a harsh analogy, but similar thoughts crossed my mind as I toured the aisles of MacWorld.

It was a pleasant enough experience, and I suppose I should feel honored that I was spared the need of a pilgrimage to Boston or San Francisco, when so many other travel days each year for the same purpose, but somehow, I felt...empty. And not just by the $20 lightening of my wallet. MacWorld DC just wasn't the holy Grail I had expected after hearing the war stories of wall-to-wall humanity and football fields of products.

An afternoon sufficed to walk the relatively empty corridors, as about 25% of the floor space had been walled off. And the items on display, while flashy and impressive, were clearly there for people putting together GSA-approved purchase orders; only the occasional vendor seemed to be interested in the individual Mac user as a potential customer. None of this surprises me terribly, since Government is what makes Washington move, and since the Macintosh is now a respected "business" computer. Professional shows display what there's a market for, and I'll always be ready to visit.

But as a personal user, I sometimes ask myself: "Is this all there is"? FOSE, FED-EXPO, and all the other presentations at the convention Center are essentially variations on the same "business" theme.

Still with us? Now turn to Page 88. Last time...

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# Bits & Bytes

by Lynn R. Trusal

### *Apple to Fix Hardware Problems!*

Apple supposedly is relying more on Quantum and less on Seagate hard disks since Seagate drive reliability has supposedly proved troublesome. From my experience I would have to question the reliability of the Quantum hard disks found in the Mac II. Mine failed within the first year and so have several others in the club that I have heard about. We have also had 4 out of 14 Quantum drives fail at work. This is just too high a failure rate for a two-year period.

Now Apple may be ready to admit there is a problem and refund some money. A year ago, I had to pay $400 to swap out my 40 MB Quantum hard disk that finally froze after numerous boot up problems. Apple has announced that owners of Mac SE, Mac IIs and Mac IIxs will be eligible for free replacements under a new program. Drives covered under the program have serial numbers 00335507 - 01023016 which are located near the 50 pin connector. The problem has been sticky spindles in the hard disk itself. Apple will supposedly send a letter to customers explaining how to apply for reimbursement for past repairs on covered drives.

(It is just possible that I might actually get back my $400. I will believe it when I see a $400 check in the mail.)

Apple says that it is also going to fix problems that have plagued the ImageWriter LQ printer since its introduction. (Source - *MacWeek*, June 13, 1989).

### *Metro Stack*

If you use the metro a lot and are always referring to a metro map you may want to do what I did. I used the Metro Stack on one of the WAP public domain disks, printed out the 6 maps available as part of the stack (north, south, east, west, central and enlarged central), reduced them several times on a xerox till they were 2 inches x 4 inches, and laminated them. I mounted the six back-to-back so that I only needed 3 cards.

The final laminated product is 4.25 in. x 3 in. although it could be cut down somewhat. They will easily fit into a shirt or suit pocket and may be helpful for navigating the D.C. metro.

### *Apple Dethrones IBM!*

For the first time since 1982, Apple sold more PCs than IBM. Dataquest Inc. says that Apple sold 1.27 million Macintoshes and Apple IIs last year while IBM sold a total of 1.23 million.

Of course this is largely because MS-DOS clones have taken a lot of the market from IBM which it abandoned when it chose to migrate to PS-2 models. The PS-2 models are selling well but the OS/2 operating system is not, much to IBM's displeasure.

IBM is offering rebates of as much as $800 to encourage buyers to switch to OS/2 when they purchase disk drives, additional memory (needed) or OS/2-based software. There are about 39 OS/2-compatible applications, which is not many, and more will have to become available and DRAM chips will have to drop further for OS/2 to be more universally accepted. Apple is claiming that system 7.0, when it is available in early 1990, will run old Macintosh software better than OS/2 handles old PC software. This advantage is not expected to last in 1989, according to industry sources. (Source - USA Today and Business Week, May 22, 1989)

### *Use of the Tektronix Color Thermal Printer, Aldus Persuasion and Pixel Paint*

(...Here he goes, telling us to use more than one program to achieve the desired result...) Yes, Major Mac is preaching again.

I prepared a lot of presentation view-graphs at work and have found that by combining several programs I can achieve nice results. In the May 1989 issue of the Journal, I discussed using Aldus Persuasion and PowerPoint to complement each other. I also use Pixel Paint to add color to maps and clip-art when I want multiple colors instead of a single color under PowerPoint. I will say that PowerPoint is better for adding one color to line-art than Pixel Paint because it can be done in one step versus the multiple-step approach adopted by Pixel Paint.

Even if you don't want to master the details of Pixel Paint it is really only necessary to use several tools to get the desired results. I mainly use the paint bucket and eye dropper to add multiple colors to just about any graphic. Remember that to successfully use the paint bucket, paint can only be flowed into an area completely bounded by solid pixels. If you scan a map and there are some missing pixels, just use the pencil tool to fill them in and away you go. Once the color is added, use the lasso to copy the graphic to the clip-board. Close Pixel Paint and open Persuasion or PowerPoint. Paste the graphic into the presentation application and add any overlays using Persuasion. I don't recommend adding text to the graphic in Pixel Paint. Do that in Persuasion and avoid the jaggies.

### *Desktop Presentation Software*

I have done quite a bit of preparation of presentation view-graphs in the past several months and would like to suggest some general advice on the basis of this experience. This advice is not meant to be dogmatic but only suggestions.

1. Fonts

a. Stick with Helvetica or Times since they are the two most readable fonts and the ones that have large enough point sizes supplied with most presentation software to give the best results. Zapf Dingbats can be used for many different types of bullets. Most presentation packages come with these fonts up to 96 point size that are scaled down by the printer to produce higher resolution text. You must install these large point sizes in your system or open font suitcases with Suitcase to have access to these "screen fonts."

b. Do not use smaller than 18 point size for text on slides. It cannot be read when projected (24 point is preferable.)

c. Use one standard size larger for the slide title than is used for the rest of the text; e.g., if you used 18 pt. for the text use 24 pt. for the title.

2. Colors

a. Background

1. The best colors are the darker colors like blue and black.

b. Foreground

1. It is generally better to use bright colors that contrast well with dark backgrounds.

2. I suggest using white, yellow, red and some greens or blues.

3. It is best not to use more than 2 or 3 different colors for text on any one slide or throughout the presentation. Use color for accent!

If you are printing to the Tektronix color thermal printer, remember that what you see on the screen may not match exactly the printer output and what is viewed from the view-graph projector may project differently than you view with your eye. I have found that many novice users get carried away, using every color they can find. Many of the colors chosen from a color wheel will change dramatically when printed.

The Tektronix thermal printer is a CYMB (cyan, yellow, magenta and black) output device and the Macintosh screen is RGB (red, green and blue). Stick with bright basic colors that contrast well and it will be hard to go wrong.

Nonetheless, it is an interesting concept and I am sure other software vendors will study it to see what happens. Remember that various states have been successful in offering tax payers amnesty for back taxes without penalties. (Source - Business Week, June 26, 1989).

### *Real Bits*

1. I hope John Sculley isn't trying to tell us anything since he recently unloaded 100,00 shares of Apple stock for a $4 million dollar transaction. He still holds 9,357 shares worth over $400,000

***For the first time since 1982, Apple sold more PCs than IBM. Dataquest Inc. says that Apple sold 1.27 million Macintoshes and Apple IIs last year while IBM sold a total of 1.23 million.***

### *Pirates Invited On Board*

The Software Publishers Association estimates that the U.S. software industry lost $2 billion in 1988 to software pirates many of whom are in 25 foreign countries.

Now a U.S. software house (XTree) is inviting pirates to turn themselves in and become legitimate shipmates. Under a program called "Software Amnesty for Everyone" (SAFE), they want unauthorized users of XTree to send them $20 and a printout of their screen display that contains the serial number of the program. They will then be sent the $69.95 program, a users manual and free technical support. The offer lasts until October 31, 1989.

It sounds interesting, but is it really a Trojan horse? Will XTree then use the serial number to trace which authorized user gave out free copies and then prosecute or will it just do a little software epidemiology and seek to define the route of transmission of their software?

but don't feel sorry for him since he also holds options to purchase 700,000 more shares. There was no report on the price he must pay for the additional shares. (Source - *Investors Daily*, May 22, 1989)

2. Apple Computer is spending millions of dollars to showcase its products overseas—particularly in the Far East. Apple wants to open between 30 and 40 AppleCenters in the Pacific region this year. In order to facilitate this, Apple provides between $50,000 and $1 million to open and furnish small to large AppleCenters around the world. The first AppleCenter was opened in London in 1986, and there are now about 75 throughout the world. (Currently or soon to be 10 AppleCenters in Latin America, 10 in Asia, and 8 in Australia.) The expense seems justified since Apple Pacific is the hottest-growing segment of the company, with sales for this region alone estimated to be $1 billion by 1990. (Source - *PC Week*, May 22, 1989).

3. WingZ is apparently trying to mousetrap the introduction of

Excel 2.2 by offering its program to Excel users for $99—perhaps not incidentally the same price Microsoft is charging Excel owners to upgrade to version 2.2. (Source - *PC Week*, May 22, 1989).

the SAS Institute is a major force in mainframe and minicomputer statistical and statistical graphics applications. In the past 5 years it released a version of its SAS statistical package for MS-DOS and now for the Macintosh. If you are into statistics and related graphics, be on the lookout for its release later this year.

***The Software Publishers Association estimates that the U.S. software industry lost $2 billion in 1988 to software pirates many of whom are in 25 foreign countries.***

4. Symantec has sent a free copy of MORE II, called version 2.10, to registered users of version 2.0. It consists mostly of bug fixes or compatibility problems with other applications. It includes the ability to image slides over modem directly to MAGICorp and recognition of the dictionaries of MacWrite II and FullWrite Professional. I wish one good dictionary could be used by all programs with spelling checkers since I must have 5 different dictionaries on my hard disk. Symantec is to be congratulated for providing this upgrade for free. It would be nice if more software houses would do the same for versions that are mainly bug or compatibility fixes.

5. One of the mail order catalogs (COMB) is selling the Lisa 2/Macintosh SL for $999 with what I believe were machines obtained from SUN Marketing. The price includes a 10 MB hard disk, MacPaint, MacWrite and MacWorks Plus disks. It is catalog # C47-7703-259 and the telephone # is 1-800-328-0609, 24 hrs a day and 7 days a week. Keep in mind that there are about two months between when this is written and when it is published.

6. The SAS Institute of Cary, NC is about to release a new statistical visualization software package for the Macintosh. It is called JMP and is designed to appeal to business researchers, scientists, engineers and educators. I don't have many details but

7. Jade Computer recently advertised in a special BYTE supplement the Sony Trinitron Multiscan color monitor for both MS-DOS and the Mac II. It is a 13 inch 800x600 resolution color monitor that also works with the Mac II. The price was $488 and a Mac II cable was an additional $14.95. The order telephone number was 1-800-421-5500. The quantities were limited and it does not include the video card necessary to interface it with the Mac.

8. When using the selection rectangle to select a graphic remember that you are really creating a white box around it that will be invisible until you place it in a program that supports a colored background such as Persuasion, Power Point, Cricket Presents, etc. To avoid this, use the lasso to choose the object in a program such as Pixel Paint so that it completely closes down on the object, thus avoiding the dreaded "white box."

9. Connor Peripherals is not a familiar name to Macintosh users but it is becoming a major player in the hard disk business. The stock, recently recommended in *USA Today*, has doubled in several months and is reporting record earnings even though the hard disk business is still depressed. Connor Peripherals is a major manufacturer of 3.5 inch hard disk and is about to market a new line of 2.5 inch drives which may go into laptop computers. Already Connor Peripherals drives are used in most of the leading laptop manufactures including NEC, Zenith, GRiD and Compaq. Compaq owns 42% of the company and accounts for $43M of its sales. Even Sony chose Connor Peripherals over its own disk drive division, for incorporation into a new interactive videodisk-based workstation. (Source - *PC Week*, June 6, 1989)

10. I recently reported that several Japanese manufacturers were starting production of 4MB DRAM chips but IBM seems to have beaten them to the punch. They reported in the June 26, 1989 issue of *Investors Daily* that they were producing volume quantities of the large capacity chip. Such chips will initially be used in mainframes but eventually will be seen in PCs. If used in a Mac II they would permit 32 MB of RAM in the 8 SIMM slots.

11. Apple has been unable to meet the demand for the Mac IIcx, particularly those with 80 MB hard disks. Quantum is having a hard time supplying the necessary hard disk drives and Apple is looking elsewhere for other suppliers. Not only are purchasers shying away from the Mac II but the SE has also lost sales to the cx. Maybe the smaller footprint of the cx is appealing to potential SE purchasers who need the smaller footprint but also want the power of the cx.

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

# The Musical Apple

.....by Raymond Hobbs

*Common questions about music and computers*

Having manned a music hotline for several years, I begin to think that I've heard it all. Actually, that's not the case, I keep reminding myself. I recall that I had one call about how to use Lotus Jazz ("I know that it's not music, but I didn't know who else to call..."), and I'm sure that there are others waiting in the wings to stump me. However, some questions recur, so I will pass them on here, in hopes that some of the Journal's readers (those who are still too shy to call) will find some useful information in them.

**Which music program should I buy?**

This is the all-time winner for questions asked, and it should be asked either over the Hotline or at a Music SIG meeting. The program to buy will depend on several things, including your particular musical interest, skill level, budget and how much equipment you are considering installing over the long haul. General advice on this question is relevant only to those with general interests, skill levels, budgets and music systems. (If this sounds like a plug for Music SIG, it is.)

**I set up my synthesizer and computer, and it doesn't work. What should I do?**

At least five items are involved in setting up a complete music system: the computer, MIDI interface, synthesizer, an amplification system and music software. A problem can occur in any of these.

I have found it best to set things up in the following manner: First, connect your synthesizer's AUDIO OUT to your amplification system. Turn on the synthesizer, then the amplifier. Play something on the synthesizer. If it doesn't play, check the AUDIO OUT to amplifier INPUT connection and, of course, the volume controls. If this combination can't be made to work, the problem is in either the amplifier or the synthesizer (a hardware problem).

If the thing works, the next thing to check out is the MIDI connection between the synthesizer and the computer. Plug a MIDI cable between the MIDI OUT of your synthesizer and the MIDI IN of your MIDI interface. Plug the MIDI interface into the serial port on your computer (the modem port on a Mac or a IIgs). Older Apples have the port build into the MIDI interface, which is a card which fits into a slot in the Apple. Some MIDI interfaces have front-panel lights to indicate MIDI activity, and when you play notes on the synthesizer, you should see the lights flash. If you have no lights, you will have to run the software to check the connection.

Put your sequencer into RECORD mode, then play something. Next choose EDIT mode. You should see some representation of what you played. If not, check to see that your connections are made properly, and that your synthesizer is in OMNI mode. OMNI mode will send output out over all channels. If OMNI mode is unavailable, or your synthesizer allows output over only one channel, make sure that the sequencer is enabled to record from the channel available on your synthesizer.

If none of these things work, then the problem is generally with the interface or the synthesizer (another hardware problem!) The last thing that I normally connect is the MIDI IN on the synthesizer to the MIDI OUT of the MIDI interface. This connection can be checked out by writing some music into your sequencer (from EDIT mode on the sequencer) and then playing it back. The music should come through the amplifier. By checking things out one connection at a time, the problem area can usually be isolated and the offending component returned for repair, if necessary.

**I recorded a sequence on one synthesizer, but when I played it back, all of my synthesizers played it. How can I get it to play only on the one I want?**

When most synthesizers are turned on (at least for the first time), they default to OMNI mode. In this configuration, the synthesizer will receive MIDI information on all channels. Therefore, if you record from synthesizer "A" into your sequencer, which may be set to (for example) channel 1, when you play it back, all of your synthesizers which are set to receive MIDI information on all channels. Therefore, if you record from synthesizer "A" into your sequencer, which may be set to (for example) channel 1, when you play it back, all of your synthesizers which are set to OMNI mode will receive channel 1, and play the sequence. To correct the problem, turn OMNI mode off on all synthesizers, then set them to receive on different channels. Only tracks set to the channel indicated will be received by the synthesizer.

**When I play a sequence from computer to synthesizers, my drum machine starts playing junk. How can I get it to stop doing that?**

A few drum machines (Yamahas are notorious for this) take any MIDI signal as a message to start playing an internal song. If your drum machine does this, select a song number (usually 1 to 99) that you can clear out. In other words, a song of no notes at all. Your drum machine will still react falsely to the MIDI signal, but when it starts playing the song, there will be no sound to play. This will not interfere with the MIDI notes intended for your drum machine. It will still play its sequenced track OK.

**When I orchestrate my piece, it sounds fuzzy and indistinct, like the instruments are out of phase. What went wrong?**

Probably the instrument selection. Some instruments have much longer attack slopes than others, and if you write in the music, or if you play it in from another instrument, the attack slope of the original may be quite different from the attack slope of the instrument that is trying to play it. For example, if you play a part in on a piano patch, then play it back on a violin patch, the violin will lag behind the intended attack. Why? The violin patch, which mimics the attack of the "real" violin, has a long attack slope. Orchestral strings actually start playing before the beat, instead of right on it, because it takes some time for the vibration of the string to reach an audible volume. Your synthesizer patch, in recreating the violin sound, matches the buildup of vibration intensity in order to duplicate the sound. In the above case, I would have the violin part offset a quarter to a half-beat early, to compensate for the attack slope.

My music sounds good when I play it through the system, but when I tape it, the piece sounds muddy. Is my tape recorder bad?

Possibly, but a common taping problem is instrument separation. When run through the tape recorder input, a lot of the natural separation of instrument timbres is lost. When this happens, a "muddy" sound can result. Try boosting the bass and treble a bit, while lowering the midrange. This is best done at the synthesizer output stage, rather than in the tape recorder itself. Equalizers that can accomplish this cost as little as $200. Another tape recording enhancer is the "sound processor", or "special effects processor," which can add depth to your recording by adding a hall or plate reverb; however, to make this sound good, you must have already achieved good instrument separation. In that respect, I depart from the conventional wisdom of studio "gurus," many of whom state that a sound processor should be the first piece of sound enhancement equipment purchased. I would go for the equalizer first and the processor second.

I hope that some of these questions and answers can be of help to you in your musical work. In another plug for Music SIG, I would remind readers that we regularly handle questions of all sorts at Music SIG meetings. Call me (301 - 490-7484 evenings) or Bill Bittle (301 - 236-9898 evenings) for information.

Over time, the number of columns that readers have come to expect in the Journal has fluctuated. Authors have left town, burned out, been distracted by obligations that seemed more pressing—what can be more pressing than an insistent Editor confronted by an implacable deadline—or just tuned out of the Journal, for reasons that seemed persuasive to them at the time. Grumbling about this, but recognizing it as one of the hazards that Life favors us with, we have nonetheless made efforts to rebuild this base of contributors. Ralph Begleiter, aka MacNovice, promises us that he will resume his contributions next month. Several new authors appear in this issue, and they have indicated that they expect to contribute articles on a regular basis. (Spurred on, no doubt, by implausibly denied rumors that the Editor has a set of dedicated kneecappers whose only job is to enforce deadlines.)

Why not think about joining us? We are, by and large, a congenial lot, and we do it because it is fun. We particularly need articles written about the Apple II line, in all of its heterogeneity.

A general list of guidelines for prospective aauthors is reproduced in this issue of the Journal, and this ought to give you enough to begin.

If you are as interested as we hope you will be, please contact the Editor or the WAP office for more details.

# Wired...

The TCS

by Leon H. Raesly, LCSW, TCSO

Here it is August already, and we have some HOT news for you from the TCS (the PI's TeleCommunications System).

We have a new (old) Board on the TCS, for discussion of PI Philosophy, Politics and Policies as well as any Board of Directors (BOD) matters. We have been going through a series of votes on the name, and as of the writing of this article, the final results are not in. But the two leaders are: Glasnost & PI Politics. Next month we will give you the results.

But the REAL HOT NEWS is that we are completing a process of speeding up the System! We have successfully tested the use of a 4 Mhz Zip chip on the Corvus network (with the use of a Corvus Network patch purchased from Zip Technologies—written by Tom Vier) and it works!

And does it scream! For those in the know, to compare the speed of a 65nn chip with the IBM's 80nn or the Mac's 68nnn chip, you really need to compare MMIPS (Million Memory Instructions Per Second). But for a short cut way of looking at it, you can multiply the 65nn clock speed by four, then compare that with the clock speed of the IBM or Mac.

The reason is that the 65nn chip takes (on the average) 1 clock cycle per memory instruction, while the 80nn and 68nnn chip takes (on the average) 4 clock cycles per memory instruction. So to put the new speedup in perspective, it is as if we were running at 16 Mhz

AND IT IS FAST! By the time you read this, all Systems should be upgraded to 4 Mhz. Then later this year we will probably be able to upgrade to the new 8 Mhz Zip chips for a nominal fee. That is the equivalent of a 32 Mhz clock speed! Talk about flying!

Apple II and Mac Downloads are still expanding, as you can see from the listing of new files elsewhere in this Journal.

In the Apple II world, there is talk of a new method of encoding files for compressed storage. A NuFx file inside a Binary II header. It seems that this enables the Apple II GS "Flounder" to decode it properly. It seems that "They" are going to this trouble for 250,000 Apple IIGS users (only a few of which actually use the Flounder), and ignoring the 5,000,000 Apple II, II+, IIe and IIc & IIc+ users who don't need it! Well, more on this next month.

One of the things the Crew tries to do each Saturday is to be available at the PI Office for your TCS and other questions. So just drop by from Noon to 3:00 PM any Saturday, you will usually find us there. And bring your Apple II & Mac TCS and related questions. Usually somebody will have an answer for you. See you there!

Take Care, Now! Lee...

## New Files on the TCS

The following is a list of new files recently uploaded to the TCS. These files are available for downloading by TCS users. A longer, more detailed browse description for each of these files is available on the TCS. Call the Pi Office to obtain a TCS password.

File area 3 - Apple II Technotes

018 TNGSOS.06 06/10/89 0003K Technote #6

File area 4 - Apple II Utils

128 BINSCII103.SHK 06/23/89 0004K Encode programs for Internet transfers

127 FAZ.V2.6.SHK 06/19/89 0019K File Attribute Zapper v2.6

126 CHRIS.MAC 06/15/89 0039K For Chris Bastian

125 WINDOWS.SHK 06/10/89 0022K File utility, see browse description

124 PUPS.SHK 06/10/89 0058K Program selector and utilities

File area 5 - GS Desk Accs

059 ALARM.3.2.SHK 06/25/89 0026K Alarm Clock version 3.2

058 ADB.CDA.SHK 06/24/89 0006K CDA for viewing AW database files

057 SHOWPIC3.03.SHK 06/18/89 0014K Display SHR graphics, v3.03, NDA

File area 7 - GS Games

055 CRYSTAL.SHK 06/10/89 0199K Demo of Crystal Quest

054 GRACKEL.SHK 06/04/89 0039K An Arcade Game Shoot-'em-Up

File area 8 - GS Graphics

057 PS.GS.GRAPH.2 06/21/89 0021K PS GS Graphics

056 PS.GS.GRAPH.1 06/21/89 0030K PS GS Pictures

055 SLIDE.SHOW.SHK 06/16/89 0004K $C1 pictures auto slide show

File area 9 - GS Misc.

055 DESIGN.DEMO 06/18/89 0059K Demo version—ASM/C progr. utility.

054 GENESYS.DEMO 06/11/89 0303K Genesys programming demo.

File area 10 - GS Utilities

055 ECP16.0.43.SHK 06/11/89 0033K A BETA release of ECP16 - v0.43

054 AEPCT.RAMTEST 06/11/89 0005K PC Transporter Ram Tester (Prodos 8).

File area 11 - AppleWorks

037 SP.INFO.SHK 06/25/89 0012K Info on SuperPatch version 5.0 and 6.0

036 MORTGAGE.I.SHK 06/18/89 0036K Evaluate ARM mortgage loans

035 MORTGAGE.II.SHK 06/18/89 0071K Evaluate ARM mortgage loans

034 AWGS.PALLTS.SHK 06/11/89 0006K Pallets for AppleWorksGS

033 MORTGAGES.SHK 06/10/89 0031K Evaluate mortgage loans

File area 14 - Mac Games

078 BILLARDS.SIT 06/05/89 0041K billiards game

File area 15 - Mac Graphs

103 CHRCTERS.SIT 06/18/89 0205K Foto montage art by Mike Swartzbeck

File area 16 - Mac Hypercard

110 UNITEDNAT.SIT 06/18/89 0017K Crossword puzzle stack, GAMES Magazine

109 SCRIPTVIEW.SIT 06/05/89 0028K Get all the scripts in a stack.

108 DIAL.BUTTON.SIT 05/28/89 0006K Rotary 12-position button (like clock).

107 ARRAYS.SIT 05/28/89 0038K XFCNs for HC arrays; HyperArrays 1.3.

File area 18 - Mac Utilities

210 EXPRESS.SIT 06/21/89 0172K EXPRESSIONIST DEMO 2.0

209 PYRUP331.SIT 06/20/89 0020K Pyro Updater from 3.X to 3.3.1.

207 VIRDET301.SIT 06/19/89 0052K Virus Detective DA Version 3.01

206 ZTERM0.80.SIT 06/17/89 0132K Version 0.80, ZTerm shareware comm prog

205 DAMENUZ.SIT 06/13/89 0020K Hierarchiacal Menus, popups (2nd try)

204 DIAGSOUNDS.SIT 06/08/89 0006K Mac II diagnostic sound explainer

203 WELCOME.SIT 06/05/89 0011K Create reminder notes after bootup.

File area 20 - GIF Graphics

069 ONMOON.GIF 06/22/89 0021K GIF of Moonwalkers

File area 23 - Apple ///

006 PD3.1041.1050 05/31/89 0007K Description Public Domain <text files>

005 PD3.1031.1040 05/31/89 0014K Description Public Domain <Text files>

004 PD3.1021.1030 05/31/89 0012K Public Domain Descriptions <Text Files>

003 PD3.1011.1020 05/31/89 0013K Public Domain Descriptions <Text Files>



## *The Best of the TCS—Apple II*

Another Good Reason to Buy a Modem!

FROM GARY HAYMAN ON 06/09

I have just uploaded the following interesting files that may be of aid to those who use the Beagle Bros. products. The information was taken from the April Beagle Buddy Update Disk and is to be shared.

HELP TIMEOUT
HELP QUICKSPELL
HELP SUPERFNT.A
HELP SUPERFNT.B
HELP SUPERFNT.C
HELP SUPERFNT.D
HELP U.MACROS.A
HELP U.MACROS.B
HELP U.MACROS.C

AppleWorks 3.0

FROM PAUL SCHLOSSER ON 06/18

From the July issue of A2 Central, via GEnie:

"Imagine what would happen if Claris asked Beagle Bros to make all the enhancements to AppleWorks that users had ever dreamed of. Now stop imagining. It's reality."

"Claris announced AppleWorks 3.0 at the National Educational Computing Conference in Boston on June 20. [June 20? Today is only the 18th!] Alan Bird, originator of Beagle Bros' TimeOut utilities and author of TimeOut QuickSpell, Randy Brandt, author of TimeOut UltraMacros, and Rob Renstrom, author of TimeOut Graph, have been at work on the AppleWorks 3.0 project since last summer."

TimeOut and AppleWorks 3.0

FROM PAUL SCHLOSSER ON 06/21

I've read on GEnie that TimeOut won't be updated to work with AppleWorks version 3.0 until after version 3.0 is released. Since Claris has announced that AppleWorks 3.0 is expected out in August, TimeOut will be after that.

TimeOut probably has to wait because the TimeOut authors are still de-bugging AppleWorks 3.0!

A2 Central — Another Satisfied Customer!

FROM THOMAS BLASI ON 06/19

Can anyone tell me

how I can subscribe to A2 Central? Apparently it has a lot to offer.

FROM DAVID PAGE ON 06/20

A2Central is available by mail, address as follows:

A2 Central
P.O. Box 11250
Overland Park, Kansas 66211

Or you can call 1-913-469-6502.

A2 Central isn't really a magazine...it is a newsletter of no more than 8 pages each month, but is packed with very useful information.

FROM PAUL SCHLOSSER ON 06/25

If you subscribe to Incider, Nibble, or have any old A+'s laying around, look carefully through the ads. You will find an ad from A2 Central offering two free issues.

A Super AppleWorks Patch!

FROM PAUL SCHLOSSER, ON 06/25 06:40AM

Be sure to check File Transfer area 11 for this file:

037 SP.INFO.SHK SHK 00000 0012K Info on SuperPatch version 5.0 and 6.0

This file reviews the newest version of SuperPatch, version 5.0. Starting with version 5.0, SuperPatch is no longer shareware. It is a commercial product, available from the author. It now is capable of over 100 popular patches to AppleWorks v2.0 and v2.1. The next version of SuperPatch, v6.0, will support AppleWorks version 3.0. This file is an AppleWorks word processor file.

Fire Drill?

FROM TOM VIER ON 05/29

PLEASE PASS THIS ON!

My IIe has a conductive coating on the underside of the lid. There is also a lid stiffener that extends downward in the area of the lid angle.

My Applied Engineering RAMWORKS III card does not have a conductorless border around its edge. Along the top of the card, the copper traces meet the edge. They also met the lid stiffener, which caused a high current short between the power buss and ground. This burned the board and the lid. If left unchecked, it could have potentially started a serious fire.

You should check ALL your cards to confirm that the traces to not meet the edge of the board. If they do, protect them from contact with other parts of your computer!

FROM PAUL SCHLOSSER ON 05/29

Tom, why would Apple put a conductive coating on the underside of the lid? Is it to contain electrical noise?

FROM DALE SMITH ON 05/29

I think you're right. Now the question is, why would Applied Engineering (AE) make their card (any of them) large enough to hit the "roof" even if it were insulated? And of course, Tom's question, why do the conductors go to the top edge (assuming they're not required there)?

Tom, thanks for the FIRE WARNING! It's the 3rd I've seen for an AE product. The other two were RamKeeper fires in IIgs's, a different problem. Can they be getting sloppy with success? I hope not.

Beam Me Up, Scotty!

FROM PAUL SCHLOSSER ON 06/01

From GEnie, some more news on the new AE hard drive 'Vulcan'. Seems it partially blocks slot 1.

The Vulcan case is slightly wider and in the IIgs extends out into part of slot 1. Short printer type cards are not a problem there Long PCT type cards would be. The fan is on top of the supply end of the case and blows up out of the top of the IIgs case. It would be helped considerably by the Kensington or other top-mounted fan system. The power supply provides more power than our heavy duty model we sell for the IIe and II+.

Battery News

FROM PAUL SCHLOSSER ON 06/04

I've learned (from a msg on GEnie) that you can order a new battery for your IIgs from your friendly Apple dealer. It is part number APPL-7420007, and costs $8.40 plus tax.

That's more than Arlington Electronics charges for a similar battery, but you're certain of getting precisely the correct battery from Apple.

FROM DAN HUGHES ON 06/07

If anybody out there has a TransWarp GS (TWGS) and a Checkmate MemorySaver card, I can save you some hair pulling. You cannot install the ROM disk at TWGS speed. It took me two calls to Checkmate (no help at all, of course) before I figured out this little conundrum myself. It's simple. Just lower the TWGS to normal 2.6 MHz IIgs speed and you can install the ROM disk. Now speed back up to 6.2 MHz (soon to be 7 MHz) and forget about slow scrolling and floundering Finder forever. No kidding, my IIgs is faster than my Mac Plus except for Disk I/O and that will soon end with System 5.0. Hurray for Apple and Applied Engineering for finally delivering to us the machine we thought we bought in 1986.

Select Light Won't Come On

(Note: This message was posted in response to an inquiry from someone who was unable to print with his ImageWriter because the SEL light would not light.)

FROM RICH SANDERS ON 06/09

The ImageWriter I and II both have a small magnet glued into the lid of the machine. When you take the lid off the sensor no longer "sees" the magnet. The one on the Imagewriter is on the left hand side sitting horizontally. The one on the Imagewriter II is on

the right hand side and it is on a small plastic tab that juts down vertically.

If you lose the magnet the select light will not work on either printer.

A Solution to a Glaring Error!

FROM HARRY BACAS ON 06/15

I got an anti-glare screen for my IIgs color monitor and like it a lot. I had rejected the idea of screens in the past. I thought they were gimmicks and that you could remove glare by tilting the monitor or relocating lights. But my IIgs is set up in a tight place; height, tilt and light sources are greatly restricted. And try as I might, I couldn't get rid of reflections of my shirtfront, bare arms and belt buckle.

So I sprang for the Kensington screen, put it on and voila! Virtually no reflections. I don't have to squint any more. A great relief.

The Kensington screen lists for $49, is advertised by mail order for $39. I got it at Clinton-Computerland for less. Clinton Tyson ordered it from their warehouse and had it in one day.

For users with problems of unwanted reflections, I recommend it.

Hard Disk Question

FROM RICKY JUDGE ON 06/21

I have a new hard disk coming in the mail and I have a hypothetical question. If ProDOS limits one to 32 Meg per partition and the SCSI card limit is 4 drives, how can you break the implied 128 Meg limit overall? So what happens when we have 320 Meg read/write laser disks?

FROM SAM KNUTSON ON 06/25

The point is that ProDOS 8 imposes the limits you discuss while GSOS does not. We will be able to have our 500 Meg R/W laser disks but they will not be accessible to Prodos 8 as we know it.-Sam

Slide Show

FROM GARY HAYMAN ON 06/16

You may be interested in a program I uploaded to the IIgs Graphics area. It is called Automatic Slide Show. It is designed to display all your $C1 (65 block) pictures in a continuous fashion. There is also a complete directions file. Let me know how it works for you. Have fun with your pictures.

FROM PAUL SCHLOSSER ON 06/08

From GEnie:

Interestingly enough, Call-A.P.P.L.E. will be going quarterly starting in September ("to coincide with the San Francisco Applefest"). Evidently, a lot of people liked the look of their sister mag for the Mac which is also quarterly and runs 164 pages. I can see the advantage of time wherein they can now take 12 weeks to make a magazine instead of 4. However, I know I will have trouble following the various columns after a 3 month delay. And I also expect that the timeliness of the information will suffer greatly (witness the IIgs Buyer's Guide).

FROM KIM BRENNAN ON 05/29

One of the fixes in version 2 of version 1.0 of AppleWorks GS is the printing of the list format within the database. All of the problems I encountered before (and my attempts to bypass the problem) have been rendered naught by this fix. Thank your local deity.

FROM ALAN D. HOFFMAN ON 06/14

I just got in a shipment of new software for my IBM at work, and have tried some of it out on the PC Transporter. The following programs work flawlessly:

MicroSoft WORD 5.0: Just arrived. This is the new version that is supposed to knock the socks off Wordperfect 5.0. It is very full featured, and is FAAAAST!! The speller and thesaurus are finally usable. Can't print IBM special characters with the Imagewriter emulation of an IBM graphics printer.

MicroSoft EXCEL: Yep, just like the Mac version. It's supposed to run only on 286/386 machines (under Windows 286/386) but runs just great. You configure it for a PS/2 25 or 30 machine, CGA monitor and a Microsoft mouse. Takes a while to boot, but is faster than AWGS. What fun to run EXCEL on a machine that from the outside looks like an Apple IIe!

MicroSoft QuickBASIC 4.5: The newest version. Faster, with a hypertext help and advisor system. Now I can finally crank out the code. So long AC/BASIC until you speed it up.

FastBack Plus: A full-featured backup program that is about the best on the market right now (PC magazine). Backs up each of my 3 16 meg MS-DOS partitions to about 10 x 720K 3.5 floppies with "compression" on.

Other programs that I am using, and that work well are:

Norton Commander
Norton Advanced Utilities
PC Magazine Utilities
Microsoft MS-DOS learn
Microsoft MS-DOS help
MicroSoft Windows/286
Wordperfect 5.0
Microsoft Works 1.5
Reference Manager
Reference Update
DesqView
Statgraphics
SigmaPlot
Mystat
Procomm Plus
PC Anywhere III (version 3.1)
DBase III+
Lotus 123

My next project is to get Pagemaker 3.0 and AutoCAD up and running. Apparently, there are new utilities out that allow you to use part of a hard drive for "virtual memory", so that you can simulate LIM 4.0 extended and expanded memory to 8 megs. Seems interesting. It just blows me away to do "POWER DOS" stuff on my old Apple II.

*III SIG*

# New Stuff

by David Ottalini,
WAP III SIG Co-Chairman

We break into the 60s this month, III SIGers, with three PD offerings! To begin with, disk 1060 is our first AppleWorks/3EZ Pieces disk. It's specifically for those interested in an accounting system to use with 3EZPs (or AppleWorks, of course). EASY Accountant by Louis Vincenti first came out in 1987. This is version 1.01 and is NOT self-booting. The templates are well laid out and documentation is excellent. To make it as easy as possible for you, we've also provided an ASCII (text) version of the documentation so you can read it using Menu.Maker from any WAP Basic PD disk (and print it out) if you choose. Vincenti explained what EASY Accountant can do in his introduction:

Easy Accountant is an Appleworks/3EZ Pieces spreadsheet application designed to manage the ledger of an individual or a small business running on a cash-basis accounting system. The basic structure of Easy Accountant can be modified or expanded to handle your specific needs. Easy Accountant will enable you to enter all receipts and expenditures for each monthly period and will then compile and print a Monthly Report, a Year-To-Date Report and a Detailed Journal Listing Report. In a future PD offering, we hope to offer a full-blown accounting program that comes from Joe Dobrowolski's AUGI PD library.

PD disk 1061 is our second Contributors Disk. Dr. Al Bloom offers his thoughts on how to move files and programs from Catalyst to Selector, Russ Crom offers Basic and Pascal programs that allow you to process ASCII text from Data Bases, Jim Suthard offers his Time.Piece program that turns your III into various timers and a great List.Maker program for grocery lists. Finally, Jim Salerno weighs in with his version of Chaos, a program that creates a very interesting fractal graphics display. Some additional FOTO files of fractals he's created are included and can be viewed through Menu.Maker. I've been really pleased with the SIG contributions to these disks and invite you to send in your programs. These disks are fun!

Disk 1062 is our first Graphics disk. You'll find a number of Foto files here, including many from Apple II applications that I've converted over from WAP PD disks, as well as Print Shop disks. Because these files take up so much room, this disk is NOT self-booting. However, you can use Sketchpad, disk 1012 to load any of these files and play with them or print them out. On the same disk, the Slideshow program will load and display each Foto file one after another. The Alldump.Inv graphics program from the first Contrib disk will also print any of these graphics for you. I'm looking for more graphics to put on a second disk, so any offers are welcome.

Next month, we "Fall" into September with an extravaganza of telecommunications programs and information. To kick things off on the right foot, we've updated disk 1032, the TerminALL Manual. It contains a number of information files of vendors of telecom programs, etc., and there've been a number of changes since we introduced that disk last year.

*Mac Disks*

by Dave Weikert

The current disk catalog includes a list of disks and titles, a new introductory section, descriptions of files on all the disks, a list of files on the disks sorted by alphabetical order by file name and a second list sorted alphabetically first by file type and then by file name. The catalogs cost $3.00 at the meeting or office; add $1.50 for mailing. The catalogs are current except for the recently issued ImageWriter Fonts series, Mac Disks #5.05 through 5.15.

## *New and Recent Disks*

We have eight new disks this month: six ImageWriter Fonts series and two disks of Apple System Software. Recent disks include reissues of the Desk Accessories (Mac Disks 2.01B through 2.10B), ImageWriter Fonts (Mac Disks 5.01 through 5.04) and System Utilities (Mac Disks 16.01 through 16.04) and mostly original issues of Anti-Virus Utilities (Mac Disks 1.01 through 1.03), ImageWriter Fonts (Mac Disks 5.05 through 5.09), Sounds (Mac Disks 12.25 through 12.31), System Utilities (Mac Disks 16.05B and 16.06B) and StackWare (Mac Disks 19.25 through 19.29).

## *ImageWriter Fonts Series*

The six ImageWriter Fonts disks are the last increment of this series; the fonts are arranged mostly in alphabetical order. The

six new ImageWriter Fonts are numbered as Mac Disk #5.10 through #5.15. Most of these fonts are new to the Washington Apple Pi disk collection but many have been available in other collections for some time. A number of the fonts were extracted from the Shenandoah Macintosh User Group (SMUG) collection and these have been identified in the title by appending "•smug" to the folder or file name. There are a number of attractive decorative faces and some foreign language fonts such as Hebrew and Chinese in the collection. In addition, there are a number of fonts that could vie for the category of "super-fonts" like the Beverly Hills, Boston, Clairvaux and Palencia fonts included in our first four disks. The candidates for "super-fonts" include Ottawa and Palatini (Disk # 5.12), York (Disk # 5.14) and Neshota (Disk # 5.15). Look them over and if you agree with the author's assessment, take this opportunity to add to your font collection.

### *Apple System Software*

Apple Computer has released two new system disks that may be of interest to some of our members. The disks are LaserWriter Ver. 6.0 and 32-Bit QuickDraw. LaserWriter Ver. 6.0 supports color PostScript printers. It also supports halftone printing of color images and halftone printing of gray scale images to standard (monochrome) LaserWriters or LaserWriter compliant printers. The 32-Bit QuickDraw breaks the 256-color barrier for members who can afford Mac II and SE/30 systems with 16 or 24-bit video cards and color monitors. It also provides access to more than 256 colors to users with 8-bit video cards and better support for gray scale image processing.

### *Help Wanted*

A number of Disketeria volunteers test programs and develop the program notes for our disks; Dave Condit, Rick Chapman, William Jones and Chuck Sicard are the mainstays of this effort and others have supported this effort as well. However, the backlog of candidate programs for our library is expanding faster than our ability to test, annotate and assemble them. We need additional volunteers to help in this process. The skills required include enough writing ability to describe the function of the program in a few sentences, a general knowledge of Macintosh operations and an ability to assess a program's worth to our members. If you have these skills and can devote 20 to 30 hours per month to annotation and testing, call me at (301) 948-9646.

### *Donations Still Needed*

Most of the programs in our Mac Disketeria are archived on five inch 20 Megabyte Bernoulli cartridges or on 45 Megabyte Syquest cartridges. This includes material already issued as well as downloads waiting to be tested, annotated and assembled onto disks. 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 that they would be willing to donate, I (and the club) would be eternally grateful. You may leave them at the office to 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 others. Thanks.

### *About Shareware Requests*

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

## Disk #5.10 — IW 10

### ImageWriter Fonts

view_fonts_paint_f: This folder includes edited screen shot samples (in MacPaint format) of each font on this disk and the **ViewPaint 1.7** application which may be used to view the MacPaint files.

**London (LQ):** A decorative Gothic style font in 18, 24, 36, 48, 54, 60, 72 and 108 point sizes optimized for the ImageWriter LQ and LaserWriter SC.

MacInHebrew2.1_f: By Joseph Weinstein. **MacInHebrew2.1-Fonts, MacInHebrew2.1-DA** and **MacInHebrew2.1-Instr** permit you to generate Hebrew text with true right to left character entry and display on your Mac. ***Donation of $25 to MIT Hillel Foundation requested.***

**Chicago w Hebrew Block:** The standard Apple font with matching Hebrew Block style in 12 point size.

**Geneva w Hebrew Stick:** The standard Apple sans-serif English font with matching Hebrew Stick in 9,12, 18 and 24 point sizes.

**Hebrew Cursive:** A sans-serif English font and a cursive Hebrew font in 24 point size.

**Monoco w Hebrew Typewriter:** The standard Apple monospaced sans-serif font with matching Hebrew in 9 point size.

**New York w Hebrew Block:** The standard Apple serif font with matching Hebrew Block font in 9, 12, 18 and 24 point sizes.

**Rehovot:** A fixed stroke weight style Hebrew font in 10, 12, 20 and 24 point sizes.

**Siloam:** A cursive style Hebrew font in 10 point size.

**Troyes:** A variable stroke weight style Hebrew font in 10, 12, 20 and 24 point sizes.

Madison_f: By Bradley Poulson.

**Madison** is an angular san-serif "all caps" font in 9, 10, 12, 14, 18, 20, 24, 28, 36 and 48 point sizes. **Madison.documentation** describes the font and its use. ***Shareware – $10.***

**Mammoth•smug:** By Philip Russell. A series of pictures of various items in 18 point size.

**Manhattan:** A serif font in 12 and 24 point sizes and has additional characters for documenting Macintosh keyboard operations if you are writing documentation.

# Disk #5.11 — IW 11

## ImageWriter Fonts

.view fonts paint f: This folder includes edited screen shot samples (in MacPaint format) of each font on this disk and the **ViewPaint 1.7** application which may be used to view the MacPaint files.

**Math•smug:** A mixed style font in 12 and 24 points sizes that may be useful for representing mathematical operations such as vectors and sets.

**Memphis:** An old west styled decorative font in 24 point size.

**Micro•smug:** An all capital letter sans-serif font in 7 point size.

**Mike:** A distinctive (but not very distinguished) script style font in 24 point size.

Milan f: **Milan Font.** A decorative font in the style of illuminated letters in 48 point size. This Milan is completely unlike the other of the same name. **Read me-Page 1(PAINT)** and **Read me-Page 2 (PAINT)** are the documentation.

**Milan•smug:** By D. Lowing. A rounded sans-serif font in 12 and 24 point sizes.

**MiscPic•smug:** A series of pictures of various items in 24 point size.

Mishu f: By Maynard Chen and Zane Pan. **Suzhou Fonts (0-4):** A Chinese font in 24 point size. **MISHU Demo (DA), MISHU DemoGuide** and **ReadMe** provide the "engine" and documentation for this demo Chinese language font. The DA permits you to construct Chinese words and paste them into MacWrite. The demo copy is fully functional except that it does not contain any characters past "gan". ***Demoware – $89 ($69 for BCS members).***

**Monaco:** An extension of the Apple sans-serif monospaced font in 18 point size.

Monaco f: By Ken Kikuchi. **Monaco-18:** An extension of the Apple sans-serif monospaced font in 18 point size. **Monaco-18.doc (MW)** is the brief documentation.

**Monogram•smug:** By Doug Miles. An elegant script style font in 24 point size suitable for monograms.

**Montecito•smug:** A decorative style font in 12 point size.

**More Computer (Armonk) •smug:** A decorative font in the style of a machine readable characters in 12 and 24 point sizes.

**Mos Eisley:** A decorative font also in the style of computer (OCR) readable characters in 12 and 24 point sizes.

**Moskva•smug:** A sans-serif Russian alphabet in 9, 10, 12, 14, 18, 20 and 24 point sizes.

**Mozart•smug:** By Dave Carlisle. Music staffs and notes as a font in 24 point size.

**Music•smug:** Music staffs and notes as a font in 18 point size (the fonts listed as 9, 10, 13 and 18 point sizes are not different sizes but different notes).

**Navigator:** A monospaced font in 9 point size.

**NBC:** A specialty font consisting only of the NBC network logo letters and stylized peacock in 9, 10, 12, 14, 18, 24, 36 and 48 point sizes.

**New Dali:** A decorative sans-serif font in 10, 12, 20, 24 and 40 point sizes.

**New Hiragana:** By Oi. A 24 point size revised version of the Hiragana font on Mac Disk 5.09.

# Disk #5.12 — IW 12

## ImageWriter Fonts

.view fonts paint f: This folder includes edited screen shot samples (in MacPaint format) of each font on this disk and the **ViewPaint 1.7** application which may be used to view the MacPaint files.

**New Ultra•smug:** An angular sans-serif font in 12, 14, 18, 24 and 36 point sizes.

**New York Italic•smug:** An italicized version of the Apple New York font in 18 point size.

**Old English•smug:** A decorative font in old English style in 18 point size.

**Omnibus•smug:** A sans-serif font in 9, 10, 12, 18 and 24 point sizes.

**Oregonclose•smug:** A sans-serif font with somewhat of a calligraphic look in 9, 10, 12, 18 and 24 point sizes.

**Ornamental Arabic•smug:** An Arabic font in what appears to be 18 point size.

Ottawa f: By K. W. Vollman. **Ottawa:** A high quality serif font in 9, 10, 12, 18, 20 and 24 point sizes. **Introduction** and **Keyboard** describe the font and its use. This is a candidate for one of the super fonts.

**Ouray:** A decorative font with an old west look in 12 and 24 point sizes.

Palatini f: By Len Flier. **Palatini:** A serif font in 10, 12, 14, 18 and 24 point sizes. **Palatini docs 3/88** describes the derivation of this font from the LaserWriter font Palatino and notes that the quality of 12 point is as good as the Beverly Hills or Palencia "super fonts".

**Palo Alto•smug:** Another decorative font that looks like machine (computer or OCR) readable text in 9, 12, 18, 24 and 36 point sizes.

**Park Avenue•smug:** A script style font in 18 point size.

**Parker•smug:** An icon font in 24 point size.

**Pattti•smug:** A serif font in 18 point size.

Playbill f: By Ed Warren. **Playbill:** A decorative old west styled font in 62 and 124 point sizes. This font is different from but similar to the **Playbill•smug** font following. **Playbill Documentation** describes the font and its use.

**Playbill•smug:** A decorative font in 12, 18 and 24 point sizes.

Positions f: By Dennis Dunkerly. **Positions:** A font of chess pieces in 24 point size. **PositionsNotes** describes the font. ***$10 for application tailored for use with Positions.***

**Prague•smug:** A sans-serif foreign font with many diacritical characters in 10, 12, 20 and 24 point sizes.
**Premier•smug:** A decorative font with a modern look in 24 point size.
**ProFont™:** By Andrew Welch. This application installs a 9 point size sans-serif monospaced font in your system file. The font is designed for extra visibility for programmers and others who must readily distinguish between 0 (zero) and O (ohs), 1 (ones) and l (letter el), etc. ***Shareware – $8.***
Proxy f: By K. W. Vollman. **Proxy:** A serif font in 10, 12, 20 and 24 point sizes. **About Proxy Font** describes the font as having similar spacing on the ImageWriter as Times font on the LaserWriter. Thus the name and its use for "proof" printing material on the IW that will be "final" printed on the LW.
**Rangers•smug:** A decorative font with a rugged look in 18 point size.
**Relief•smug:** A decorative font with a shaded (relief) appearance in 18, 24 and 36 point sizes.
**Robust•smug:** By Alexander Benenson. A decorative font with a heavy look in 24 point size.
**Round•smug:** A decorative font in 12 point size.
**Russell Sq•smug:** A sans-serif font in 14, 18, 24 and 36 point sizes.

# Disk #5.13 — IW 13

## ImageWriter Fonts

.view fonts paint f: This folder includes edited screen shot samples (in MacPaint format) of each font on this disk and the **ViewPaint 1.7** application which may be used to view the MacPaint files.

**Santiago•smug:** A script like font in 12 point size.
**Seattle•smug:** A sans-serif font in 10, 12, 18 and 20 point sizes.
**Silicon valley Plus•smug:** Another decorative font designed to look like machine readable text in 12 point size.
**Small•smug:** A sans-serif font in 9, 10, 18 and 20 point sizes.
South Bend f: **South Bend Font:** A decorative, outlined block font in 18 and 36 point sizes. **Read me-Page 1** and **Read me-Page 2** are the documentation primarily of the keyboard layout.
**Square Serif•smug:** A decorative font in old west style in 24 point size.
**Steel Brush•smug:** A decorative font with a Gothic look in 12, 24, 36 and 72 point sizes.
**Stencil:** A decorative font with a stencil-like appearance in 12 and 24 point sizes.
**Stiletto•smug:** A decorative font with somewhat a Gothic look in 14 and 28 point sizes.
**Stuart•smug:** A serif font with the appearance of being lettered on lined tablet paper in 12 and 24 point sizes.
**Sudo Avant•smug:** A sans-serif font in 12 point size.
**Symbols•smug:** By Michael C. Mace. A collection of iconic symbols in 36 point size.
**Taliesin:** An icon font in 18 point size.
**Tamil•smug:** A foreign font in 12 and 24 point sizes.
**Tank•smug:** A font mostly of tanks and planes in 9, 12, 15, 18, 21, 24 and 30 point sizes. The utility of this font is left as an exercise for the user.
**Tech•smug:** A sans-serif font with additional mathematical symbols in 9, 10, 12, 14, 18 20, and 24 point sizes.
**tiajuana•smug:** A decorative font in 10 and 12 point sizes.
**tile 2•smug:** A decorative font in 18 and 24 point sizes.
**Tinytown:** A small but legible sans-serif font in 8 and 9 point sizes.
**Tiny•smug:** A very small but legible sans-serif font in 6 point size.
**Titling•smug:** **Philo Roman** and **Titling** are two decorative fonts with a speckled look in 24 point size.
**Tombstone:** A decorative font with an old west look in 24 point size.
**Toronto•smug:** A serif font in 9, 12, 14, 18 and 24 point sizes.
**Toyland 1 & 2 (pix)•smug:** By M & M Bryant. Two different sets of icons in 36 point size.
**Trekkies:** By Bill Sammons. This decorative font has a Star Trek look in 18 point size.

# Disk #5.14 — IW 14

## ImageWriter Fonts

.view fonts paint f: This folder includes edited screen shot samples (in MacPaint format) of each font on this disk and the **ViewPaint 1.7** application which may be used to view the MacPaint files.

**Troy•smug:** A decorative font in 12 point size.
**typewriter•smug:** A serif font with a typewriter look in 9, 12, 14, 18 and 24 point sizes.
**Ultra:** A sans-serif font in 12, 14 and 24 point sizes.
**Uncial:** A Celtic font in 12 point size.
**Uncial•smug:** A Celtic font in 18 point size.
**Vancouver:** A serif font in 9, 12, 14, 18 and 24 point sizes.
**Venice•smug:** A heavy decorative font in 12, 14, 24 and 28 point sizes.
**Video•smug:** A decorative font with raster-like characters in 48 point size.
Wall Street f: By Andrew Welch. **Wall Street:** A sans-serif font in 9, 10, 12, 14, 18, 20, 24, 28 and 36 point sizes. Manual is the documentation. ***Shareware - $15 registration fee for any or all of the Apollo fonts.***
**Walla Tiny•smug:** A small but legible font.
Wartburg f: By Brian H. Powell. **Wartburg:** A decorative German script style font in 18 and 36 point size. **Wartburg.doc** describes its derivation.
**White Shadow•smug:** A decorative shadowed font in 48 point size.
**Willowdale:** A serif font in 9, 12, 14, 18 and 24 point sizes.
**Yerkes•smug:** A sans-serif font with additional mathematical symbols in 12, 18 and 24 point sizes.
York f: By J. W. Leedom. **York Master:** A decorative font with a formal calligraphic look in 9, 10, 12, 14, 18, 20, 24, 28, 36, 40, 48, and 72 point sizes. **York Caps** provides upper case letters only in sizes from 18 to 72 point. **York Docs Font Map, York Docs.McWrt** and **York Text intro** provide comprehensive documentation of the font. York a candidate for "super font" status.

*Shareware – $10.*

**Zodiac•smug:** By R. Ettore. The signs of the Zodiac in 18 point size.

DISKETERIA

## Disk #5.15 — IW 15

### ImageWriter Fonts

.view fonts paint *f*: This folder includes edited screen shot samples (in MacPaint format) of each font on this disk and the **ViewPaint 1.7** application which may be used to view the MacPaint files.

Neshota *f*: By Bradley Poulson. **Neshota 9** is a sans-serif font in 9, 10, 12, 14, 16, 18, 20, 24, 27, 28, 30, 32, 36, 40, 42, 48, 54, 56, 60, 64 and 72 point sizes. **Neshota.documentation, V9** describes this font as sometimes acclaimed as "the best ever font for the Apple ImageWriter, bar none" and it may qualify as one of the "super fonts' for the ImageWriter. *Shareware – $10.*

Disk #SS.LW 6.0

LaserWriter 6.0

LaserWriter 6.0: **Laser Prep, LaserWriter and PrintMonitor.**

**Read Me and TeachText**

Disk #SS.32-Bit QDraw

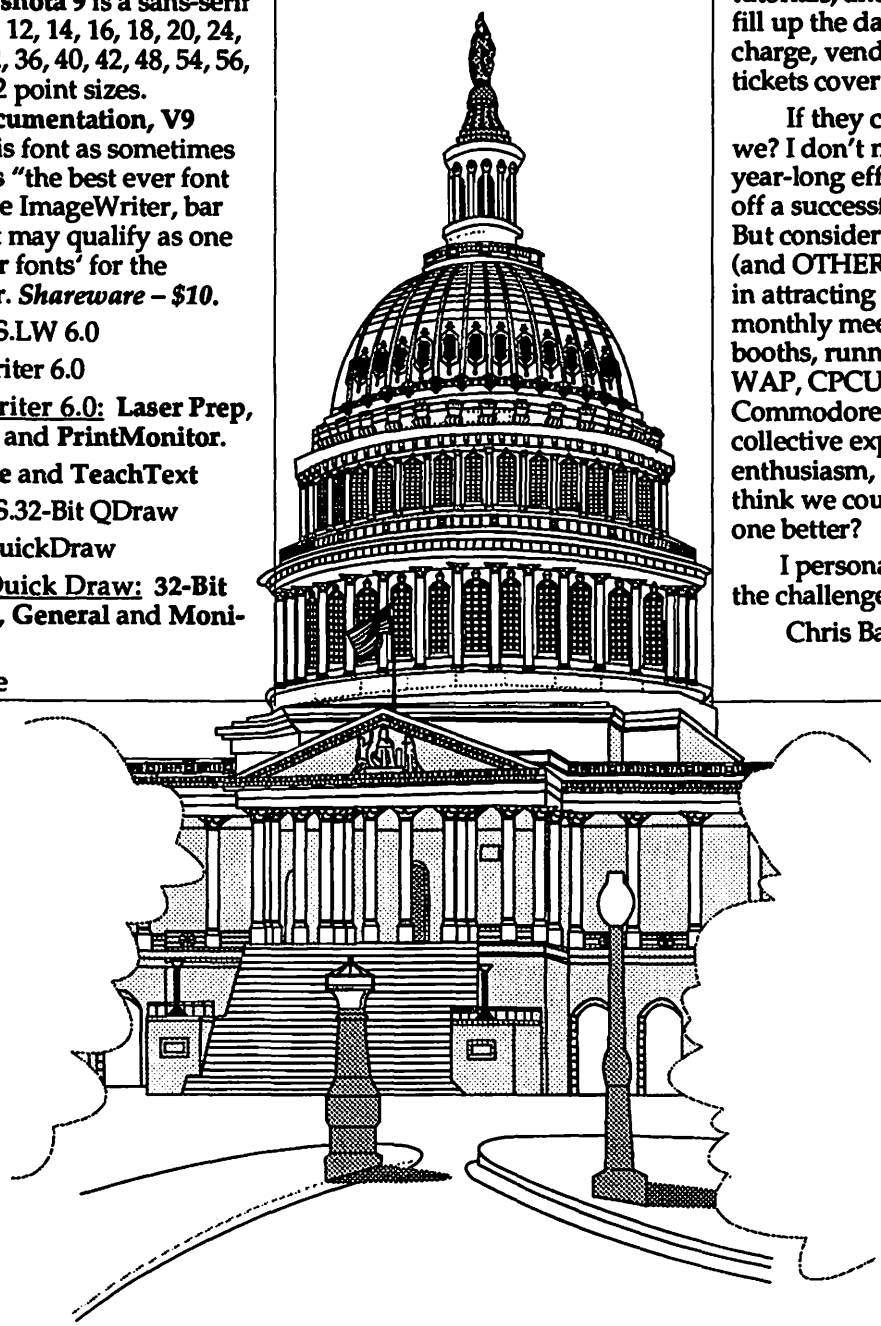
32-Bit QuickDraw

32-Bit Quick Draw: **32-Bit QuickDraw, General and Monitors.**

Read Me

*U.S. CAPITOL*

*(From Federal Clip Art, reviewed on page 34)*



## *Letter to the Editor*

*(continued from page 74)*

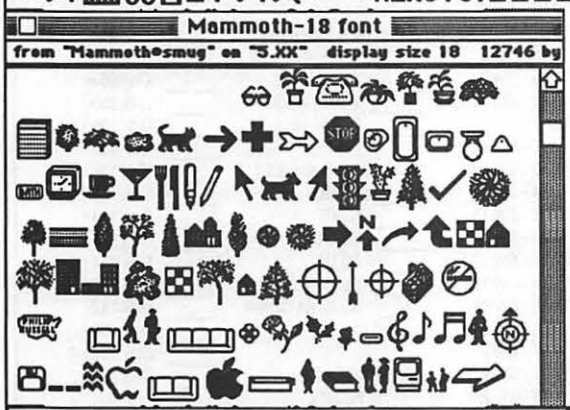
Why isn't there ONE show for the "user"? To this day, the New York MacUsers Group puts on an annual computer fair in the heart of Manhattan. It too has a business component, but also addresses the needs and interests of the individual attendees. A keynote speech, two or three panel discussions, hands-on tutorials, and a large vendor room fill up the day. A $7 admission charge, vendor fees and raffle tickets cover expenses.

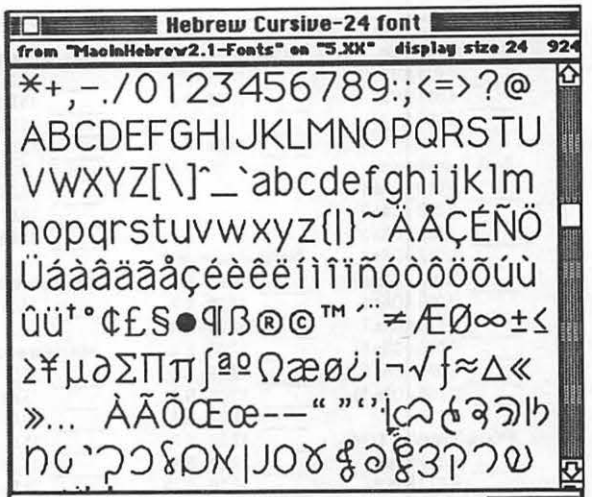
If they can do it why can't we? I don't mean to trivialize the year-long effort required to pull off a successful effort of this sort. But consider the experience we (and OTHER User Groups) have in attracting presenters to monthly meetings, staffing booths, running raffles, etc. If WAP, CPCUG, the Amiga people, Commodore, Atari.....pooled their collective experience, ideas and enthusiasm, is there any reason to think we couldn't do NYMUG one better?

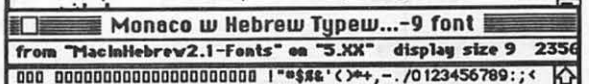
I personally think we're up to the challenge.

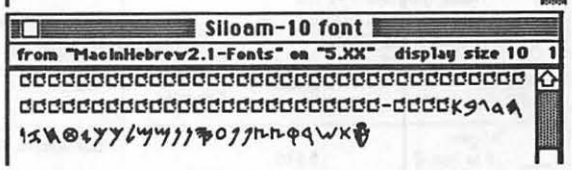
Chris Bastian

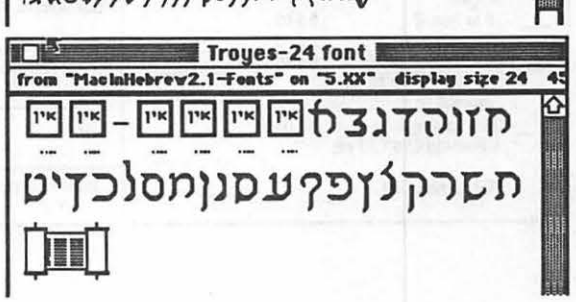
Mac Disk # 5.10 Fonts (60% Reduction)







**Anti-Virus Utilities**
- ____ 1.01 - AV 1
- ____ 1.02 - AV 2
- ____ 1.03 - AV 3

**Desk Accessories**
- ____ 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)**
- ____ 4.01 - FKs 1 •
- ____ 4.02 - FKs 2 •

**ImageWriter Fonts**
- ____ 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
- ____ 5.11 - IW 0
- ____ 5.12 - IW 1
- ____ 5.13 - IW 2
- ____ 5.14 - IW 3
- ____ 5.15 - IW 4

**LaserWriter Fonts**
- ____ 6.01 - LW 1
- ____ 6.02 - LW 2
- ____ 6.03 - LW 3

**Paintings (MacPaint)**
- ____ 11.01 - P 1
- ____ 11.02 - P 2
- ____ 11.03 - P 3
- ____ 11.04 - P 4
- ____ 11.05 - P 5

**Digitized Sounds**
- ____ 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**
- ____ 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**
- ____ 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**
- ____ 16.01B - SU 1
- ____ 16.02B - SU 2
- ____ 16.03B - SU 3
- ____ 16.04B - SU 4
- ____ 16.05B - SU 5
- ____ 16.06B - SU 6

**Word Processing Utils**
- ____ 17.01 - WP 1
- ____ 17.02 - WP 2
- ____ 17.03 - WP 3

**Adobe Screen Fonts**
- ____ 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**
- ____ 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

**HC Stackware (contd.)**
- ____ 19.25 - SW 25
- ____ 19.26 - SW 26
- ____ 19.27 - SW 27
- ____ 19.28 - SW 28
- ____ 19.29 - SW 29

**Mac II Series**
- ____ 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**
- ____ 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

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.

**Disk Series, Disk Sets**

| | | | |
|---|---|---|---|
| ____ Anti-Virus Utilities | 3 disk set - $ 10.50 | ____ Miscellaneous Utilities | 13 disk set - $ 45.50 |
| ____ Desk Accessories | 10 disk set - $ 35.00 | ____ System Utilities | 6 disk set - $ 21.00 |
| ____ FKeys (Function Keys) | 2 disk set - $ 7.00 | ____ Word Processing Utils | 3 disk set - $ 10.50 |
| ____ ImageWriter Fonts | 15 disk set - $ 52.50, last 9 - $ 31.50 | ____ Adobe Screen Fonts | 14 disk set - $ 49.00 |
| ____ LaserWriter Fonts | 3 disk set - $ 10.50 | ____ HyperCard Stackware | 29 disk set - $ 101.50 |
| ____ Paintings (MacPaint) | 5 disk set - $ 17.50 | ____ Mac II Series | 14 disk set - $ 49.00 |
| ____ Sounds | 31 disk set - $ 108.50; last 7- $ 24.50 | ____ HyperCard Externals | 4 disk set - $ 14.00 |
| ____ Telecommunications | 8 disk set - $ 28.00 | | |

**Mail this form with your check to:**
**Disketeria**
**Washington Apple Pi, Ltd.**
**7910 Woodmont Ave., Ste. 910**
**Bethesda, MD 20814**

Are you a member of Washington Apple Pi, Ltd? Yes/No ___. If Yes, Membership Number _____.
All payments must be in U.S. funds drawn against U.S. banking institutions.
Disk Prices are $ 5.00 for members, $ 8.00 for non-members; deduct $ 1.00 per disk for 5 or more.
Disk Prices for sets are as marked for members, add $ 3.00 per disk for non-members

| Number of Disks | Member Price /Disk | Extended |
|---|---|---|
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| ____ 4 or less @ | $ 5.00 = | _____ |
| ____ 5 or more @ | $ 4.00 = | _____ |
| ____ Sets (each disk) @ | $ 3.50 = | _____ |
| + Postage - $ 1.00 /disk, max $ 5.00 | | _____ |
| ____ Disk Catalogs | $ 3.00 = | _____ |
| + Postage @ $ 1.50 ea. | | _____ |
| **TOTAL AMOUNT** | | _____ |

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## Letters to the Editor—Part II

Way back on Page 74, we sort of...lied. We said that would be the end of the string of continuations of the editorial page. From page 7, to page 74 to page 88 seemed long enough. As indeed it is.

But circumstances lead us to continue a little longer, not as part of the original string, but as a new thread of its own. (With some fibres (we are in an English mood today) common to each.)

The first of these has to do with the concept of letters to the Editor in general. We like the idea very much, and hope that you will and that you will seize upon the occasion to let us know about things that we might not otherwise have heard about.

Which brings us to the next reason for continuing this thread. Earlier we whined a lot about the quality of the Quantum 80Meg disk drives—note the plural, there—that we have been provided with by Apple. And the excellent, and consistent, service provided by MidAtlantic Computerland (a.k.a. Clinton) at Tysons Corner. They did their best to help, as did some of the people at Apple Federal HQ in Reston. Their best, unfortunately, was not good enough—responding to urgent requests, Apple did indeed send a replacement for the 80Megabyte drive for the Macintosh IIcx, and it did arrive two days later. But what arrived was a 5.25-inch drive, which in a IIcx is useless. The reason that this Journal made its deadline was the existence of a PLI 40Megabyte removable drive, previously used as a backup system.

We are not here to engage in an orgy of Apple-bashing, or Apple-polishing, as the case may be. If they deserve credit, we are happy to extend it. Same if they deserve lumps. But what seems highly relevant is the quality of equipment and service that they provide. Many of us are hobbyists, for whom irregularities in their equipment is merely an inconvenience, not a disaster. And many of us depend upon our computers for our livelihood, and we cannot afford constant repetitions of inferior quality control (if that is the case) or service.

IBM understands this problem well. Their personal computers have been criticized as rarely reaching the state of the art, when new, and the speed of their meeting new standards and capabilities has been described as glacial. But their service and their responsiveness to their customer base is outstanding, or so we have been informed.

There's probably a moral here, for those who are disposed to see these issues this way. And a lesson for Apple.

Maybe we are reading this whole situation the wrong way, and if so, we hope that you will let us know about it. But that's what letters are for, no?


# APPLE Discounts from VF Associates

### MACINTOSH CORNER

- DS/DD DISKS, BOX OF 10 ..... $14.00
- DS/DD DISKS, CASE OF 50 ..... $65.00
- HIGH DENSITY DISKS, BOX OF 10 ..... $36.00 •
- HIGH DENSITY DISKS, PAK OF 25 ..... $85.00 •
- 10 DISK STORAGE BOX ..... $2.50
- 36 DISK STORAGE BOX ..... $9.00
- MODEM CABLE ..... $19.00

### 5-1/4 INCH DISKETTES & STORAGE

- SS/DD, BOX OF 10 ..... $5.00
- SS/DD, PAK OF 25 ..... $11.00
- SS/DD, CASE OF 100 ..... $39.00
- SS/DD, CARTON OF 500 ..... $175.00
- 2-NOTCH/DS/DD, BOX OF 10 ..... $6.00
- 2-NOTCH/DS/DD, PAK OF 25 ..... $13.00
- 2-NOTCH/DS/DD, CASE OF 100 ..... $45.00
- 10 DISKETTE CASES (each) ..... $2.25
  5 for $10.00

SPECIFY COLOR CHOICES: (BEIGE, BLACK, BLUE, GREEN, GREY, RED, YELLOW)

- 75 DISK FLIP TOP CASE ..... $11.00
- 160 DISK LOCKING CASE ..... $29.00

### PRINTERS

- CITIZEN 120-D ..... $189.00
- STAR NX-1000 ..... $199.00
- PANASONIC 1080i/2 ..... $199.00
- PANASONIC 1091i/2 ..... $219.00 •
- NEC P2200, LQ ..... $395.00
- STAR NB-2410 ..... $495.00
- STAR NB-2415 ..... $625.00
- NEC P5200 ..... $645.00
- NEC P5300 ..... $845.00
- LASERJET PLUS COMPATIBLE,1.5 MB ..... $1825.00

### PRINTER ACCESSORIES

- 1000 SHEETS OF PAPER ..... $19.00
- 2500 SHEETS OF PAPER ..... $29.00
- PANASONIC/CITIZEN/EPSON RIBBONS ..... $7.00
- GRAPHICS PARALLEL INTERFACE CARD ..... $59.00
- PRINTER STAND ..... $14.00
- PRINTER CART ..... $59.00

- SWITCH BOX, 2 WAY ..... $25.00
- SWITCH BOX, 4 WAY ..... $39.00
- P-LINK 75 FOOT w/32K ..... $149.00

### DISK DRIVES

- 5-1/4" FLOPPY DRIVE ..... $95.00

### MODEMS

- 300/1200 EXT ..... $89.00
- 300/1200/2400 EXT ..... $129.00

### MONITORS

- MED RES. COMPOSITE ..... $89.00
- HI RES COMPOSITE/GREEN ..... $129.00
- HI RES COMPOSITE/AMBER ..... $139.00
- COMPOSITE COLOR ..... $239.00
- RGB COLOR ..... $269.00
- MONITOR VLF FILTER ..... $59.00
- VGA MONITOR CABLE ..... $24.00

### CHIPS

- 64K, 150 NS ..... $2.95
- 256K, 150 NS ..... $10.00

### GENERAL ITEMS

- SURGE PROTECTOR ..... $9.00
- 6-OUTLETS WITH SURGE PROTECT ..... $19.00
- MINI POWER CENTER ..... $58.00
- CABLE GENDER CHANGER ..... $9.00
- CABLES (S OR P) ..... $19.00
- MOBILE COMPUTER STAND ..... $139.00

### COMPATIBLE COMPUTERS

- LASER 128, APPLE COMPATIBLE ..... $395.00
- LASER 128EX, APPLE COMPATIBLE ..... $475.00
- VF-PC, IBM COMPATIBLE ..... $536.00
- VF-AT, IBM COMPATIBLE ..... $964.00
- VF-386, IBM COMPATIBLE ..... $3164.00

### GAME I/O DEVICES

- STANDARD JOYSTICK ..... $29.00
- CH MACH III JOYSTICK ..... $39.00
- MOUSE ..... $75.00

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

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# WAP Journal Tutorial Input

by Lynn R. Trusal

Apple IIgs The following three WAP tutorials are offered to Apple IIgs owners on the first three Tuesday evenings of the month for 2 to 3 hrs., beginning at 7:15 PM, at the office. Arrive by 7:00 PM to set up your computer. We are currently alternating months between the Apple IIe, c and the the IIgs. These tutorials are designed for "beginners," not experienced users, and you may sign up for one or more of these tutorials. The fee for each session is $15 for WAP members and $20 for non-members. You are urged to bring an Apple, monitor and disk drive. Please note that WAP does not have equipment for you to use; if you do not bring your own, you will have to look over someone's shoulder. Tutorials with only one student will be cancelled.

Aug 5 (Tuesday) Welcome To the World of Apple
Aug 12 (Tuesday) How To Use Your Apple Software
Aug 19 (Tuesday) Popular Applications

Macintosh: Tutorials are for "beginners," not experienced users. They are given regularly on the 2nd, 3rd and 4th Monday evening of each month at the office, from 7:15 to 10:15 PM. The fee for each session is $15 for WAP members and $20 for non-members. You may sign up for 1, 2 or all 3 sessions. You are strongly urged to bring your Macintosh, external disk drive, startup disk, and several blank disks. WAP does not have equipment for you to use. (Note to Mac II owners: You are not expected to bring a computer, but we do not have a Mac II for you to use). These tutorials fill up quickly so call the office to verify space before mailing your registration.

Aug 11 - (Monday) Introduction to Macintosh. Prerequisite: Guided Tour
Aug 18 - (Monday) Intermediate Mac Skills. Prerequisite: Familiarity with Desktop
Aug 25 - (Monday) Personalizing your Mac for Productivity: Prerequisite: 1st two sessions.

## Macintosh Tutorials in Northern Virginia

Macintosh tutorials, taught by Russ Bradley, are at the Fairlington United Methodist Church, Rt. 7 and I-395 (King Street Exit), in Alexandria, VA. They will be at *three month intervals* during the months of March, June, September and November, 1989. This year they will be on the 2nd, 3rd and 4th FRIDAY NIGHT each of these months. The fee for each session is $15 for WAP members and $20 for non-members. You may sign up for 1, 2 or all 3 sessions. Call the WAP office for specific directions or Russ Bradley at 703-768-2529. The tutorials will be from 7:15 to 10:15 PM.

Sept 8 - (Friday) Introduction to Macintosh. Prerequisite: Guided Tour
Sept 15 - (Friday) Intermediate Mac Skills. Prerequisite: Familiarity with Desktop
Sept 22 - (Friday) Personalizing your Mac for Productivity: Prerequisite: 1st two sessions.

### LOOKING FOR INSTRUCTORS

We are looking for several new instructors to teach Macintosh tutorials. New instructors will be required to sit in on one tutorial for each of the three sessions taught prior to teaching. Acceptance as an instructor on a regular basis will be determined by critiques filled out by the students in classes taught. Contact The WAP office at 301-845-2651 before 10:30 PM if you are interested or require additional details.

## *Classified Ads*

FOR SALE

1983 Apple II disk drive; Apple C/PM software (WORDSTAR, DBASE II, QUICKCODE); Other Software - all original- at good prices! Call Tom at (202) 483-4819

FOR SALE

Imagewriter II, with cable for SE, original manual. Excellent condition, one year old, $350. (301) 869-5339

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For Mac: My Starfleet I and Felony! for your Falcon 2.0. Call Randy Ferrance, Manassas 703/330-0333

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Macintosh software, original disks and manuals. Professional: WordPerfect, Filemaker IV ($70 each), Superpaint ($30). MIscellaneous ($10 each): Dark Castle, Math Blaster, Once upon a Time, ...Carmen San Diego, Mavis Beacon Typing, World Builder, Taxview Planner, MacBible book & disk. Also PC-type Tangent keyboard $35. Call Mike at 768-1187.

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Apple //e with mSci 80/64 E card; Amdek Color I display; Taxan 12" amber display; 2 - mSci disk drives; Promethesis Promodem 1200A; lots of Software, Computer Manuals. $850.00 or best offer. Will consider selling piecemeal. Call Joel after 6:00 PM, 703-860-4485.

FOR SALE

MAC 512KE (800K) & external drive (400K) keybd, mouse. $880. Teri (703) 941-3148

HELP WANTED

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Hard disk for MacPlus 20Mb+. ImageWriter I or II for not to esceed $250. Daughter off to college... Frank (703) 620-8886.

# WAPACROSTIC
## by Dana J. Schwartz

Using the Definitions, fill in Words. Transfer each letter into the corresponding square of the grid. The resulting quotation will read across. The first letters of the Words column spell out the Author's name and the Title of the work, reading down.

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 I | 2 F | 3 R | 4 B | | 5 B | 6 F | 7 X | | 8 K | 9 D | 10 F | 11 H | | 12 U | 13 Z | 14 N | 15 T | |
| | 16 W | 17 F | | 18 Q | | 19 D | 20 R | 21 F | 22 J | 23 X | 24 N | 25 T | 26 B | | 27 M | 28 a | 29 W | 30 U | | 31 J | 32 Z |
| 33 M | | 34 U | 35 a | 36 L | 37 G | 38 K | | 39 L | 40 X | 41 P | | 42 F | 43 Y | 44 I | 45 K | 46 R | 47 X | 48 U | 49 S | 50 P | 51 L |
| | 52 Q | 53 a | 54 A | 55 T | 56 S | 57 M | 58 X | 59 b | 60 U | 61 L | | 62 R | 63 O | 64 U | 65 S | | 66 A | 67 P | 68 U | | 69 Y |
| 70 B | 71 J | 72 b | 73 G | 74 O | 75 M | | 76 T | 77 K | 78 I | | 79 P | 80 W | 81 A | 82 S | | 83 Y | 84 W | 85 X | | 86 R | 87 V |
| 88 L | 89 P | | 90 V | 91 E | 92 C | 93 I | 94 Z | 95 D | 96 X | 97 P | | 98 V | 99 C | | 100J | 101R | 102C | | 103T | 104A | 105I |
| 106N | 107R | 108O | 109L | | 110M | 111E | 112S | | 113b | 114A | 115a | 116S | 117Q | 118R | 119U | 120H | 121W | 122G | | 123N | 124P |
| | 125I | 126A | 127E | 128a | | 129a | 130b | 131B | | 132C | 133U | | 134R | 135T | 136Q | 137F | | 138C | 139B | 140A | |
| 141B | 142G | 143C | 144H | | 145G | 146Q | | 147M | 148U | 149X | | 150I | 151J | 152V | 153O | 154U | 155X | 156K | 157Z | 158R | 159M |
| 160N | 161Y | | 162N | 163b | | 164U | 165R | 166L | | 167Q | 168K | 169M | 170a | | 171X | 172M | 173L | 174W | 175J | 176V | 177R |
| | 178E | 179O | | 180b | 181Y | 182D | | 183Z | 184L | | 185K | 186D | 187Z | 188Y | | 189G | 190O | 191V | 192D | | |

**Definitions** **Words**

A. Emitted
81 114 66 126 104 54 140

B. Depressants (sl)
131 70 5 139 4 26 141

C. Have an effect
132 143 102 138 92 99

D. After that time
95 9 192 182 19 186

E. Kitchen tool
178 127 91 111

F. Welsh rabbit
42 6 21 10 137 2 17

G. Lower cow parts
189 142 145 73 37 122

H. Age
144 120 11

I. Shoestring
44 105 1 150 125 93 78

J. Confab, get-together, etc.
22 151 100 71 175 31

K. Total disaster (sl)
8 45 185 168 77 156 38

L. Without purpose
39 36 173 166 184 88 109 61 51

M. Opium, belladona, e.g.
57 110 75 159 172 147 169 27 33

N. Half price (sl)
24 123 162 14 160 106

O. Tangle
74 179 108 190 153 63

**Definitions** **Words**

P. Color retaining
41 97 124 67 79 50 89

Q. Cunning
18 117 167 146 52 136

R. Sleepwalker
158 20 86 62 101 3 134 107
165 177 118 46

S. Move off station
112 49 65 116 82 56

T. "Fifth __"
103 55 25 76 135 15

U. Confutable
48 64 133 34 60 119 68 148
164 30 12 154

V. Notorious
98 191 90 87 152 176

W. Deposit in the earth
16 121 84 29 174 80

X. Melting
96 47 155 23 85 7 171 149 40 58

Y. European capital
181 83 69 43 188 161

Z. Cecil's partner
183 157 32 94 13 187

a. Light repasts
28 35 53 115 129 128 170

b. Obliterate
113 59 163 130 180 72

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- ☐ Mac 800k
- ☐ 5.25" disk
- ☐ 3.5" disk

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- ☐ Mac SE
- ☐ Mac SE/30
- ☐ Mac laptop
- ☐ Other Mac _____
- ☐
- ☐ LISA
- ☐ Mac II
- ☐ Mac IIx
- ☐ Mac II cx
- ☐ Other Mac II _____
- ☐
- ☐
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