

\$2.95

# washington pple pi

The Journal of Washington Apple Pi, Ltd.

Volume 11, Number 12

December 1989



← **WAP Artists  
on review**

**16**

**Just another  
pretty (type)face?**

**18**



← **Culture 1.0:  
HyperMedia Flash!**

**26**

**Sim City:  
How it's done**

**38**

**Quicken:  
II Accounting**

**72**

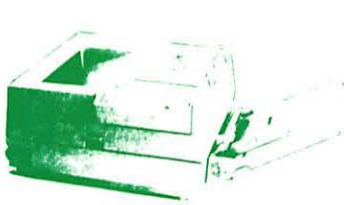
**And Much, Much More:**

President's Corner, 9 • WAP Hotline and Calendar, 47 • How to help techies help you, 33 • Adobe TypeManager explained, 20, 24 • WAPTCS chatter, 30 • Fastat (review), 35 • Macinations, 40 • Setting LaserWriter margins, 45 • MacDraw II (review), 51 • New developments for the Apple III, 55 • Apple III stocking stuffers, 57 • Modifications of "LIST," 60 • New Apple II Newsletter, 65 • AppleWorks 3.0 & Publish.It! Compatibility, 68 • The Jabberwock Lanced, 68 • MathShop (review), 70 • Do you need a Mac at home, 71 • Cheap Computing, 75 • I Vulcanized my GS, 76 • HyperStudio: What Is It?, 81 • The Legend of Blacksilver (review), 78 • Macintosh Disk Library specials, 82 • Macintosh typeface bitmaps of WAP disks, 85  
**and all the regular condiments...**



# Great Products, Great Prices.

We have taken the MacCorner concept one step further. Now you can enjoy the service and support that we are famous for, at prices like you have never seen before! Here is a mini-sampler of our great values. Come on in and Enjoy!



## Business Laser Printer by GCC: **\$3,095.**

Rated the best postscript printer under \$6,000 by both MacUser (9/89) and MacWorld (10/89). The BLP is our best selling mid-range solution for your network or individual printing needs. Come over to our showroom to see why we often consider the BLP a better solution than an NTX at half the price!



## RasterOps ColorBoard 264 (II/IIx/IIcx): **\$899.**

Rasterops introduces the only 24 bit board available for the Apple RGB, Sony 1302-4, and other third party color monitors. The 264 offers 640 x 480 resolution at 2, 4, 8, and a full 24 bits. SE/30 version available.



## ULTRADRIVE 80 by GCC: **\$899.**

GCC has introduced the most exciting series of hard drives in recent times. All include GCC's legendary security and partition software, spooling, backup, and Symantec Utilities! The UD 80 leads the pack in value!  
*Two Year Warranty.*



## 4th Dimension 2.0 by Acius: **\$539.**

The most powerful relational database package on the mac just got faster (as much as 100 times) and easier to program! Truly the relational database language for the mac, now with links to Oracle, and others.



## Radius Color Systems For prices: **\$CALL**

Radius brings us some of the most advanced color graphic solutions available. With a FULL two pages in view at all times this is the ideal system for CAD and DTP where it is not critical to have WYSIWYG



## TSI 68030 Mac +/SE Accelerator: **\$1069.**

The 16Mhz 68030 gives your mac plus or SE the full performance of an SE/30 at a fraction of the cost, and with full System 7 and Virtual™ compatibility! This Month get an extra meg. free w/purch of any TSI board. *1 Year Warranty.*



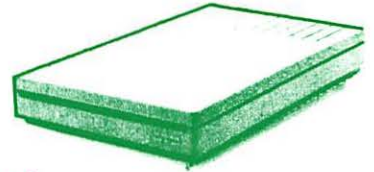
## WingZ: **\$258.**

The newest, most powerful spreadsheet on the Macintosh, with unmatched 3-d graphics, potent macros and a complete hypertext custom environment! Reads WKS files (Excel 1-2-3).



## Virtual by CNI: **\$239.**

Turn the hard drive in your Mac II, SE/30, or TSI Accelerated computer into an extension of RAM and watch multifinder and RAM intensive applications fly! (Requires PMMU on 020 based machines).



## InterFax Modem by Abaton: **\$299.**

The Mac press found the Abaton InterFax to be the best performer and the best value for the Macintosh. The InterFax includes background software (that works under both finder and multifinder). *1 Yr Warranty*



## 1 Megabyte SIMMS High speed: **\$137.**

MacCorner guarantees you the best prices on low profile high speed SIMMS in the Area! fully compatible with all Macs, accelerators, large screens, full height hard disks, and any internal expansion your Mac will ever require. *2 yr warranty*



## Adobe Type Manager by Adobe: **\$69.**

Adobe has developed a driver that allows your Mac's screen & quickdraw printer (image-writer, PLP, SC) to use adobe's postscript outlines, so all your fonts are always perfect, to the limit of the resolution of your output device!



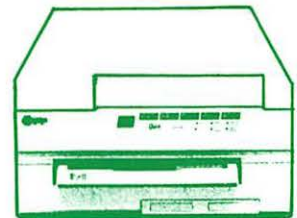
## 330 Meg. Maxtor Drive: **\$1578.**

Only a few left in stock! These are the last of a large delivery we took in early summer. The best deal in large capacity in the country, period. But there are only 7 left! Need we say more? *1 yr Manuf. Warranty*



## PLI 50 Turbo HD by PLI: **\$699.** PLI Turbo Floppy 1.44 by PLI: **\$399.**

If you are shopping for drives, PLI's 50 is the best value in midrange hard disks! And their Turbo Drive gives you all the formats in the Apple 1.44 drive, adds the famous PLI software set, and works with all Macs! *One year full warranty on both.*



## Qume CrystalPrint Publisher: **\$3,495.**

The Eddy award winning Crystal Print is the fastest PostScript printer in its class. The Crystal-Print delivers truer blacks and gray, and faster speed than the Laserwriter NTX and costs less than the LW NTI!  
*1 Year Manufacturer's Warranty*

SEPT.-OCTOB. WAP ONLY SPECIALS	
Sony DSDD...	\$15
Supra 2400 HC modem....	\$149
Rasterop Clearview II	\$1399
PLI infinity 40 turbo....	\$1099



(301) 948-1538

We ship worldwide • Overnight delivery available within the DC Area.  
MacCorner, 8653 Zetta Av. Gaithersburg Md, 20877

# Choose One.



## Get hundreds.



Now, when you choose an Apple® Macintosh® computer for your business, you'll get a lot more than you bargained for. Hundreds more.

Because with the purchase of a Macintosh qualifying system, between October 14 and December 31\*, Apple will give you from \$200 to \$300 cash allowance toward the purchase of selected Apple peripherals -- including printers, extra memory, scanners, modems, and more.

Once you've saved hundreds of dollars on your Macintosh system, you'll also save time learning how to use it. Because the Macintosh works like you do, with computer visuals similar to your actual work area. And because its wide range of powerful software all works alike. So when you learn one program, you've virtually learned them all.

### PLUS -- a 30% Discount Off List Price from Us on the Computer.\*\*

#### \*\*OUR **NEW** DISCOUNT POLICY FOR WASHINGTON APPLE PI MEMBERS

COMPUTERLAND MID-ATLANTIC offers Washington Apple Pi members a 25% DISCOUNT OFF THE LIST PRICE on all Apple-brand peripherals and AppleCare. For Apple computers, we offer a 30% DISCOUNT OFF THE LIST PRICE. Discount is available to persons who have been Pi members for at least 3 months. Discount cannot be applied retroactively. Pi members need to present their cards up-front. Discount cannot be used in combination with other promotions. Products on allocation from Apple are excluded from this offer. COMPUTERLAND MID-ATLANTIC reserves the right to change this policy at any time.

# ComputerLand<sup>®</sup> Mid-Atlantic

#### Eight Business and Service Centers

Washington, DC 1905 K Street, NW	(202)223-0900
Annapolis, MD 2049 West St.	(301)261-8181
Clinton, MD 6443 Old Alex. Ferry Rd.	(301)856-2500
Laurel, MD 9636 Ft. Meade Rd	(301)953-1110
Rockville, MD 12204 Rockville Pike	(301)881-2810
Alexandria, VA 277 S. Washington St.	(703)838-9700
Richmond, VA Lakepointe Shops, Innsbrook	(804)346-8827
Tysons Corner, VA 8032 Leesburg Pike	(703)442-3800

#### Corporate Specialists

Desktop Publishing Specialist	(703)838-9700
Service Contract Sales	(301)599-1596
Training Services	(301)953-1110
K-12 and Higher Education Sales	(301)599-9555



Owned and Operated by

**Clinton  
Computer**

\*Apple's "Cash Back" offer is valid from October 14, 1989 to December 31, 1989. All products may not be available at all participating authorized Apple resellers. Certain restrictions apply. Rebate offer is subject to strict compliance with the Terms and Conditions of Apple's Cash Back Offer. See us for details. Sale prices may not be combined with other promotions or discounts. Prices in this ad are good through the current month. Apple, the Apple logo, and Macintosh are registered trademarks of Apple Computer, Inc. Apple products are available only from authorized Apple dealers. They are not available by telephone or mail order.



# Table of Contents

Volume 11 .....December 1989.....Number 12

## Club News

Editorials .....	7
by Frank Potter/ New schedules and old problems	
President's Corner .....	9
by David Morganstein/ Club news	
Minutes .....	11
by Chris Bastian/ October and November BOD meetings	
WAP Hotline .....	47, 50
Help when you need it	
WAP Calendar .....	50,51
Coming attractions	
Index to advertisers .....	81
Classified ads .....	95
Membership application .....	96

## SIGs and Slices

AV SIG .....	13
Apple IIGS SIG .....	13
Annapolis Slice .....	14
NeST SIG .....	14
HyperCard SIG .....	14
WorksSIG Report .....	15
Columbia Slice .....	15
GameSIG November .....	80

## General Information

Artists on Exhibit .....	16
by Nancy Seferian/ See what WAP artists are doing	
I like your face .....	18
by Jim Donnelly/ An insight into typefaces	
The Care and Feeding of Technical Support 33	
by Mike Berganski and Jay Heller/ Think about the kind of help you really need	

## Macintosh Articles

Managing Adobe Type .....	20
by Phil Noguchi/ Adobe's new scheme for WYSIWYG	
Adobe Type Manager .....	24
by Andrew Solmssen/ A different look at ATM	
Culture 1.0: The HyperMedia Guide to Western Civilization .....	26
by Karen Rall/ A major effort to show some cultural roots	
TCS Gleanings .....	30
by Lou Pastura/ In which our hero, the Mac convert, talks about what we are saying on the BBS	
Fastat(review) .....	35
by David Morganstein/ More than you ever thought you would have to read about statistics	
SimCity—A Planner's Perspective .....	38
by Chris Bastian/ Smash those en- vironmentalists! Crush that devel- oper! See what happens next...	
Macinations .....	40
by Robb Wolov/ Useful utilities for the season	
Bits & Bytes .....	42
By Lynn R. Trusal/ Rumors and events	
Minimum LaserWriter Margins in MS Word 4.0: Trial and Error .....	45
by Harris J. Silverstone/ Printing at the edge...	
MacDraw II (review) .....	51
by Jay Rohr/ A look at a Macintosh staple	

## Apple III

Happy Holidays .....	55
by David Ottalini/ New develop- ments for the III	
Apple III disks .....	56
Public domain presents .....	57
by David Ottalini/ PD disks with interesting things as stocking stuffers	



## Apple II

- Modifications of "LIST"** ..... 60  
 By Chester H. Page/ Program listings for the careful typist
- New Newsletter on the II** ..... 65  
 by Phil Shapiro/ Apple Productivity enhanced
- AppleWorks 3.0 & Publish.It! Compatibility** 68  
 by Gary Hayman/ Reality and compatibility checks a specialty
- The Jabberwock Lanced** ..... 68  
 by Gary Hayman/ A beta tester got bit
- Math Shop** ..... 70  
 by Phil Shapiro/ A learning game for kids (and not so kids)
- Do you need a Mac at home?** ..... 71  
 by Tim McGraw/ He doesn't think so
- Sinking into QUICKEN-sand** ..... 72  
 by Gary Hayman/ Two steps into the Big Muddy of accounting
- Cheap Computing** ..... 75  
 by Ron Evry/ Good finds in public domain disks
- I Vulcanized My GS!** ..... 76  
 by Joshua Adler/ And lived to tell about it
- HyperStudio—What is it?** ..... 81  
 by Lee Cabana/ A must for the IIGS

## Games

- The Legend of Blacksilver** ..... 78  
 by David Granite/ Yet another adventure, albeit a pretty good one
- GameSIG Holiday Software Gift Suggestions** 80  
 by Paul Moore/ What to get for the game junkie

## Disk Library

- Holiday Specials** ..... 82  
 by Dave Weikert/ Macintosh goodies in the WAP library
- Bitmap Typefaces for the Macintosh** ..... 85

This issue of the Washington Apple Pi Journal was created on a Macintosh IICx, with very little help from a Quantum 80MB hard disk drive, and printed on a LaserWriter IINTX. The program used was PageMaker 3.02; the word processing program was Microsoft Word 4.0; the principal typeface is Palatino for the articles, and Helvetica and Condensed Helvetica for headlines, emphasis and generally where we felt like it.

### *Editorial Staff*

- Managing Editor**  
 Frank Potter (703) 620-8886
- Graphics Editor**  
 Nancy Seferian (202) 333-1260
- Apple II Editor**  
 Tim McGraw (301) 585-3289
- Macintosh Editor**  
 Marty Milrod (301) 464-2154
- Copy Editor**  
 David Harris (202) 966-6583
- Columns Editor**  
 Dianne Pecor (202) 832-0522

### *Deadlines*

- Writers' submissions**  
 January ..... December 4  
 February ..... December 27
- Editors' submissions** .....  
 January ..... December 11  
 February ..... January 1
- Ad space reservations** .....  
 January ..... December 6  
 February ..... January 3
- Camera-ready ad copy** .....  
 January ..... December 13  
 February ..... January 10

### *Postal Information*

The journal of Washington Apple Pi is published monthly by The Washington Apple Pi, Ltd., 7910 Woodmont Ave., Suite 910, Bethesda, MD 20814.

Application to mail at second class postage rates pending at Bethesda, MD.

POSTMASTER: Send address changes to The Washington Apple Pi, Ltd., 4910 Woodmont Ave. Suite 910, Bethesda, MD, 20814



**Officers and Board of Directors**

President	David Morganstein	(301) 972-4263
Vice President-Apple Mtg	Sam Knutson	(301) 498-8411
Vice President-Mac Mtg.	Eric Rall	(301) 596-0004
Treasurer	Edward Myerson	(703) 759-5479
Secretary	Chris Bastian	(301) 907-8187
Directors	Richard Byrd	(703) 978-3440
	Gary Hayman	(301) 345-3230
	Harvey Kaye	(301) 299-8994
	Patricia Kirby	(202) 479-2665
	Priscilla Myerson	(703) 759-5479
	Tom Piwowar	(202) 223-6813
	Leon Raesly	(301) 220-0717
	Bob Shaffer	(301) 384-3724
	Tom Warrick	(202) 654-8060
	David Weikert	(301) 963-0063

**Office Staff**

Office Manager	Nancy Pochecko
Office Assistants	Ambrose Liao
	Phil Shapiro

**Volunteers**

Group Purchases	Rich Wasserstrom	(202) 479-2516*
Head Reading Lib.	Walt Francis	(202) 966-5742
Apple Tea Coord.	Amy Billingsley	(301) 622-2203
Dealer Relations Comm.	John Alden	(202) 686-1656
	Harvey Kaye	(301) 493-6875
	Rich Wasserstrom	(202) 479-2516*
Legal Counsel	Richard Wohlstrom	
Membership	Dana Schwartz	(301) 654-8060
SIGs & Slices Coord.	Bob Shaffer	(301) 384-3724
Hotline Coordinator	Larry Feldman	(202) 546-9556
Telecom SYSOP	Leon Raesly	(301) 220-0717
Journal Store Distribution	Andy Wallo	(703) 430-1553
	Joe Chelena	
Publicity	Chuck Sicard	
	Curtis Lauret	774-6721
Tutorial Coordinators	Apple II	
	Peter Combes	(301) 251-6369
	Allen Beach	
	Macintosh	
	Rob Clark	(301) 428-9207
	Eileen O'Grady	(703) 532-0641

Community Affairs	Rick Gilmore	(301) 587-6928
	*Call only evenings 7:00-9:30, M-F	

**Washington Apple Pi, Ltd.**  
 7910 Woodmont Avenue, Suite 910  
 Bethesda, MD 20814  
 Business Office (301) 654-8060  
 Telecommunications System (301) 986-8085

Office hours: M-Sat. 10-2:30\*  
 Tues. 7-9pm  
 \*The office will be closed for the  
 1st 2 hours of the general meeting

**Library Volunteers**

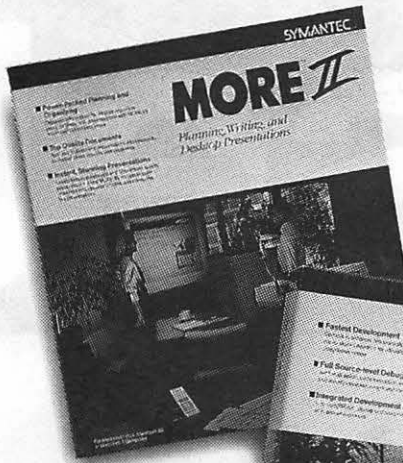
DOS 3.3 Librarian	Jim Little	(301) 762-3215
Macintosh Librarian	David Weikert	(301) 963-0063
	Martin Milrod	(301) 464-5981
Pascal Librarian	open	
ProDOS-CP/M Libr.	open	
IIGs Librarian	Sam Knutson	(301) 498-8411
	Richard Sanders	(703) 450-4371
Apple II Disks	Jim & Nancy Little	(301) 762-3215
John Bell	Bob Houts	John Ruffatto
Dave Harvey	Gary Hayman	
Mac Library		
Dave Benbennick	Rick Capman	David Condit
Hampton DeJarnette	John DeMarco	Garry Elliott
Ben Frank	Andy Gallant	Gary Grey
Mary Hockmeyer	William Jones	Ralph Mullendore
Fred Rodgers	Tony Salerno	Charles Sicard
Bob Soule	Joe Swick	Bob Vandegriff

**SIG Chairs**

Annapolis Slice	Charles Schindler	(301) 437-4624
AppleWorks	Gary Hayman	(301) 345-3230
Apple IIGs	Gary Hayman	(301) 345-3230
Apple III	David Ottalini	(301)681-6136
	Jim Jutzin	
	Nancy Seferian	(202) 333-0126
AVSIG		
Columbia Slice		
Presidents	Ann MacKay	(301) 740-4482
	Paul Retz	(301) 596-2185
V. Presidents, Mac	Ann Knust	(301) 781-7587
	Pat Cappelaere	(301) 596-3989
V. Presidents, Apple	Tom Cook	(301) 995-0352
	Tom Crowley	(301) 730-2319
Treasurer	Neil Gordon	(301) 381-5877
Secretary	Steve Gaston	(301) 992-0480
Apple Ambassador	Tim Childers	(301) 997-9317
Database SIG	Eric Gutsche	(703) 379-1265
DisabledSIG	Jay Thal	(202) 244-3649
Desktop Publishing SIG	Tom Piwowar	(202) 223-6813
EDSIG	Peter Combes	(301) 251-6369
Excel SIG	Larry Feldman	(202) 546-9556
Federal SIG	Lyle Eesley	(301) 740-8472
	John Nelson	(703) 425-1832
Frederick Slice	Scott Galbraith	(301) 865-3035
GameSIG	Charles Don Hall	(703) 356-4229
HyperCard	open	
Mac Programmers	Bob Shaffer	(301) 384-3724
	Bruce Jacobs	(301) 439-7812
Music SIG	Bill Bittle	(301) 236-9898
New SIG	Chris Bastian	(301) 530-1935
	Bernie Benson	(301) 951-5294
NeXT SIG	Hugh O'Neill	(202) 328-9510
Pi-SIG	Ted Meyer	(703) 893-6845
StockSIG	Peter Kasper	(703) 620-4071
Telecomm. SIG	Allan Levy	(301) 340-7839
Works	Chris Bastian	(301) 907-8187

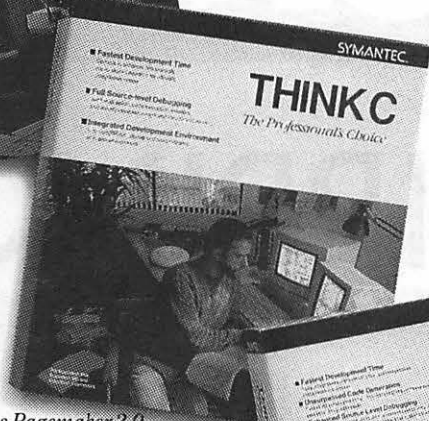
User groups may reprint without prior permission any portion of the contents herein, provided proper author, title, and publication credits are given, except in cases where the author has reserved copyright permission. In these cases, the author should be contacted directly. Please send a copy to the editor.



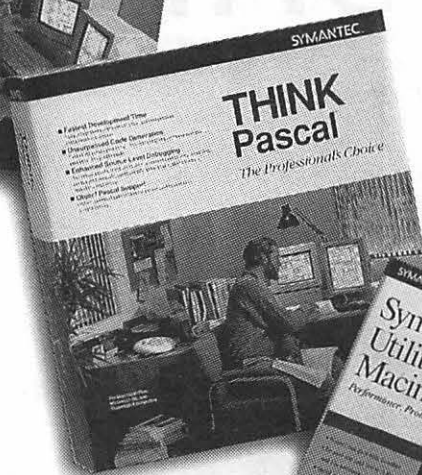


**MORE II:** Advanced business productivity tool based on outlining. Perfect for organizing, planning, refining and presenting your ideas. Awards: Five Mice rating, MacUser, 89; Macworld World Class 87, 88 & 89.

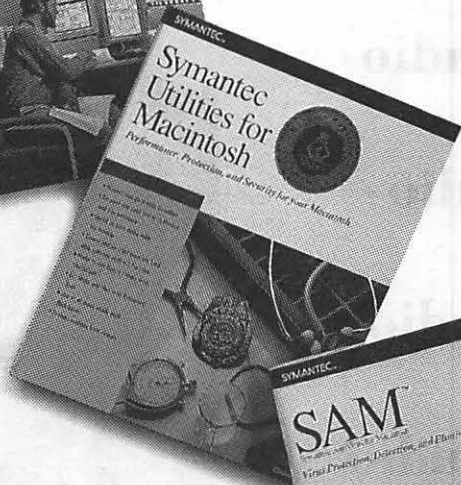
# SYMANTEC MAKES LEADERS.



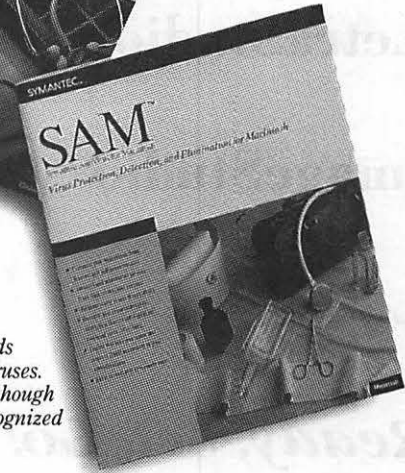
**THINK C\*:** Ultra-fast, C language programming environment. Chosen to develop Aldus Pagemaker 2.0, Adobe Illustrator and MacWrite II. Awards: MacUser Editor's Choice, 88 & 89, Software Publisher Association's Best Programming Language, Macworld World Class, BYTE Award of Distinction, 89.



**THINK Pascal\*:** High-performance, easy-to-use Pascal programming environment. The #1 choice for learning and professional programmers. Awards: Five Mice rating, MacUser, 88; Macworld World Class (Australia), 88; MacGuide Golden Gavel, 89.



**SUM:** A comprehensive set of Macintosh disk utilities for automatic data protection, fast data recovery, and improved hard disk performance. Awards: Five Mice rating, MacUser, MacUser Editor's Choice, Macworld World Class, 89.



**SAM:** Detects, eliminates, and guards against both known and unknown viruses. Also repairs virus-damaged files. Although just released, SAM is already the recognized leader in its field.

For Symantec, leadership stems from a passion for uncompromising quality and a simple formula. We ask our customers what they need today, add power for the future, and craft it all together into software that professionals can easily use. That's why Symantec's Macintosh products are so highly acclaimed, by both critics, and customers. We make software for leaders in business, who in turn, make our products leaders in software.

For detailed product information on any of these products, call (800) 228-4122 Ext. 800Q.



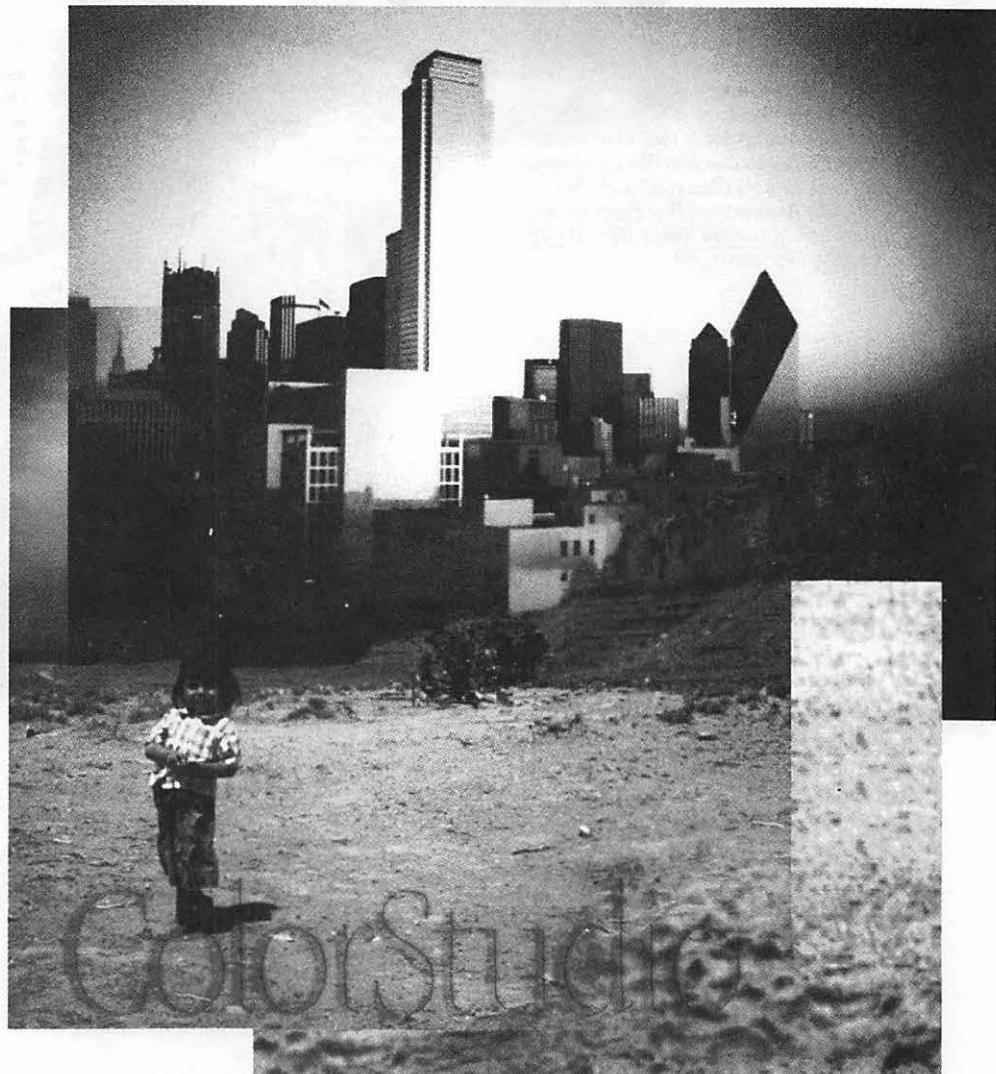
Symantec Corporation, 10201 Torre Avenue, Cupertino, CA 95014. 408/253-9600.  
\*Formally THINK's LightspeedC and THINK's Lightspeed Pascal. MORE, THINK C, SUM, THINK Pascal, and SAM are trademarks of Symantec Corporation. All other product names are trademarks of their respective owners. © 1989 Symantec Corporation



# Letraset<sup>®</sup>

• NOW SHIPPING •

- DesignStudio™
- ColorStudio™
- FontStudio™
- LetraStudio™
- ImageStudio®
- LetraFont™
- *Ready, Set, Go!*™



RINGMASTERS

(202) 347-7817

601 INDIANA AVE., N.W.  
SUITE 900  
WASHINGTON, D.C. 20004



## At your service...

The times, they are a' changin', and the WAP continues to search for better ways to serve its members. One of the most annoying aspects of membership, or so we have heard often enough to believe it, is the length of time that it takes for the Journal to arrive on your doorstep, or in your mailbox, or wherever it is that you interact with the U.S. Postal Service.

The way it works now, the copy usually gets into the hands of the printer on the Sunday before the monthly meeting. (Always assuming, of course, that the editorial staff is appropriately on the ball—not always an accurate assumption, we add reluctantly, but we do try, honest.) The printers set it all up, we sign off on the "blue line" for on Tuesday afternoon, and the presses begin to roll shortly thereafter.

The actual delivery of the magazines to the Pi office usually happens on Thursday or Friday afternoon; these in turn are brought to the meeting on Saturday for the people who come to USUHS for enlightenment, gossip, a chance at free software or just because they didn't have anything better to do at the time.

A few copies are handed out to members who are willing to deliver them to computer stores near their homes or places of business, and that's pretty much it.

But what about the 5,000 plus people who don't get their Journals that way: who wait, with a patience that defies understanding, for their Journals to arrive in the mail—sometimes as much as two or even three weeks later? There's the rub...

The balance of the print run—now in excess of 6,200 copies—are delivered to the Center for the Handicapped that gets them labeled and out. This takes time, as you might expect, and is compounded by the Third Class

mailing system, under which the Journal has traditionally been distributed. And this—you thought we were never going to get to the point, didn't you?—is where things get interesting.

Beginning this month, the Journal will be mailed Second Class, which means that it ought to get into your hands much sooner than it ever did before. It is our hope, and our expectation, that this will allow delivery of the Journal before the regular Saturday meetings, which ought to make the communications process that much easier for everyone.

This year, things may or may not work as planned. Thanksgiving happens at exactly the wrong time for the Journal and for other turkeys, and notwithstanding the delay of a week for the actual meeting, the Journal may not be delivered to everyone.

We'll get it into the printers' hands all right (always assuming that we finish this bloody message on time), but the printers will be working on skeleton shifts at the critical time, so it looks like a race for the postal service.

Our lives and those of our many contributors—thank you, contributors—will suffer in the transition, since we will have to move our schedules up by a week to compensate. The next couple of Journals may reflect these delays, while we lay in a stock of whips and other inducements to meet the new deadlines, but we assume, and therefore assure you lightheartedly, that it will all work out, and that the quality of service will continue to improve.

There—we told you we'd get to the point, didn't we?

## More woes

We apologize for making noises that sound suspiciously like whining, but life has been...trying...recently, and some useful experiences may be buried underneath all that biomass.

Conscientiously practicing what we have been known to preach to anyone willing to listen, and to a lot more as well, we started to back up our files the other day. So far, so good...

But a funny thing happened—what, we are not sure even yet—and the backup process terminated abruptly, along with our hard disk. This, you understand, is not all that rare an occurrence—this being hard disk number four—count 'em, four, in our establishment. All Quantum 80s, or zeros, depending on how you look at it.

After panicking and doing a number of other things that we are still too embarrassed to contemplate, we took the drive to the dealer and made indignant noises. Fortunately, the drive is still under warranty, it having been extended four times already, and so the only problem is one of terminal inconvenience.

One interesting tidbit that we did pick up, though, is that some Apple scanners have been known to cause disk crashes and failures, and we have one of those suckers sitting right here on the desk.

Not plugged in—not any more, anyway. So in it goes tomorrow to have its chips and circuits checked.

If you are having problems that seem to have no rational source, and if you have an Apple scanner someplace in your network, you may want to look into this.

As we understand it, Apple has issued an order to its dealers to permit them to replace the faulty circuitry in these scanners. Your dealer will have the full information on this subject, and if not, we would like to hear about it.

Until next month, then.

FMP

# Gestalt

Gestalt Systems, Inc.

*Gestalt Systems offers comprehensive training on both Macintosh and IBM/Compatible Platforms.*

**We offer classes in the following disciplines:**

- General Microcomputer Usage
- Word Processing
- Spreadsheets/Financial Management
- Database Management
- Elements of Design
- Drawing & Illustration Programs
- Desktop Publishing
- Desktop Presentations/  
Presentation Graphics
- Systems/Network Administration

**Features of our training program include:**

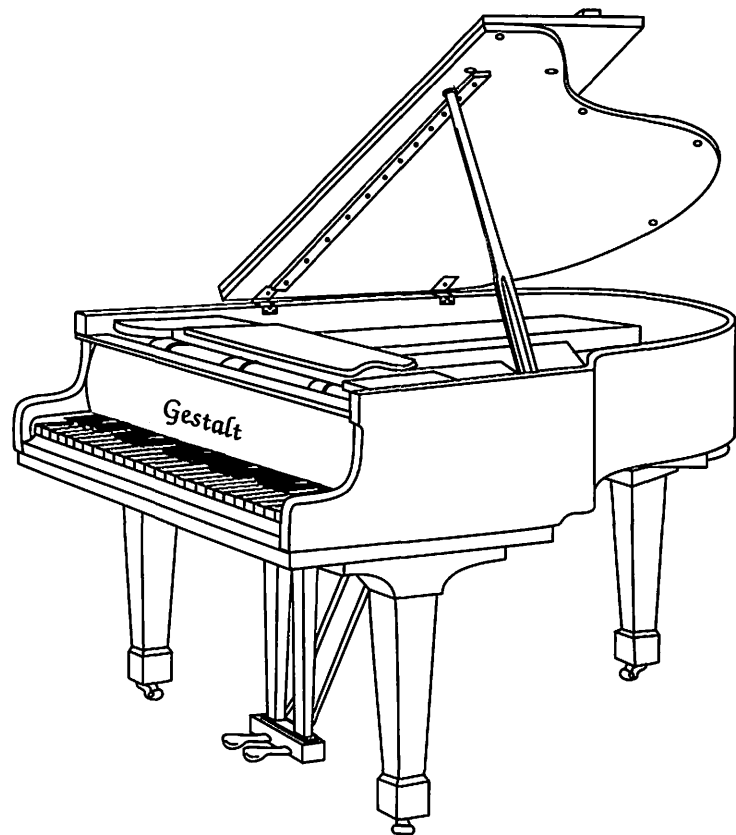
- In-house developed training materials which include a student workbook, hands-on exercises with real-world examples, and a reference guide.
- Teaching software programs requires a special set of skills. Our instructors are educators as well as subject matter experts.
- Customized training available to satisfy specific requirements.
- Access to our *Tips & Techniques* Database.
- Free telephone support following training.
- Group and volume discounts.
- Classroom and on-site training.

**Please call us at (703) 471-6842  
for more information.**

## **Even Beethoven Needed Training!**

Quality training is essential to use any tool effectively. Whether you are preparing a Concerto for your debut at the Kennedy Center or using a word processing program to write a proposal, training is the key to success.

Gestalt Systems is committed to maximizing your productivity by stressing *the practical application of software* to satisfy business and individual needs.



*We also provide consulting services in Requirements Analysis & Systems Design, Application Design & Development, Network Planning & Implementation, Systems/Network Administration and Technical Support.*

# Gestalt

Gestalt Systems, Inc.

***"Integrating People, Technology, and Organizations"***

450 Spring Park Place • Suite 1200 • Herndon • Virginia • 22070 • (703) 471-6842





by David Morganstein

**Apples Down Under.** I recently had an assignment that took me to Australia, a first for me and quite a pleasure (not to mention quite a trip). I did a two-week teaching stint for a large corporation. They had a two story facility containing more than a dozen training rooms dedicated to keeping its staff up to date. Imagine my surprise and delight when, upon entering this building some 10,000 miles from home and glancing into the first room, I saw desk after desk topped with an Apple computer! (And the displays weren't upside down.) It seems that Apple has a pretty good reputation down under. This corporation was among the biggest on the Australian continent. It left me feeling right at home.

**A Giant Offer.** Many of you may have read about Giant Food's recently announced offer to help put Apple computers into the area's public schools. Giant is willing to trade your receipts from their stores for computers. To take them up on this offer, the WAP is sponsoring a program to help round up as many Giant Food receipts as we can and use them to acquire computing gear for schools which otherwise may not be able to get it from their school system. I urge those of you who shop at Giant Food to save your receipts and forward them to the WAP office. Of course many of you may be saving receipts for your own local schools and that is just grand. We are trying to reach those of you who would not otherwise be saving receipts. Of course if you don't currently buy from Giant but are willing to 'switch' for a few months just to help in the effort, please feel free.

It seems as if, Safeway, not to be outdone, may be offering a similar deal for the 'other' computer company. We are trying to get in touch with the Capital PC User's Group and work a swap, under which members from either group will collect receipts—we'll give them the Safeway receipts and we'll take the Giant receipts, in the process making more computers available for local kids.

We will take requests from schools who would like to have the receipts we collect. In the request, we would like to know how many kids there are in your schools and how much computer gear you currently have as well as equipment you will be getting this year. We do want to give priority to the less fortunate schools in selecting a school(s) for these receipts. Chris Bastian is taking the lead role in organizing the collection and school selection.

**Kudos to our Office Staff.** This is the season of Thanks Giving. It is appropriate that the WAP do a little giving of thanks to a few of the many special folks who make this organization work. How about a round of applause for the people who run our office? The "Chief" is Nancy Pochepko. Nancy has served almost a year now and is a tremendous asset to the WAP. She has been through some harrowing times and is currently enjoying a less tense but nevertheless busy period of growth for us. Nancy has become very knowledgeable in Apple computer problems and has done a fine job in organizing the services WAP provides at the office. She has put her own personal touch on the operation and the reports I receive are highly favorable. If you haven't already,

you can meet her by phone when you call in or by visiting the office. Additionally, you will see her at almost every meeting, assisting with WAP transactions. Nancy, we are glad you are here!

Nancy is served by two very able assistants, Ambrose Liao and Phil Shapiro. Ambrose has excellent strength in the Macintosh area and is complemented by Phil's thorough knowledge of and love for the Apple // family. Phil's interest are in education. Ambrose plays trombone professionally and I am told is quite a world traveller. I have had many conversations with members the past few months who expressed high praise for the patience, courtesy and dedication of both Ambrose and Phil in helping them, whether it be with technical or club matters. I would like to personally thank all three for the efforts. Their time and talent is helping us serve you better. They are much appreciated.

**A Survey is on the Way.** For several months, Milt Goldsamt has been working on a WAP membership survey. In all but the past year, this has been an annual event. As of the beginning of November, a proposed survey form which Milt prepared will be reviewed by WAP Board members and other active volunteers. A randomly selected sample of about one tenth of our members—each with the same last digit in his other membership number—should receive the questionnaire before the end of December. This should give a true cross-section of both old and new members, having the full range of computer hardware. The form is three pages and includes questions about most of our services, the monthly meetings, the Journal, the office, the TCS and the group purchase program. When the form is mailed out, it will be accompanied by a cover letter and will include a WAP addressed, stamped return envelope to make it easy to send the questionnaire *to the office*. (By the way if you are pestered by other 'surveys' asking you to send the 'questionnaire' anywhere but the WAP office, you can bet the request has not come from your elected Board).

If you are one of the 'lucky'



**MacHeaven™**

*Your source for all things Macintosh!™*

### **MacHeaven BUYS Mac Products From**

- Dealers (dealer trade-ins)
- Corporations (upgrade programs)
- Individuals

### **MacHeaven SELLS Preowned Mac Products**

- Mac cpus (128k - Mac II)
- Laserwriters
- Imagewriters
- Disk Drives

### **MacHeaven SELLS New Mac Products**

- Apple
- Microtech
- Super Mac
- Peripheral Land
- Everex
- Radius
- Seikoshia
- GCC
- Levco

### **MacHeaven SERVICES Mac Products**

- Repairs and Upgrades
- Walk-in or on-site
- Annual Service Contracts

### **MacHeaven RENTS and LEASES Mac Products**

- Single Workstations
- Complex Office Systems

### **MacHeaven SUPPORTS Your Corporate Needs**

- Desktop Publishing
- Training
- Programming Support

**(703) 263-2567**

14101-D Parke-Long Ct., Suite 206  
Chantilly, Virginia 22021

members selected for surveying, please take five minutes to complete the form and send it in. It is one of the best ways you can tell your elected officials what is on your mind. We NEED your feedback if we are to move the WAP in the direction you want. If there is one thing that we, your elected officials, need to do, it is to make the changes you want, not just the ones we dream up! If all goes as planned, you should read a summary of the survey results in a WAP journal early next year.

**Our Own Piece of Glasnost.** The WAP was asked to host a room full of visiting Russian school kids and to show them what personal computers are doing here in the States. Bob Shaffer, Sam Knutson and Chris Bastian expressed a willingness to help lead the demonstration. We are wondering if any KGB and CIA operatives will be hidden in the crowd.

**Advertising Chairman.** WAP is looking for someone who can help organize Journal advertising. This individual would stay in touch with advertisers and insure that the WAP is receiving prompt payment and copy. They would also help analyze ad rates and recommend rates for us that are competitive with the market. We would offer the Ad Chairman a portion, say 10-15%, of new advertising revenues they may bring in (in fact, such an offer could be extended to any member). If you are interested, please give me or the office a call.

**Help for the Homeless.** We were recently contacted by the Well Robertson House, a shelter for the homeless operated by the City of Gaithersburg, to help with a problem. They received a Lisa computer donated by a WAP member but found that the internal drive was operating marginally. We contacted Sun Remarketing, the company that has taken over support of the Lisa. Sun offered a replacement 400K drive for free or an 800K upgrade for their cost. Thanks to Sun and another WAP volunteer who did the hardware fix, the WR House is back up and running. (If you hear of situations like this one, where WAP members and the computer community provide help like this, please let us

know).

### **WAP Monthly Meetings at USUHS**

This statement is made to insure that all members of WAP who attend meetings at USUHS and non-members who are attending WAP meetings as guests understand our relationship with USUHS and our responsibilities regarding the use of its facilities.

The USUHS is a facility of the Department of Defense, it is *not* a public meeting place. The WAP has been allowed to utilize this excellent facility as guests of specific WAP members who are on the staff at USUHS. These WAP members/USUHS staff have been allowed to host us because the WAP provides a community service. The WAP has always had a number of responsibilities associated with our being guests at USUHS. Among these are:

To keep the area clean and always return it to the condition in which it was found.

To refrain from smoking or drinking while on the premises.

To use the facility only for WAP activities and not for commercial or public purposes.

To maintain a quiet presence and not be disruptive of USUHS activities.

In particular to cooperate with requests of the guards assigned to protect the facility.

If we wish to continue using these facilities, both WAP members and non-member guests must insure that our actions while on the USUHS grounds be consistent with these responsibilities. The Chair of the meeting, usually the President or one of the Vice Presidents, has the responsibility of maintaining order during the hours reserved for our meeting. Please respect their requests for assistance.



# Minutes—Oct/Nov B/D

By Chris Bastian  
Secretary

The Washington Apple Pi Board of Directors met on October 11, 1989.

1. The minutes of the Sept. 13 Board meeting were reviewed and approved.
2. The Board appointed Frank Potter as Journal Editor, as recommended by the Editor Search Committee.
3. The November membership meeting was scheduled for Dec. 2 at USUHS. In consideration of those members who do not regularly attend meetings, it was decided to mail out all copies of the Journal, rather than hold them for distribution at the meeting.
4. Dave Weikert reported on a study of the applicability of using 2nd class mail to speed up Journal delivery. Following discussion, the Board asked Dave to make a careful financial and operating analysis of a 2nd class mail application, and report back to the Board in November.
5. The Board voted to award lifetime memberships to Bernie and Gena Urban, and passed a resolution recognizing their service and contributions to both WAP and other User Groups.
6. In response to a report by the Secretary on unfinished business, the Board:
  - approved as written the minutes of the January '89 minutes.
  - accepted the report of a Committee established to review allegations of unauthorized modifications to the membership database, and abolished the Committee.
  - gave final approval to the rules of procedure for Board meetings, presented in July.
  - requested that the Treasurer prepare an update on the status of WAP's application for 501(c)3 tax-exempt status.

7. After reviewing alternative meeting dates, it was decided to continue to schedule Board meetings on the second Wednesday of each month.
8. Bob Shaffer reported that Apple Computer, Inc. had donated a Macintosh SE to the office, and that negotiations were underway to obtain the loan of 4 additional units with the option to purchase them in a year.
9. As a result of the existing vacancy in the position of Hyper-Card SIG chair, Bob Shaffer and Chris Bastian agreed to supervise the SIG's meeting and elections on Oct 28.
10. Discussion was held on whether WAP should participate in the Giant Food "Apples for the Students" program by collecting receipts from members, and donating equipment to deserving schools. In light of general interest by the Board, Chris Bastian said he would contact Giant Food for program details.
11. The Board continued its review of the TCS Committee's proposed 1990 budget. In light of the absence of several Board members, no action was taken.

At the membership meeting on October 28, 1989, TCS Committee Chair Lee Raesly offered a motion to approve the proposed TCS budget as written. Following discussion, John Hardis proposed a substitute motion to approve the operating portion of the budget, and to table for further discussion the system expansion portion. The original motion to approve the entire budget was voted on and passed by the membership.

The Washington Apple Pi Board of Directors met on November 8, 1989.

1. The minutes of the October 11 Board meeting were reviewed and approved.
2. Dave Morganstein reported that he had appointed Mil Goldsant to prepare a survey of members' opinions on Club functions and services.
3. In light of a burglary in the office, a Committee was established to review and select security options.
4. Discussion was held on the appropriateness of distributing flyers, advertising, and other handouts at membership meetings. Dave Morganstein said he would prepare a set of guidelines for use by the meeting Chair.
5. Eileen O'Grady discussed plans for expanding the tutorial program, and requested ideas for new classes to be offered.
6. Chris Bastian reported that receipts for the "Apples for the Students" program had started to be collected, and that consideration should be given in the future to selection of a school to which equipment would be donated. The Board agreed that a donation of software from the library and technical assistance would also be provided.
7. Following a discussion of the costs and time savings of 2nd class mail versus bulk mail distribution of the Journal, the Board voted to make an application for a 2nd class mail permit, to be used beginning with the December '89 Journal issue. Labeling and sorting of Journals will continue to be handled by the Centers for the Handicapped.
8. Ed Myerson reported on previous efforts to obtain 501(c)3 tax exempt status application. The Board agreed to hold a discussion on the effect of an application on WAP activities, at a continuation of the Board meeting, scheduled for Dec. 2 at 1:00 PM.
9. No action was deemed necessary on a request by Garry Simpson to have statements retracted from the July '89 Journal.

10. Sam Knutson requested input from the Board on topics to be addressed by the Code of Conduct Committee. He also reported that he was still looking for a non-Board member to serve on the Committee.

12. Ideas for a WAP social activity were discussed. A holiday party following the Dec. 16 Garage Sale is being considered, along with a spring picnic.

13. Dave Morganstein announced that WAP would resume a policy of paying someone \$50 to deliver equipment to and from membership meetings each month, and that a prospective candidate for the job was being selected.

### Consumer Advocate Program

by Gary Hayman

In an attempt to better serve its members, the Washington Apple Pi (WAP) is developing a Consumer Advocate Program. David Morganstein has asked me to lead the project.

The first phase, which is currently in progress, is to collect information from the members regarding problems, complaints, lack of responsiveness to inquiries, unreasonable charges, faulty service, etc. relative to computer, service and repair, and software related firms. Kudos for organizations are also encouraged to be submitted for the file. This information will be compiled and will be made available to WAP members to aid them in choosing their vendors.

WAP members are encouraged to write to me at either the Pi office or 8255 Canning Terrace, Greenbelt, MD 20770, or post a message on the D.C. LIVING board (Conference 1) of the WAP's TCS. I will receive and compile the accolades and gripes. Please note that only comments in WRITING (letter or TCS) will find their way into the Consumer Advocate's collection. The second phase (still in the planning stage) may be the WAP

writing the vendors asking for a report of progress, much as is done by the Better Business Bureau. The WAP will NOT act as an intermediary between the member and the vendor, but may, just by identifying itself and showing interest in the matter, speed resolution of the problem.

Other follow-on phases, such as reports of Consumer Advocate activities being listed in the Journal, are possible. Uncooperative vendors could be identified as well as product problems. Plaudits will also be listed. Your suggestions as to the direction we should take are encouraged. Your participation in this program will make it meaningful and strong.

### Giant Food Computer Program

by Charis Bastian

Washington Apple Pi members who shop at Giant Food supermarkets may be aware of Giant's "Apples for the Students" program, whereby cash register receipts can be collected by area schools, and exchanged for Apple II and Macintosh computers and software. At the suggestion of several members, WAP has decided to undertake a collection drive of its own, and to donate any equipment earned to a deserving school (or schools) in the Washington area.

For every \$70,000 worth of receipts submitted, Giant will provide the designated school with an Apple //c computer system with monochrome monitor. \$85,000 earns a //c with color monitor, \$125,000 a choice of a Mac Plus or //e color system, and \$160,000 a IIGs with RGB color monitor. All Apple II packages will include a copy of AppleWorks. Additional software and computer peripherals will also be available. While the numbers may seem imposing, consider that \$70,000 works out to about \$12 worth of receipts per member. Any receipt issued from now until the end of March, 1990 (printed on blue paper) counts towards the pro-

gram, whether for a 25¢ pack of gum or a \$100 weekly food run.

The Board of Directors has also agreed that, for each computer system donated, WAP will provide a selection of disks from its software library, and will offer technical assistance to the teachers or staff at the school(s) selected.

Giant receipts may be sent to the WAP office, or deposited in the collection box by the cash register at membership meetings. A tally of donations will be presented monthly, and a list of all contributors will be compiled, and presented to each school to whom a donation is made. For more information, contact Chris Bastian at 301/907-8187.

[STOP THE PRESSES! Shortly after Giant started its "Apples for the Students" program, Safeway announced a similar concept, in which GOLD colored receipts could be collected and exchanged for IBM PS/2 computer systems. WAP is currently talking to the Capital PC Users Group about a joint collection drive, in which Safeway receipts collected by WAP would be traded for Giant receipts collected by CPCUG. Whichever store you shop at, please help out with the collection effort. Look for an update in next month's Journal.

We Can Image Any

\$5

- PICT
- Scrapbook
- PC HPGL

Custom Slides Available

GALAXY GRAPHICS

703-278-8000



## AV SIG

by Marianne Giguere

Rob Sugar of Auras Design welcomed our AV SIG group to his beautiful studio on October 25. He showed us around, describing the purposes for the way things were set up. He gave a short history of how he began to use computers in his design work, and the growth of their importance in his business.

Rob showed work produced in his studio and described some of the processes used in production there, such as color, use of photography, and scanning photos for placement in various pieces.

He talked about what could be done in-house on computers as opposed to sending work out, and the financial aspects of using computers, font management, and he demonstrated building an ad. He also described setting up the building with regard to the wiring for the computers and answered questions about problems and equipment.

## Apple IIGS SIG

by Paul Tarantino

The IIGS SIG types approached the site of our October meeting, the Dolley Madison Library in McLean, with considerable caution. It was, after all, the night before Halloween, and a large gathering of parents and curiously dressed children was milling about in the woods adjacent to the library, obviously preparing to indulge in some pagan ritual too hideous to contemplate.

Caution turned to outright panic when Gary announced that we were going to hold our own pagan ritual, the election of a new SIG chairman, which the Pi requires each October. The by now traditional silent response greeted Gary's call for nominations, so we all fidgeted in our chairs for a few

uncomfortable minutes, glancing furtively at one another. Ted Meyer refused to even enter the room, for fear of being elected by acclamation.

Eventually realizing that we were getting nowhere, Gary decided to divert his increasingly hostile audience with a change of subject, and demonstrated the wonders of Speedy Smith, a very fast 3.5" disk copier created by a group of French IIGS hackers. Three different versions of this program are making the rounds of the bulletin boards. V1.1 is text-based, in French. V1.2 is text-based in English. For the right-brained, V2.0 uses a graphic control panel interface, with the buttons captioned in French, and this is the version we were examining. (Note: constant readers will remember a previous report in this space that some versions of Speedy Smith were afflicted with a virus which could be bad news for your 3.5" disks. The copy that Gary was using is apparently virus-free.)

Gary's demo rapidly degenerated into a veritable feeding frenzy of copying, as Speedy Smith itself and an update of GS/OS (v5.02) were quickly copied for all interested SIG members who had brought blank disks. (This month's Handy Hint #1 is a reminder to ALWAYS bring a few blank disks to our meetings, as you never know what goodies will suddenly be available to those who are prepared!) We were able to repeatedly verify that Speedy Smith can copy 3.5" disks really fast; as quickly as 46 seconds for multiple copies!

We returned to the dreaded subject of SIG chairman elections, but quickly discovered that no new potential leaders had emerged from the ranks in the last half hour. The ensuing discussion finally began to focus on ways to make the SIG chairman's job less burdensome, and two signup sheets were circulated, soliciting volunteers to take turns bringing GS hardware to our meetings, and to provide discussion topics for future meetings. A third signup sheet will serve as the basis for an update of the IIGS section of the Pi Hotline, which had fallen into disrepair of late.

Newly armed with this wealth of assistance, Gary Hayman allowed his name to be placed in nomination for re-election, and was duly elected to continue to serve as SIG chairman. (Handy Hint #2: Volunteers will continue to be needed to support our program of monthly meetings and hotline assistance to GS owners and GS owner wannabe's. Deep technical expertise is NOT a prerequisite! We will keep passing around our signup sheets at future meetings; don't be afraid to volunteer!)

A flurry of short announcements and questions filled the remaining time before the friendly librarians threw us out; they are reported here in no particular order.

Bill North put in a plug for the PISIG, a prospective home for IIGS programming wizards and wizards-yet-to-be. He also suggested that future IIGS SIG meetings would be great places to offer old hardware and software for sale, and asked that an attempt be made to entice our disk librarians into once again making GS disketeria disks available for sale at SIG meetings.

AppleLink Personal Edition is now America On Line, which will cost a minimum of \$5.95 per month starting 1 December (this includes one hour of on-line time). That's a sizable sum unless you are going to really use the system a lot. Registered users have the month of November to determine whether to stay on or not before beginning to incur an automatic monthly charge.

AppleWorks GS has an update (v1.1), which costs \$29 or so. It's mainly a bug fixer, and it works with GS/OS (comes with GS/OS v5.02).

Our November meeting will be at 7:00pm on Monday, 27 November, in the seventh floor conference room in Building 31C at NIH. The December meeting will be on the 18th, back at Dolley Madison Library in McLean. See you there!

(Continued on next page)

**Annapolis Slice**

by Katherine M. Cave, Secretary

The biggest news from Annapolis Apple Slice is the new telephone number and location of our bulletin board, CRABBS (Chesapeake Region Apple Bulletin Board Service). It is 553-6929 and the new SYSOP is Bill Arndt.

December 9 meeting will be held in the normal location, the lecture hall in the Careers Building of the Anne Arundel Community College campus, Arnold, MD. from 10 a.m. to noon. After election of 1990 officers, the program will be on Hyper Media, for both Apple and Mac. The slate of officers for 1990 being presented is as follows:  
 President: Ray Settle

Vice-President/Programs: Seth Mize

Secretary: Kay Cave

Treasurer/Membership: Bill Derouin

Other nominations may have been made by write-in or at the November meeting, so this line-up is not definite. A complete listing of officers and committee heads will be submitted in December.

The program in October celebrated Computers in Education month and was presented by representatives from Towson Computer Company. Sharon Carter, Head of Sales, and Ginge Ferguson, Manager, demonstrated on the Apple IIGS the use of Hyper Studio and how it can relate to classroom studies.

Attending teachers each received a free disk from the disketerias.

Towson Computer Co. also brought along the latest model of MAC, the laptop. Members enjoyed testing it after the regular meeting.

Tentative plans for future meetings held at AACC include:

- January - Telecommunications;
- February - Taxes

That's all the news from Crabtown. 🍏

**NeXT SIG**

by Gary Letourneau

A group of over 20 NeXT enthusiasts met on the 12th of October to discuss the latest "goings on" in the world of NeXT. We were fortunate to have Fred Giordano of NeXT give us his insight into what NeXT is planning for the immediate future.

Naturally, he mentioned the new networked NeXT offering: a system that includes a small (40 MB) hard disk instead of a 330 or 660MB disk that is normally used. This small disk is not intended to be used to store data or application files, instead its sole purpose is to hold unix "swap" space. This allows speedy running of applications for those who only have the optical disk. By the time you read this this option will be readily available.

Fred emphasized the fact that NeXT is currently standardizing around system 1.0 of the operating system, and contrary to media speculation, there are no immediate plans for a NeXT II. Such a machine is 9-12 months away. This makes sense, considering NeXT is really just getting started in the business sector. A color NeXT is 6-9 months off. Fred's talk went well, and was followed by general discussion of NeXT application development.

The November 9th meeting saw a dramatic upswing in our attendance. A group of 40-plus people met to hear two presentations: The first, from Pete Yadlowsky of the University of Virginia, concerned music applications on the NeXT. He discussed the NeXT music kit and a graphical front end to the NeXT sound package.

In the second presentation, Ariel Corporation representative, Gerardo Noejovich, discussed the Ariel digital microphone and Bug-56, a symbolic debugger for the dsp chip.

**Coming Attractions**

Dec 6 A Joint meeting of NeXTSig with the Desktop Publishing SIG. at which Frame Technology will

demonstrate FrameMaker 2.0 for the NeXT. 7:30 P.M. at the Pepco Auditorium, 19th and Penn. NW

Dec 14 An open planning meeting of the NeXTSig to plan activities for 1990. 7:30 pm at National Institute of Health, building 31, conference room 4, A-wing.

Jan 11 A demonstration and discussion of the use of a NeXT in a clinical workstation given by Derek Ney, director of Body CT Imaging Laboratory at Johns Hopkins University. 7:30 pm at National Institute of Health, building 31, conference room 4, A-wing.

**HyperCard SIG**

by Chris Bastian

As another Pi meeting concluded, and most members departed to try out their new PRODIGY accounts, the HyperCard faithful gathered for monthly session in the USUHS Auditorium. On the card was a presentation by Eric Rall of HyperTMON, a set of debugging utilities. In the Q&A following, discussion was held on the relative merits and shortcomings of SuperCard and Plus as HyperCard alternatives, and how to script a stack to perform cash register-like totalling of values stored on separate cards. It was also reported that HyperCard version 1.2.5 was available, but required System 6.0.4 (written for the Mac Portable) to operate. In the business portion of the meeting, Nancy Wallace and Mark Fraser agreed to fill the vacancy in the SIG's leadership, and were elected as co-chairs. Mark suggested that the development of a set of education stacks be considered as a joint project, and several newcomers to the SIG asked for an introductory or tutorial session to get them started with the program. There was general agreement among the attendees to keep the meetings at the same time and location.

**\*\*\*\*\* MEETING NOTICE \*\*\*\*\***

The next SIG meeting (which, because of the rescheduling of the membership meeting, will be on DECEMBER 2ND) will feature a



guest speaker from APPLE COMPUTER (RESTON), who will provide a HyperCard overview for beginners, and discuss aspects of the Hypertalk scripting language. All members are invited to attend.

## WorksSIG REPORT

by Chris Bastian

November brought a rejuvenated Works SIG together to delve into the world of telecommunications. After stringing phone cables throughout the Pi office, a modem connection was established, and Dave Harris took the group on a tour of the Works Communications module, explaining the mysteries of baud rates, handshaking protocols and parity settings. Once the settings were established, it was off to Chicago for a tour of WORKING WITH WORKS, a remote computer BBS dedicated to discussion of the Works program and its application. Despite the restrictions of a 15 minute time limit, Dave was able to demonstrate Works' ability to write the text from the BBS session directly to disk, how to download a file using the XMODEM protocol, and how to transmit (with appropriate line and character delays) a previously prepared message. Following the on-line exhibition, a quick foray was made into the Pi's TCS for a copy of the Focke's list of bulletin boards in the Washington area, followed by a spirited debate about the first amendment issues relating to message posting.

Coming in December (the 20th if my Calender DA is functioning properly), Works SIG will look across the DOS chasm at AppleWorks (integrated software for the rest of them?) and uses of the Works- To-Works Transporter utility. SIG meetings are held the THIRD WEDNESDAY of each month at 7:00 PM in the Pi office.

## Columbia Slice

by Timothy R. Childers

The 7 September Meeting of the CAS celebrated our first Anniversary. To honor this event we had an especially full show put on by several Officers of the WAP: Sam Knutson, Bob Shaffer and Eric Rall. Even without a publicity mailing, 40 people showed up!

Sam Knutson demonstrated the capabilities of the Apple IIGS. He ran through a large number of programs showing the steady progress of the GSs capabilities.

Then he answered questions from the audience such as: "Should I buy a SCSI hard disk for my II or a non-SCSI disk?" He recommended SCSI drives because they are more likely to still be usable if you upgrade to some new type of future Apple. If you are getting a disk of any kind get the biggest you can afford, you are sure to fill it up eventually. Buy utilities to work with it which can bypass the *Finder* and make sure to BACK UP!!!!!!!

For the general business portion of our meeting Ann MacKay welcomed new members to the Columbia Apple Slice and announced that we would give away door prizes that night. Paul Retz announced that his company had donated a copy of *Aldus Persuasion* to the Slice as a future Prize. Our guest speakers distributed free copies of the WAP Macintosh disk catalog. Bob Shaffer donated several T-shirts and stuff from MacWorld Expo. Eric Rall donated a copy of *Gofer*, a text search and retrieval utility for the Mac. Then we drew for door prizes. Tom DeMay won Apple II disk cataloging SW. Tom Calley won a T-shirt from Mind Write. Mary Roepcke won a T-shirt. Neil Gordon won *Gofer*. A Tote Bag from Double Helix went to John Archer.

There is now a Developer Services Bulletin Board on Applelink Personal Edition. AppleWorks 3.0 was released 20 June. Owners of the AppleFax modem can get a free

upgrade of new ROM chips and v1.2 of the modem software from their dealer. The best news was that the Apple office in Columbia has invited our little group to see their Corporate Briefing Room. Stay tuned for the exact date but we might be able to hold our December 7th meeting there.

Business meeting completed, Eric Rall and Bob Shaffer then gave us two hours of nonstop info from MacWorld Boston. Bob showed a product called *AME* which puts a high security environment on top of the Mac operating system. You can't even break in with *Resedit* or *Fedit*. Multiple users can all have different sets of priveledges. For example a store can set a machine to allow customers with no password to Run but not Copy applications yet let them Copy public domain software but not Add anything to the hard disk. It costs \$89 now but this introductory price will rise to over \$200 soon.

The meeting ended with a few more door prizes and a quick Board meeting to plan upcoming events. A Paracomp T-shirt to Ann MacKay. Another T-shirt to Sandra Breault. A mousepad to Jim McCain. *Pinpoint* to Tom Cook. A T-shirt to Tim Childers. And a T-shirt to Russ Blackburn.

Here are the early plans for upcoming meetings:

The December 7th meeting is tentatively scheduled to be at Apple. If not it will be a Beginners Class followed by a Question and Answer session.

The January 4th meeting should be *Macintax* and the II GS version of *Macintax*.

S  
I  
G  
&  
S  
L  
I  
C  
E  
S

# Artists on exhibit

by Nancy Seferian

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

**Art:** Beach Girl (below), Flamingo (opposite right), Night Lady (opposite bottom)

**Artist:** Doug Hyde, this month's artist, says he has had no formal art training since his high school years at St. Albans. He fell in love with computer graphics a few years ago, and is concentrating on that area now. He works at SAIC (Science Applications International Corporation), at Egghead, and as a freelance graphic designer.

**How they were done:** "Each of these three drawings was based on a photograph. I find an image I like and begin by making a photocopy of it. Next I draw a one inch grid over the image on the photocopy. Then, moving to my computer, I open the drawing program I plan to use, and choose Page Setup under the File menu.

"The Page Setups for these drawings were custom: Beach Girl - 7.2" x 9.313"; portrait; Flamingo - 5" x 7"; and Night Lady - 4" x 6".

"I set up the screen grid to correspond to the grid on the photocopy of my image. Then I proceed to transfer the image to the screen in the correct proportion, using the grids as reference.

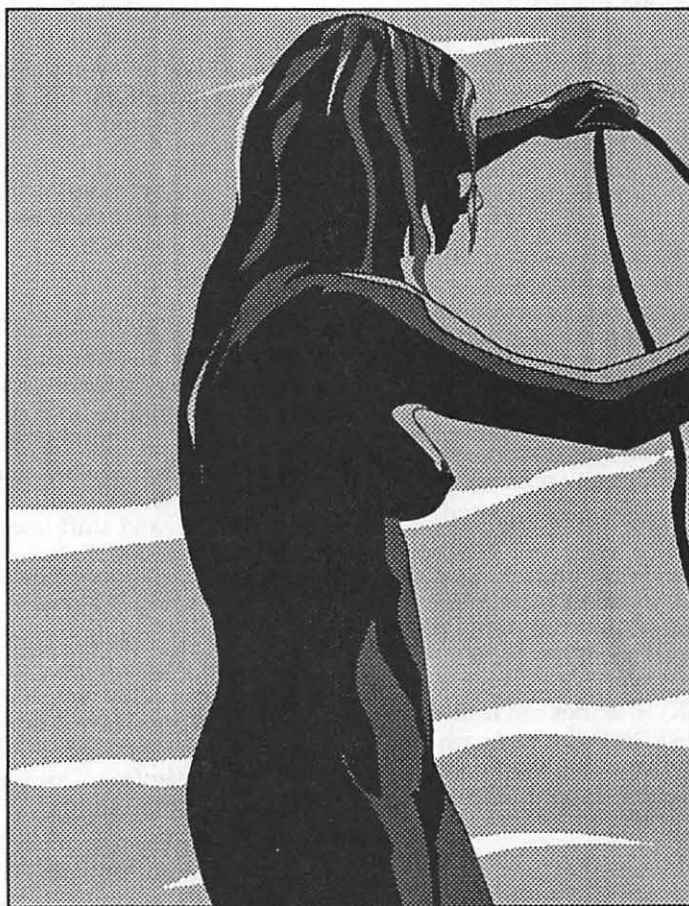
"The tools I most frequently use during this process are the

combination tool and line tools. Next, the shapes are filled in using different overlays. I experiment with the colors, testing to see how the colors come out on the laser printer.

"A problem in working with color and printing on a laser printer is that when you do a graduated fill using the color bar, the fill shows

up in striations on a laser printer. The radial or graduated fills have distinct lines between the selected shades. To compensate for that I use a half tone screen. This is a tremendous way of getting around the 300 dpi limitations of the laser printer.

"This procedure is to select the Element menu. Under that pull

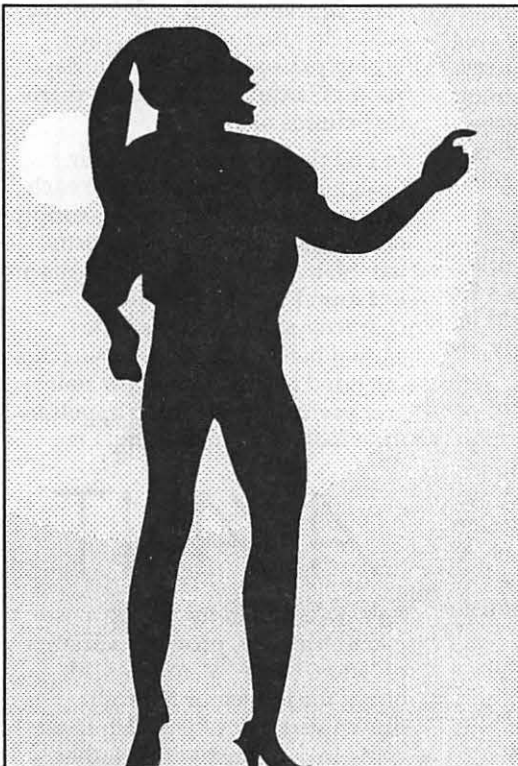


*Beach Girl*

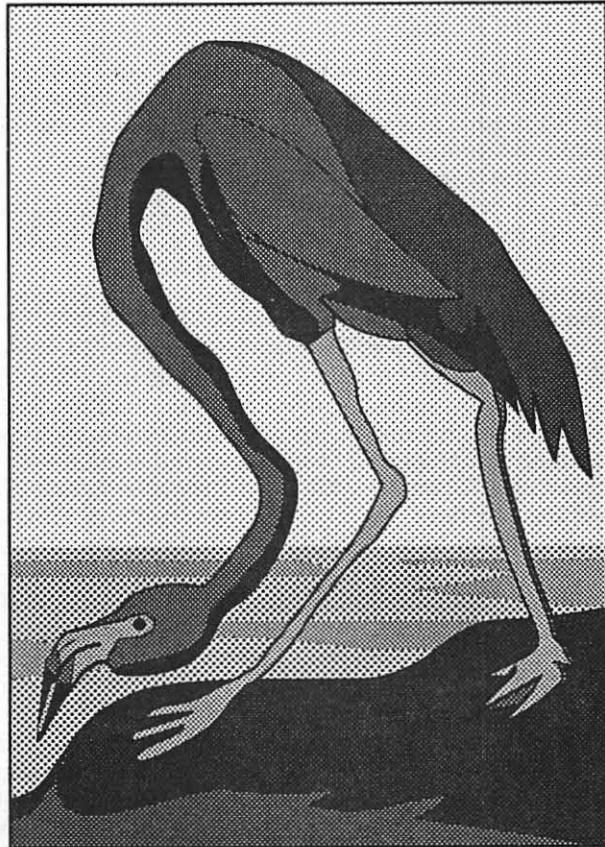
down menu I choose Special, then Halftone screen. When the Halftone screen dialogue box is displayed I choose Round dot. I don't often choose to change the Screen angle. For the Screen ruling I define how many dots per inch I would like. I usually select between 30-37.

"This process blurs the color striations in a graduated fill. Some very special effects are often the result. It is one way of taking the limits of the medium and making it into an individual style."

**Tools:** Mac II with 5 megs of ram, Freehand 2.02, Qume ScriptEN laser printer using the laser driver 6.0 with grayscale option chosen.



*Night Lady*



*Flamingo*

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

To submit art by mail, send it to

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

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



Typefaces explained...

# I like your face

by Jim Donnelly

The introduction of the LaserWriter Plus increased the complement of typefaces available to the new caste called desktop publishers by two and one-half to three times, depending on whether you count, say, Palatino as one face or four, and depending on what you make of "New Helvetica Narrow." The selection of new faces was a judicious mixture of the young and the middle-aged, and it enabled the production of some quite creative printed items while doing its best to guarantee typographically solid underpinnings. To see the wide scope of the new faces, we can hardly do better than to examine the first two items that the LaserWriter Plus put into our Font Menus: Avant Garde and Bookman.

If I were asked to discourse on the history of Avant Garde Gothic, I'd feel obliged to commence with a warning: the book I was planning to use as a source for this material has decided to disappear, and with the approach of the deadline for this issue there's no time to investigate farther afield. The result is that not much will be said here; and, assuming that you keep a grain of salt at the ready, little harm will be done if I set down what I THINK may just possibly, to the best of my recollection but issuing no guarantees, be true about this type.

(There's a disclaimer what am.) I think it was designed by the eminent Herb Lubalin, possibly with the assistance of Tom Carnase, at Push Pin Studios in New York. It was first used for the flag, or logo, of a relatively short-lived magazine of the 1950s called Avant Garde. Aside from the designer's purposes, any or all of those facts may not, in fact, be facts.

Avant Garde is thus in the long tradition of typefaces named for the publications in which they first

appeared. The list of such types would of course include Times Roman and probably Goudy's

## Avant Garde Gothic Book weight

Californian (designed for the private use of the University of California Press in 1938). It would also include the typeface that many consider the most perfect American design of all time: Bruce Rogers's Centaur type. The full Centaur font first appeared in 1915 in a book designed by Rogers, a translation of an odd little work by Maurice de Guérin called *The Centaur*, though the uppercase had been in use for a year in the promotional literature of the Metropolitan Museum of Art. Because the Centaur type was based (as were many other successful faces) on the first great Roman, the 1470 design of Nicolas Jenson, it should be pointed out that this method of naming typefaces goes back at least that far: Jenson's design itself is often called the Eusebius font because it was first used in a printing of Eusebius's *De Praeparatione Evangelica*. Add it to the list. Perhaps surprisingly, the list would NOT include Post Roman (which was designed by Herman Post in 1937).

The face we know as Bookman is one of several versions, issued by various type foundries, of a design called *Antique Old Style* by one A. C. Phemister around 1860. The Monotype Corporation continued to call it by that name, while Linotype and Intertype called it *Antique No. 1*, and Intertype issued a second version called *Bookface*. The American Type Founders (ATF) called it *Bookman*, as did Ludlow.

*Bookman* shows a certain stolidity that I've always found in keeping with the era of its creation; it says mid-nineteenth century to me.

There certainly seems to be little similarity between *Avant Garde* and *Bookman*. *Avant Garde* is a straightforward sans serif of a sort that would have appealed to the Bauhaus. Straight elements are straight, round elements are round, and terminals are cut square. *Bookman*, on the other hand, is not only a serif face, but one with quite

pronounced serifs, to the point of resembling a member of the Clarendon family. In a book called *Type and Typefaces* J. Ben Lieberman proposed a three-level hierarchical classification system that he called "The Typorama." Each typeface is described in terms of its category, class and style. *Avant Garde* would be situated in category Sans Serif, class Modern and style Geometric, while *Bookman* sits in category Strong Serif, class Bracketed and style Antique. According to this system, then, highly praised by Hermann Zapf, *Avant Garde* and *Bookman* share no features at all.

In one respect, however, their designers were of like mind: each face provides a quite lavish supply of alternate characters. Unfortunately, most of these letterforms are not found in the Macintosh's character set, so the examples shown here are just crude sketches intended to illustrate a few points and perhaps to whet the appetite for a look at the real thing.

# AVANT

*Avant Garde*, in its no-nonsense geometric way, provides variants of letters like A, V and W with either the left leg or the right drawn vertical. When such letters come into contact with another vertical stroke, this feature provides a kind of automatic kerning,

though it sometimes buys this effect at the price of increasing the white space on the opposite side of the letter.

In addition to these variants (which seem, after all, simple enough if you're working on a design for a

ing to Lieberman's "Typorama," it isn't. He locates all "book faces" in the category Small Serif. Nevertheless, the consensus seems to be that (though it would be unusual) Bookman can be used in books. It is considerably wider than the

colonial America.

Avant Garde, too, is a wide alphabet, a factor that should contribute to legibility—and so it does. The great danger arises from the fact that it's available in an absurdly light weight, and when this spectral font is set too tightly it is nearly completely illegible. The theater at the University of Maryland used to do that a lot, but fortunately they seemed to confine it to the return address on

# Bookman Demi

magazine with so many diagonals in its name—anyone might have come up with essentially the same treatment), Avant Garde includes some really innovative letters of a sort that I hadn't seen before, though I have seen them since (some versions of Lubalin Graph duplicate many of them). One variety in particular is very interesting: it seems at first to be a set of unusual ligatures, but closer inspection shows that no ligatures are involved; each letter is separate, and if we were to examine each letter on its own we would have to say that each of them is deformed, though they work together wondrously well.

The alternate forms of Bookman chiefly involve swashes. The italic swashes are not in themselves very startling; their shapes are traditional enough italic forms and they can be found in some versions of Garamond and Caslon. If Bookman is at all remarkable here, it seems to me that it's because the swashes, in keeping with the overall design of the face, are more striking because they're more substantial.

It's possible that Bookman offers a wider variety of lowercase variants than some of the other faces. My impression is that it also outdoes the others in the number of roman (i.e., non-italic) variants available.

Q

Regarding the uses to which these typefaces can be put, let's consider Bookman's name. Recall that a version of the same type was actually called Bookface; is Bookman actually a book face? Accord-

typical book faces, but that has the effect of contributing to its legibility. It's also quite readable for extended periods, and idiosyncratic only in the comical tail of the Q. (Not all versions of Antique Old Style burden themselves with that very peculiar feature.)

## WITHOUT

It can easily serve as a display face, and I have found that it can almost look backwards in time: a short text set in Bookman Bold Italic, making liberal use of the alternate letters, can somehow evoke a sense of

order forms for subscriptions and reservations. It was intensely irritating to receive mailings from them at the time, because this use of type seemed to me to be an affectation that defeated the purpose of the printing press. Perhaps a USPS letter-carrier with access to a magnifying glass could have deciphered it had he or she wanted to take the trouble.

Since the appearance of Avant Garde with the LaserWriter Plus, I have confined my use of the font to headlines, with only a few exceptions. Given the proper occasion, it can be just the ticket.

We Drop Everything...

**Document Preparation Services (B.O.S.S.)**  
8629-B Zetts Avenue • Gaithersburg, Maryland 20877

(301) 948-2175

**When Production Deadlines Approach,**  
call the **B.O.S.S.** for help!

- Presentation Graphics
- Word Processing
- Graphic Design
- Newsletters

- Books • Reports
- Illustrations • Charts
- Proposal Preparation
- Desktop Publishing

For Drop Dead Deadlines!

- Macintosh, IBM computers
- Fax & modem services
- Linotronic output

B.O.S.S. & MacTemps are Divisions of Nicklas Associates, Inc.



# Managing Adobe Type

by Phil Noguchi

As we finished the last column, Adobe, in a remarkable display of programming effort, fired the first salvo in the Adobe/Apple rift over which font technology is better/best. Adobe Type Manager, or ATM, was released in October and immediately became a best seller. According to the ATM manual:

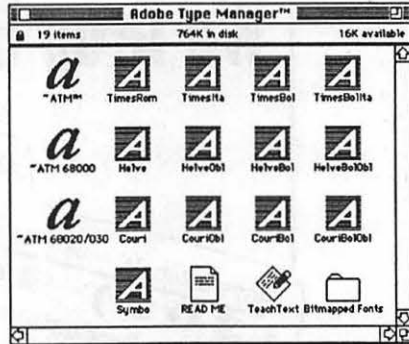
"Welcome to the Adobe Type Manager™ (ATM™) for the Macintosh®, software that produces laser-sharp images on-screen or on the printed page. ATM, incorporating PostScript® outline font technology, eliminates jagged fonts so that your screen can display high-quality typefaces of any size or style. ATM also enables inexpensive printers to print PostScript fonts that are crisp and letter-perfect."

Wow! It can do all that? Visions of resurrecting that old Imagewriter for letter quality output dance in the eyes... In this month's column we will explore some of the promise and hype of ATM, and show you some needed workarounds for best results. I have been informally following the Adobe forums on CompuServe for the past three weeks; ATM has generated more messages than have been entered in the entire year, I would guess. Obviously people are using it, but are they happy? As in most things, yes and no. Onward to uncharted territory.

## ATM

The function of the ATM is to eliminate to some extent the disparity between what you see on the screen and what you get on paper. It does this by intercepting calls to Quickdraw that deal with text. After intercept, it will first look to see if a bitmap matching the size and fontname is present; like

current Quickdraw, if it is, it will then pass the call back to the System for further processing. But, suppose you ask for an 11 point Times, and you don't have that size installed in your system. Now, ATM will go hunting for an Adobe downloadable Postscript Type 1 outline font in either the System Folder or a folder that Suitcase or MasterJuggler has an open font, and will use the Postscript information to create an 11 point bitmap on the fly, so to speak. Once this 11 point bitmap is created, it is stored in a memory cache and is available for use. If you have used a LaserWriter before, you will know that the first page of anything takes longer to print that subsequent pages; this is due to a similar mechanism in the LaserWriter for building and caching fonts.



The first figure shows you what get when stick the ATM disk into the Mac. The ~ATM™ file is a cdev/INIT which controls several functions of ATM, while the other two files with ~ATM at the beginning of the names are apparently the guts of ATM; one is for 68000 based machines such as the MacPlus and SE, while the other is for the muscle guys with 68020/68030 machines, such as the IICx, IICi, etc. The files with the large A

icons are the PostScript outline downloadable fonts that form the basis of ATM's technology. These must be ALL put into your system folder in order for ATM to work with Courier, Times, Symbol and Helvetica. If you have never used downloadable fonts before, you're probably bemused by such names as Symbo and CouriBolObl. The convention used is this: If a font has a name such as Symbol, the corresponding Postscript font takes the first five characters of the first part of the font name that starts with a capital letter, followed by the first three letters of any subsequent style names. Thus, for Symbol, the corresponding Postscript font is Symbo, for Courier Bold, the corresponding font is CouriBol. This is actually more than a convention; if you change the name of that Symbo font to Symbol, the system will not know that it exists and will not download the font at all. So don't rename the Postscript fonts, at all.

But what about CouriBolObl? In the normal Apple supplied set of fonts, only the plain style of font is present; ie Times, Helvetica, Courier. But Adobe actually supplies 4 styles of these standard fonts, with Italic/Oblique, Bold and Italic/Oblique Bold versions. Thus, with Adobe bitmaps, when you choose Courier, and then add a style like Bold, the system will automatically look for a bitmap called Courier Bold. In the normal Apple system, it won't find such a thing so Quickdraw will create a pseudo-bold by adding one pixel widthwise to the plain Courier bitmap. This, by the way is part of the reason why when you have a bolded word in Courier text, the spacing between characters is not longer strictly monospaced.

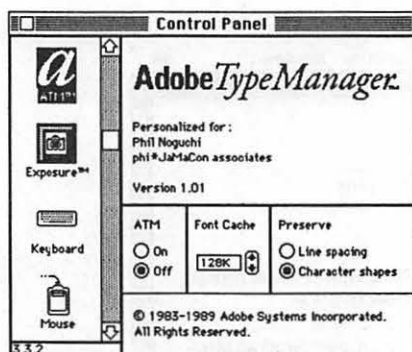
## ATM Installation

The instruction manual for ATM is a scant 20 pages long, and covers at least some of the potential problems you might face. Like most new products, there are a large number of hidden problems that have already cropped up. First, before you start, if you use the utility INIT Picker to handle INIT files, read this. INIT Picker version 1.0 and ATM v1.0.1 cannot run





together fresh out of the respective floppy disks. If you innocently put them both in your system folder, as I did, everything loads fine until you get to the ~ATM™ INIT. Then it loads twice, INITPicker loads again, and the entire chain of INITs keeps loading until your Mac bombs. Sigh. Thanks to some hints on CIS, here are two work arounds. Copy the file ~ATM™ to some place, but not in the system folder. Then remove either the ~(tilde) or the ™(trademark) and put it in your system folder. Now IN-ITPicker and ATM work together. Whew! After you put ATM in your system folder, opening the control panel and selecting the ATM cdev gives the following:



You can several things including whether ATM is on or off, how much memory to set for the cache and whether to preserve Line Spacing or Character shapes. I have not yet used ATM enough to give you coherent reasons for choosing line spacing or character shapes, but the default setting for ATM is 96k which seems to work okay in a 1 meg Mac Plus. After setting this, copy all the Postscript fonts to your system folder. If you thought that ATM would save disk space, well, the outline fonts take up about 500k! So much for that.

Don't go away yet. You need to decide which screen fonts to use. While many of us already have a set of screen fonts for the LaserWriter fonts, what you install will depend a LOT on what you print with. If you use a LaserWriter, you can now reboot and start using ATM without too much worry. But for those with Imagewriters, please see the discussion below.

### Printing on the ImageWriter

Altho I use a LaserWriter for my work on the Mac, it would seem that Imagewriter uses might be the greatest beneficiaries of this technology, IF, indeed, printing was improved. Out came the old trusty, dusty ImageWriter I that I bought with my 128K Mac. You know, nobody builds a printer like that anymore; heavy, and solid, with real metal. First off, don't be misled. There is no way to make this dot matrix printer that prints at a maximum of 160 by 144 dots per inch duplicate what you will get off a LaserWriter at 300 by 300 per inch. Resolution is resolution, and you can't get better than what the ImageWriter can do. But ATM will give you print that is better than without it... under certain conditions.

Most laser fonts look best on paper at 10 to 11 point, so I tried Times 10 printing on the ImageWriter both with and without ATM. First, without ATM the spacing was fine altho the type was so-so. With ATM on, the letters were indeed very nicely shaped..but the inter-character spacing was so poor that some words would run together like this: likethis. Aargh! I was certainly not the only one with problems; at least 50 messages erupted on CIS with various purported work arounds. It was interesting to see that the ones having the best success were the people using ATM with the HP Deskjet or Deskwriter, or the LaserWriter IISC, all printers with 300 dot per inch resolution. All the complaining from the Imagewriter users, it seemed. After spending my share of complaining and concluding that if one stuck to printing at 14 point and above it might be okay, a colleague, John Hope mentioned to me that 7 point Times on an ImageWriter II with ATM was so good that he was able to quickly sell that Imagewriter for a good price. Now, how could I be getting such poor results, and John getting great results at an even lower resolution?

Back to the bench for testing. Sure enough, I tried 8 point Times, and not only was the character shape pretty good, the spacing miraculously became better, no even quite

spectacular. So what's going on? Well, for one thing, there are no 8 point screen fonts in Times, so ATM has to build it for the screen display. Thus, I thought, if I only have a 12 point font installed, maybe the spacing will get better at 10 point because ATM will have to build that font as well. I created a set of LaserWriter fonts of 12 point only, and yes! The spacing became much, much better when printing at 10 point output. What about at 12 point? Actually, it turns out that the spacing is okay at 12 point, IF you don't have any other point sizes installed. For example, if you have both 12 and 24 point Times installed, the printout will again be not acceptable in terms of character spacing. I'm not sure of what is going on, but on an empirical basis, I would recommend using only the 12 point screen fonts for best ImageWriter output at 12 point and smaller. This is in contradistinction to the ATM manual which recommends that 10 and 12 point be installed.

### Performance

What tradeoffs are there, if any? Of course there are. Any enhancement to the system software that depends on an INIT file will entail compromises somewhere. ATM will take some system heap space, as well as require at least 64K memory to cache the fonts. The manual recommends 50K of cache memory for each font you use frequently. No problem, you say? Remember Times is a different font that Times-Bold.

The outline fonts themselves are certainly not big, but there are a lot of them. Thirteen for just the four LaserWriter fonts. If you get the plus pak which has the additional fonts in the LaserWriter Plus, it comes on six or seven disks with about 22 files of fonts. It would seem to me that ATM will sell a lot of hard disks.

When you first use a font that is built by ATM, there is a noticeable delay while it gets built in memory. Once built, it seems to be as fast or faster than a regular screen font. Along with building the font, the outline font has to be loaded from the hard disk first; thus, the faster



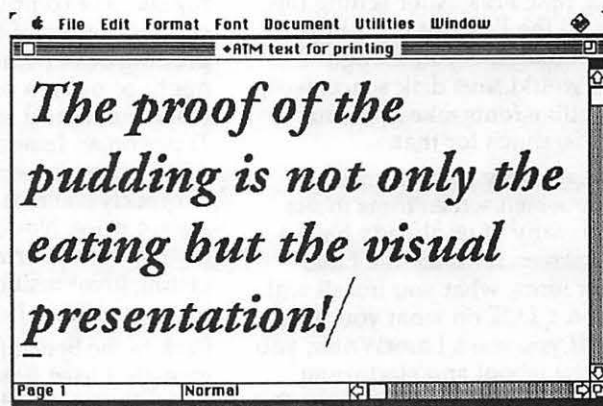
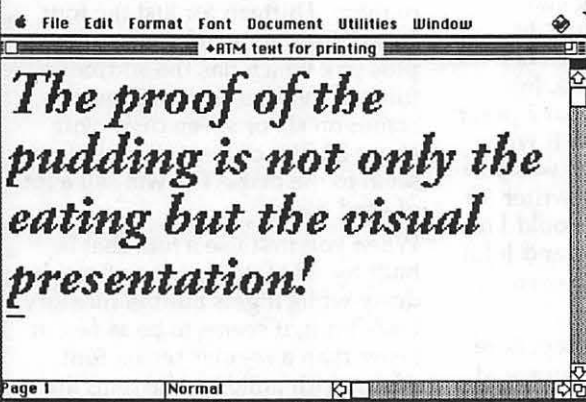
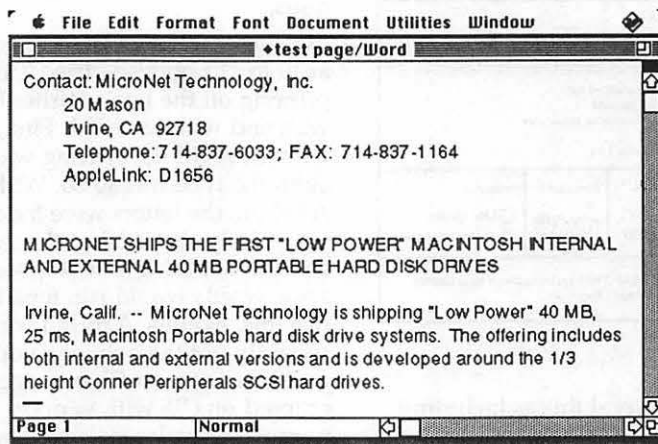
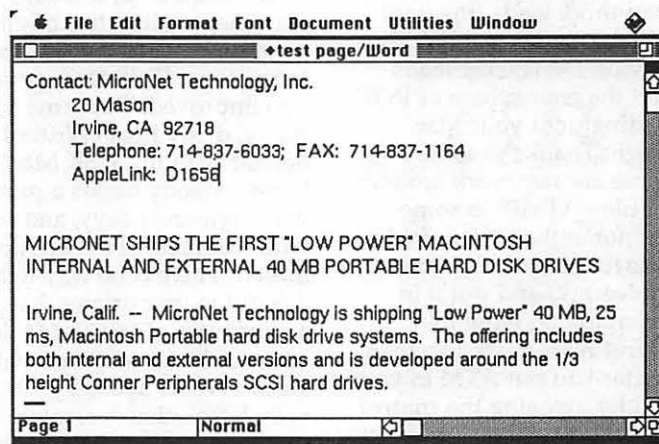
the hard disk, the less the wait. I've recently upgraded to a Micronet 173 megabyte hard disk based on the Imprimis Wren V drive; it's a real screamer, but loading the fonts does take a noticeable amount of time.

For screen sizes less than say, 18 or 24 point, ATM built fonts will not look as pretty on screen.

The upper screen is text at 14 point Helvetica using a bitmap screen font, while the bottom is the same text but using an ATM built screen font. Not only are the characters less aesthetically pleasing, the intercharacter spacing is quite different. Of course, the bottom one prints out prettier than the top one, even though the screen display is a little screwy. Hey, I thought one reason to have ATM was to create a closer correspondence between screen and paper... Well, yes, at larger point sizes as shown in the two pictures shown below:

Now, guess which one has ATM active. The font displayed is the Adobe Garamond Bold Italic font, a truly outstanding Adobe creation.

As we have seen, there are a lot of subtleties involved with using ATM. In the next column will be more on printing with the Imagewriter, and what tricks you can do with the LaserWriter and ATM.



# Are you serious about service?

If you rely on a "service bureau" for your desktop publishing output, you may miss the kind of personal attention and extra care you used to get from your typesetter. Now you can have the best of both worlds—typographic excellence and overnight turnaround on your traditional and your Linotronic jobs.

## Fifteen Years of Success

**Carver Photocomposition, Inc.** has been successful in the typesetting business since 1973. Our success is based on a combination of typographic expertise, state-of-the-art technology, and extraordinary service. Besides being expert typesetters, we are experienced providers of telecommunications, disk conversion and desktop publishing support.

## PostScript on the Linotronic 300

Trading under the name **Carver Publishing Services**, we now offer PostScript runoff on our Linotronic 300 Laser Imagesetter. This is just the latest addition to our full line of services for the desktop typesetting user. We've been setting type from telecommunicated data and word processing disks since 1980.

## Professional Typesetters

Carver is a professional typesetting service—not a service bureau. We support our desktop publishing clients by doing as much or as little of the task of document preparation as we are asked to do—from full-page makeup using **Ventura Publisher**, **PageMaker** or **Quark Xpress** to simple high-resolution runoff on our Linotron 202s or on our new Linotronic 300.

## We Use Your System

Carver offers superior service to desktop publishing system users because we use Ventura Publisher, PageMaker and Quark for much of our own day-to-day production. The chances are that if you have a problem, we've already solved it for ourselves.

## Radio-Dispatched Delivery Service

We have **radio-dispatched pickup and delivery**. We have fax machines and a computer bulletin board to speed service and save courier charges. We have years of experience translating word processing documents into typesetting. We are expert users of desktop systems. In short, we do it all.

## Carver Publishing Services (703) 528-0772

1025 North Fillmore Street, Arlington, Virginia 22201  
#1 DuPont Circle, N.W., Suite 30, Floor 1B, Washington, D.C. 20036

**Open 24 hours a day, Monday through Friday in Arlington.**





# Adobe Type Manager

by Andrew Solmssen

The first salvo of the font wars has been fired, and the finger on the trigger is Adobe's. With the arrival on the scene of Adobe Type Manager, a new option has opened up for high-quality font display and printing, even for those of us not fortunate enough to own a PostScript printer. ATM offers the Mac user a taste of outline font capability, well before the release of Apple's System 7.0.

## What is ATM?

ATM is a Control Panel document, or 'cdev' that you drop in your system folder. It comes with driver files tailored to either the MC68000 family (Plus, SE, & Portable) or the MC68020/030 family (II, IIx, IIcx, IICI, and SE/30). You must choose the appropriate driver and copy it to the System Folder as well.

The Control Panel document allows you to turn ATM on or off, change the amount of RAM ATM uses, and decide whether to give priority to preserving line spacing or character shapes. All changes made in the Control Panel require a reboot to take effect.

The remaining files are screen and Adobe PostScript outline fonts, which can be installed in the traditional way, by using Font/DA Mover to install the screen fonts to the System file and placing the outlines in the System Folder, or by opening the screen fonts with a font/DA extender like SuitCase II or MasterJuggler. Using an extender allows one to place the outline fonts in a folder other than the System Folder. ATM comes with outlines for Courier, Helvetica and Times in normal, italic, bold, and bold-italic variations, and Symbol. Adobe is also selling the "Plus Pack" of additional PostScript fonts, adding Avant Garde, Bookman, Helvetica Narrow, New

Century Schoolbook, Palatino, Zapf Chancery, and Zapf Dingbats. If these names sound familiar, it's because they complete the set of fonts that come with the LaserWriter Plus/NT/NTX, and other printers using the Adobe PostScript controller.

## Using ATM

The Type Manager is almost transparent in operation. The only clues to its operation are a slight delay as new bitmaps are generated. The delay is almost unnoticeable on anything in the Mac II class, and a little more noticeable on a Plus or SE.

One option provided in the Control Panel allows you to choose between preserving line spacing or character shapes. With the preserve line spacing option set, some characters with long descenders or especially tall characters may be clipped. With preserve line spacing chosen, the characters are slightly farther apart, preventing clipping but affecting the leading of the document.

## How Does ATM Work?

ATM performs its tricks by interposing itself between the Mac operating system and its font resources. When you select a font size in an application, the Mac checks to see if a screen font is available in the size requested. If one is not, it scales a screen font up or down to the desired size. This results in the "jaggies," as bitmaps don't generally scale well.

ATM steps in when the operating system can't find the bitmap size it needs. It creates a bitmap from the PostScript outline fonts, and provides this to the operating system, which then displays it.

This has effects beyond just screen

display, though. Because most QuickDraw printers such as the ImageWriter, DeskWriter, and the LaserWriter IISC request fonts from the operating system for high-quality printout, ATM is able to provide bitmaps to the printer drivers as well. This means that, with some limitations, even users without PostScript printers can get excellent printout from PostScript fonts.

## Who Benefits From ATM?

ATM provides a new capability to Macintosh users, but some of us are better positioned to take advantage of it than others. There are really three classes of ATM users: Those with PostScript printers, those with high-quality QuickDraw printers, and those with lower-quality QuickDraw printers.

ATM offers the benefits of truer WSIWYG screen display to Mac users with PostScript printers. Since the screen fonts are created from the outline fonts, they are a much truer representation of final output than traditional screen fonts. Especially at larger sizes, kerning and accurate placement of letters is difficult with the jagged bitmaps that were the rule before ATM. The Type Manager can be very helpful for this group of people.

Users who have high-quality QuickDraw printers stand to gain the most from ATM. Both screen display and printout will be improved. ATM will provide the 4X multiple font sizes that the drivers for the DeskWriter, LaserWriter IISC and other 300 dpi printers require. One significant advantage is the ability to print characters larger than 24 points. The largest generally available bitmap fonts are 96 points, which gives 24 points as the largest size a 300 dpi printer can print without using outline fonts ( $96 \div 4 = 24$ ). Printer makers such as GCC and Hewlett-Packard have gotten around this problem by providing proprietary outline fonts with their printers, but ATM opens these printers up to the entire Adobe font library, not just the fonts that come with the printer. I have successfully printed 250 point characters at 300



dpi from a DeskJet using the MacPrint driver software and Quark Xpress. Using fractional spacing is important for better printout, although it may make on-screen spacing less than perfect. Users with 300 dpi QuickDraw printers are well-positioned to take advantage of what ATM has to offer.

Mac users with ImageWriters can use ATM, and it will provide them with the ability to print large text cleanly without jaggies. ATM is less useful for ImageWriter users at standard text sizes like 10 and 12 point. At these sizes, ATM can produce problems with the spacing between characters, especially with applications that do not support fractional spacing on the ImageWriter, including Microsoft Word. Adobe recommends using the Apple screen fonts in this case, and I recommend installing them to 24 points so ATM does not affect printout at sizes 12 points and below. ImageWriter users can still benefit from the better screen display and the superior printout at large sizes. One other advantage for ImageWriter users is truer proofing for the LaserWriter. You can work on and print a document at home on an ImageWriter, and print it on a LaserWriter elsewhere and still find all your line breaks in the same place (Be sure to check Tall Adjusted in the Page Setup dialog box for this to be effective).

### *ATM Limitations*

Adobe Type Manager does have some limitations, though. The most pressing are its demands for space both in RAM and on disk. ATM requires that some space in RAM be reserved for a "font cache," a temporary storage area for the bitmaps it generates. The initial setting for this cache is 96K, which is adequate for documents containing one or perhaps two fonts. However, display and printing of files with three or more fonts can be agonizingly slow unless more RAM is assigned to the cache. In all, ATM works on a one megabyte Macintosh, but it may prevent you from using large applications like HyperCard especially if you have other memory-intensive Startup documents or use the Apple disk

cache. Adobe Illustrator requires two megabytes of RAM to be used with ATM. I currently have 256K assigned to the font cache, which provides optimal performance. ATM also requires a significant amount of disk space for its outline files, 406K for the outlines it comes with and an additional 817K for the outlines of the Plus Pack. There is some savings from not having to have as many sizes of the screen fonts, especially with 300 dpi printers, but ATM is not really an option for Mac users without hard disks.

Another serious limitation of ATM is that it will only work with Type 1 PostScript fonts. At present, Adobe is the only source of Type 1 fonts, although John Warnock's pledge to make the Type 1 specifications public may make more of these fonts available in future. At the moment, however, ATM cannot use fonts created in Type 3 format, such as those distributed by Casady & Greene, Fluent Fonts, and others.

### *T.A.N.S.T.A.A.F.L.*

Readers of Robert Heinlein will recognize this as an acronym for the phrase "There Ain't No Such Thing As A Free Lunch." Adobe has not released this program out of the goodness of its heart. Apple's announcement of its own "Royal" outline font technology, and the recent agreement with Microsoft exchanging Royal for Microsoft's clone PostScript interpreter have Adobe worried. Adobe feels that the more PostScript users it has, the more people there are with an investment in keeping PostScript as a standard for desktop publishing. There was considerable internal debate at Adobe over whether ATM should support 300 dpi printers, with one side feeling that this would reduce the sales of PostScript-equipped printers, and the other seeing a new market for Adobe fonts. The ImageWriter has been heavily emphasized in Adobe advertising for ATM, yet ATM has only limited usefulness on an ImageWriter. Adobe has pledged to keep ATM working under System 7.0, but much remains to be seen in the year to come.

### *Summing Up*

The Adobe Type Manager is a unique and useful tool. It gives all of us the ability to use outline fonts well before the release of System 7.0. It is not the all-encompassing font solution that Adobe has promised, however, and its prodigious appetite for RAM makes it less useful on the vast majority of Macintoshes with only 1 MB of memory.

More significant is its strange effect on spacing of 10 and 12 point text on ImageWriters. There are already a number of work-arounds on CompuServe and local Mac-oriented BBS's, but this is a real problem that Adobe needs to address.

For those who have the tools to take advantage of it, ATM is a powerful tool for high-quality printing. A 300 dpi printer such as the DeskJet or the new LaserJet IIP from Hewlett-Packard, or the LaserWriter IISC can produce excellent results with ATM. Even ImageWriter owners can benefit from ATM's ability to print large letters cleanly.

ATM has found a place on my Mac, and I'm happy it's here. Certainly, for the price (\$99 list, ~\$60 street price), ATM is an excellent value. It remains to be seen how ATM will fit into the scheme of things with the release of System 7.0 next year, but the first shot in any war, even a font war, is rarely the final one.





*HyperMedia...not just hype*

# Culture 1.0: The HyperMedia Guide to Western Civilization

by Karen Rall

Culture 1.0 has skimmed the best offerings of history, art, music and literature and presented it in way that even the most uncultured among us can enjoy (and maybe even learn something in the process).

Culture is 4.5 megabytes of information, extensively cross-linked in HyperCard stacks. Created an experienced educator in humanities, it provides a full multimedia experience of the humanities. Information ranges from overviews of the humanities in various historical periods, to in depth essays on selected topic what happened today in history.

Each of the eight stacks cover a period in history. These are Biblical History, Baroque, Classic, Greco-Roman, Middle Ages, and Renaissance. The eighth stack is the Cultural Almanac which provides interesting insights into annual anniversaries of events. For example, did you know that Attila the Hun died on March 15, 459 of a nosebleed? He got the nosebleed in a fight after he profaned holy things at a wedding.

The organization of diverse topics is easy to navigate with a return button which takes you back the last topic and a map which lets you see just where you are. The stacks are extensively cross-linked to allow free exploration of information. A mouseclick on the phrase "Attila the Hun", brings takes you to a card with more about this Asian, Turco-Mongol HUNGarian and what was happening back in the 5th century. (Basically a lot of squabbling between less than polite groups.

While checking out this time period, I was also able to find that the canon (like row, row, row your boat) was developed during the 5th Century in England. (The boat rowing explanation is provided by Culture.)

As you can see, the Culture stacks are very conducive to browsing around, hearing a few bars from a symphony and peeking at a representative illustration while culling bits of historical information. For the average person with a passing interest in the humanities, Culture offers a "Cliff Notes" approach to the humanities, with interesting facts and gossip.

For educator in the humanities, Culture provides a serious teaching aid. This is full of in depth information and examples of art, music, literature and history. A variety of tools are included that allow the user to create their own pathways through all the information to create specific lectures. Example paths show the History of Italian opera, a Brief History of Architecture, and English History Highlights.

Each period includes an introduction, an overview essay and essays giving insights into music and art of the time. Samples of music and art are available. The number of examples are a fair trade off between the amount of memory chewed up by a scanned image or music. They are scattered throughout, but not too many. This leads to one major drawback of Culture, it takes up a lot of memory on the hard drive. I cannot keep it permanently installed on my drive due to lack of space. It would lend itself

well to a compact disk, but I don't have a disk player at home—a dilemma either way.

Another useful tool is the ability to create your own notes to go along with the cards. Each card can have a note which may include quotes from the card itself. The notes can be exported to a text file which may be opened by a word processor.

Culture is a useful example of what HyperCard can provide, a flexible environment where non-programmers can organize pictures, sounds and text to provide a fuller view of an expansive topic like the history of humanities.

And remember this winter, St. Blaise is the patron saint of sore throats.

Culture 1.0  
Cultural Resources, Inc  
7 Little Falls Way  
Scotch Plains, NJ 07076  
201-232-4333

\$175  
Requires:  
HyperCard 1.2  
Macintosh with 1 Megabyte (minimum)  
HardDrive with at least 4.5 MB free

*Karen is head developer and product manager for Wild Things from Language Systems. She's also married to Eric Rall, but one way or another, we all make sacrifices...*

**NEW!**  
**MacImage Services**  
from Capital Presentations Inc.



**PICT or POSTSCRIPTI**  
High Resolution 35mm Slides  
From Your Disk or  
Via Modem  
24-Bit Color  
Over 16 Million Colors  
**NO ADDITIONAL SOFTWARE  
NECESSARY!**  
**3 Free Slides With First Order**

**Software**  
• Aldus Persuasion • PowerPoint • MacDraw • Cricket • Excel  
• Adobe Illustrator • FullPaint • PageMaker • SuperPaint •  
PixelPaint • Aldus Freehand • and many others

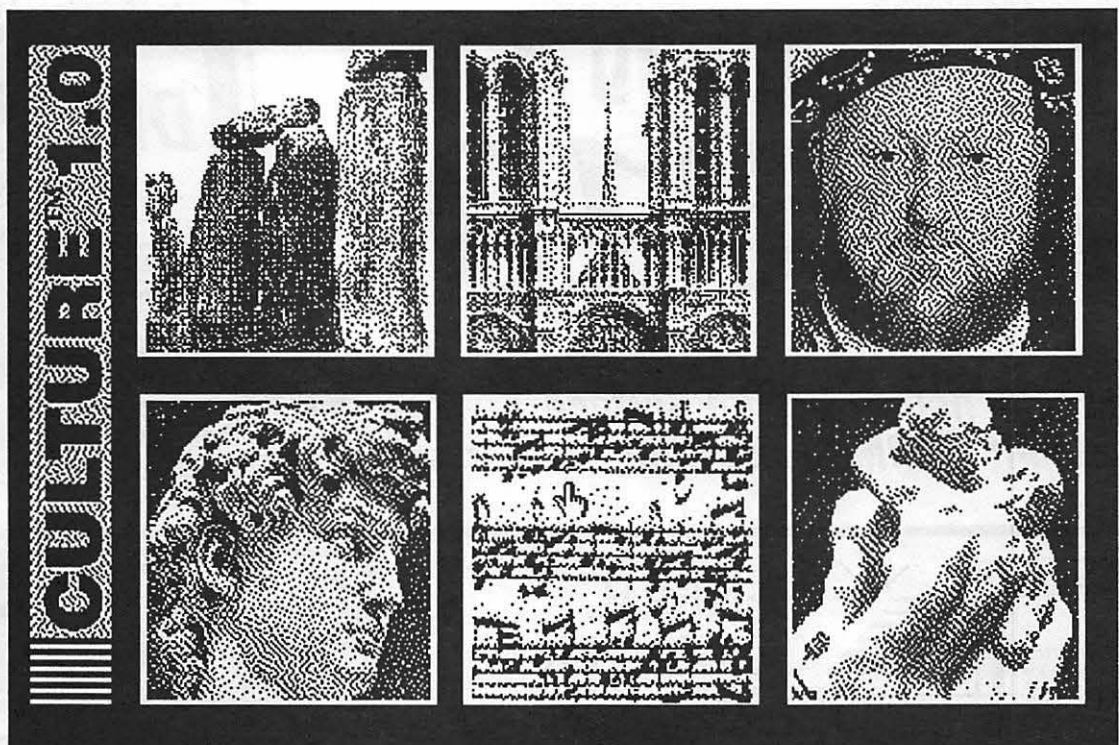
**Typefaces**  
• Avant Garde • Bookman • Courier • Optima • Helvetica • Narrow  
Helv. Cond. • New Century Schoolbook • New York • Palatino • Times  
• Zapf Chancery • Zapf • and others

**From our production studio**  
• Full design and production services • Training • Troubleshooting •  
Value added editing • Custom illustrations and clip art

**CAPITAL PRESENTATIONS INC.**  
PICTURE WORTH A THOUSAND WORDS™

Phone: 301/588-9540 Modem: 301/588-0668  
10 Post Office Rd., Silver Spring, Md. 20910





## Cultural Almanac



30 November

### ST. ANDREW'S DAY

Tandra cake, Scottish specialties: shortbread, Dundee cake

Accession of Canute on the death of Edmund Ironside in 1016

(Canute was the 1st Danish ruler in England)

**Oscar Wilde** died in Paris in 1900 at age 46, remarking on his hotel room's wallpaper ...

"One of us had to go."

### BIRTHS

Andrea **PALLADIO** - 1508

Sir Philip Sidney - 1554

Jonathan Swift - 1667

Carl Loewe - 1796

Mark Twain (Samuel Clemens) - 1835

Winston Churchill - 1874



Find...

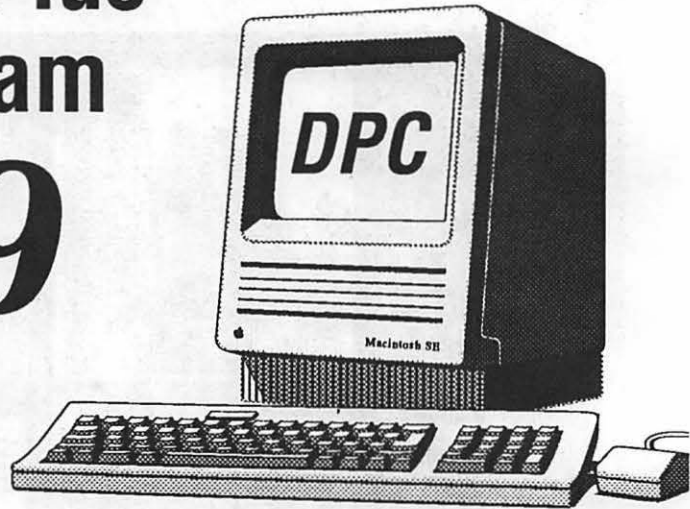
Reader's Notes

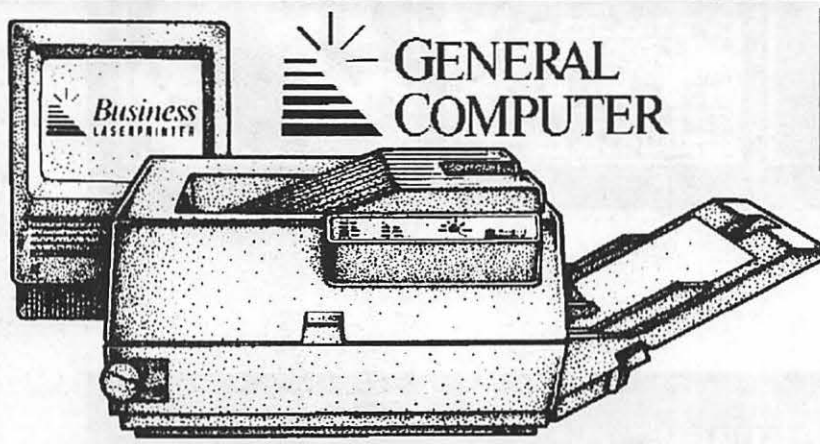


Upgrade your Mac Plus  
or SE to 2.5 meg Ram

Only **\$319**

1 meg 100 ns Low Profile Surface  
Mount SIMMS, installed





**GENERAL  
COMPUTER**

**\$1599**

*Personal Laser  
Printer*

---

**Quickdraw Based  
300 DPI Laser**

## Christmas Hard Dive Sale

**CMS External 20 meg \$399**

**CMS External 30 Meg \$459**

*With 1 year Warranty*

*Desktop Publishing Center will match  
or beat prices from any advertised  
instock local Authorized Apple Dealer  
on any Macintosh products.*

*Every Product Sold Carries DPC's 100%  
Money Back Guarantee.  
Your Satisfaction Is Our Priority*

**MICROTECH**  
INTERNATIONAL, INC.

**NOVA 40 \$699**

**NOVA 80 \$999**

**45**

*Meg Removable  
Hard Disk*

Only **\$999**

*Microtech Drives  
Have a 5 Yr. Warranty*

**DESKTOP PUBLISHING CENTER (703) 658-0033**

# **Desktop Publishing Center Doubles Apple's Macintosh Warranty**

*On every Apple product purchased From DPC from Oct 21 thru Dec 24, 1989*

## **Who Else Can Offer You**

- **Color & Grey Scale Scanners**
- **Hard drive 20 to 600 meg**
- **Big Screens**
- **Accelerators**
- **Complete Mac. Systems**
- **Service & Tech Support**
- **Networking**
- **QMS Color Printers**

## **Macintosh Systems**

Mac IICX 5 meg Ram 100 Meg Drive	\$4995
Mac IICX 2 meg Ram 40 Meg Drive	\$3995
Mac SE/30 2 meg Ram 40 Meg Drive	\$3795
Mac SE/30 5 meg Ram 100 Meg Drive	\$4895
Mac SE FD/HD 30 Meg Hard Drive	\$2494

## **PCPC**

**PCPC Shadowgraph  
Grey Scale Monitor**

**\$1995**

**With This Ad Only**

## **Qume ScriptTen**

**Adobe Postscript  
3 meg of Ram 35 Fonts  
10 pages Per Min**

**\$3495**

**With This Ad Only**

## **Desktop Publishing Center**

**5704-G General Washington Dr. Alexandria**

**TEL (703) 658-0033**

**FAX (703) 658-0386**

**Located next to Marlo at I-395 & Edsall Rd.**

Apple & Macintosh are registered Trademarks of Apple





# TCS Gleanings

by Lou Pastura

Let me make myself perfectly clear: THIS IS A COMMERCIAL. I admit it. It's a commercial for the WAP Teleconference System (TCS), and it's a commercial for telecommunicating in general. No matter what you produce with your Mac—art, documents, publications, spreadsheets, data bases—telecommunicating can enhance what you do and how you do it. The TCS is replete with information and points of contact for answering your specific questions, adding to your general base of knowledge and extending your network of informed and interesting people.

What I plan to do here each month is summarize the most useful information from recent messages on the TCS, add a few tidbits gleaned from other sources and make a few comments of my own. Do be tempted to explore the TCS and telecommunications on your own and discover all the goodies I'm leaving out.

## Mac Utility Survey

A feature of the TCS that can provide entertainment and resources to WAP members is the interactive survey. One such survey is used each week to run a football pool. Its weekly prize is a disk from WAP's outstanding public domain disk library. In addition, WAP members conduct periodic ad hoc surveys on a variety of subjects. For example, recently Ryan Edelstein conducted a survey on favorite Mac utilities of WAP members. With one word of caution—the results often represent "used most frequently," not necessarily "best featured"—here are the survey results:

Best Font/DA Manager: No contest. Suitcase II took first place.

Font/DA Mover placed a distant second and Master Juggler was close behind it in third.

Best Backup Program: In this category, DiskFit, from SuperMac, came in first. FastBack was close behind in second. HD Backup and HFS Backup tied for third place.

Best Utility Package: The winner, Symantec Utilities for Macintosh (SUM) registered seven times more votes than PC Tools, the second place winner. An assortment of packages shared the third place spot.

Best Partitioning Program: Whatever it means, in this category, "None" garnered the most votes! Among those who do use partitioning, HD Partition (bundled with SUM) and MultiDisk tied for second. In last place was SilverLining from LaCie.

Best Macro-Designing Utility: QuicKeys from CE software took honors as the most popular macro-making utility. MacroMaker (Apple), AutoMac III, and Tempo II each received votes, but placed far behind the first place winner.

Best Anti-Viral Program: Not too surprisingly, shareware programs got the most votes in this category. Of the commercial virus protection programs, Symantec Anti-Viral for Macintosh (SAM) came in first, with Virex and AntiToxin in second and third places respectively.

Best Desk Accessory: There were many different responses in this category. The most popular, though, were DiskTop, SmartScrap, and NotePad II. Other DAs included Talking Moose, Scientific Calculator, Easy Envelopes, WordFinder, Calculator+, Curator, HyperDA, Locate, Clipper,

QuickDEX, MockWrite, Virus Detective, and WriteFontSize. Lots of these DAs are here on the WAP TCS in the Mac Utilities section. Check 'em out!

Best INIT: The INITs most voted for, in order, are Suitcase II, SuperClock, QuicKeys, Boomerang, Pyro!, Moire, and Facade. Others voted for include: FindIT, GateKeeper, Talking Moose, Shortcut, OnCue, INITcdev, Aask, and INIT Picker.

Best Beginners' Utility: Symantec Utilities for Macintosh (SUM) was voted for most often for new users. StuffIt came in second, and Suitcase II came in third. DiskTop got a few votes also (we'll give that an honorable mention). Other recommended utilities were Layout, DiskExpress, Vaccine, GateKeeper, OnCue, Font/DA Mover+, and DiskFit.

Best FKey: This category pretty much belongs to Switch-A-Roo. Note: this FKey is only useful on Macs with monitors that have different viewing modes (1 bit, 8 bit, etc.). If you have a Mac with a 9" screen, don't bother downloading it. Other popular FKeys were Ripper, Mount 'Em, Fit to Mac, and Dudek's Defrost (whatever that is!).

Best Software Store: MacConnection was the big winner in this category. Note: MacZone has gone through some changes and they now are often beating MacConnection's prices and they also offer \$3 overnight delivery. Other good stores included MacWarehouse, Clinton Computer (or whatever they are called) in Alexandria and Rockville, Egghead, and MacCorner.

## Adobe Type Manager

Reactions to the Adobe Type Manager have been generally positive with only a few negative reactions. The output I have seen from an ImageWriter II won't make anyone sorry they bought a LaserWriter, but it's hard to believe that the results you see are from a 9 pin printer. Our own esteemed Dr. No has pointed out that the intercharacter spacing in 10 and 12 point leaves a lot to be desired. I don't recall the specific term he used, but it was something along



the lines of atrocious, abominable, grotesque (or something like that). The consensus seems to be that, for the price, it's a reasonable value, but that unless you need ATM's features right away your best bet is to hold on awhile and see what System 7.0 has to offer before making an investment.

### DeskWriter

The Hewlett Packard DeskWriter, reviewed in November's Journal, has been the topic of much discussion, particularly in comparisons with the DeskJet and DeskJet Plus (HP's other 300 dpi inkjet offerings) and with HP's new low cost laser printer. On the plus side, the DeskWriter comes bundled with four fonts (Times, Helvetica, Courier and Symbol) that are scalable from 4 to 250 points. The 300 dpi quality is excellent and the print speed is, based on my experience, more than acceptable. On the down side, the DeskWriter is more expensive than the other inkjets, but the price differential narrows when the interface and fonts necessary to match the DeskWriter are added to the DeskJet and DeskJet Plus prices. All 3 inkjets share a common problem, water soluble ink that runs if the printed page comes into contact with even the smallest amount of moisture. This "feature" makes it risky, to say the least, for use with envelopes. It also gives a new meaning to the term "flow text." Duty cycle on the inkjets (about 50 pages per day) limits them to light duty situations. The new personal laser has a higher duty cycle than the inkjets and does not suffer from the potential for "run on sentences." Remember to add the interface and additional fonts to the cost of the laser when you're comparison shopping.

### Warranty

Well, if the rumors are to be believed, the 90 day Apple warranty may soon be a thing of the past. Insiders at Apple who have asked to remain nameless admitted that there had been a great deal of pressure lately on this issue, but confirmed that it was Frank Potter's recent editorial in the WAP

Journal that convinced them of the error of their ways. Way to go, Frank! Seriously, there has been some discussion that Apple might possibly be reconsidering a change in their warranty policy and that the change may be imminent. Keep your fingers crossed.

### Quantum

Apple has finally acknowledged what many have known for some time. There are serious problems with some 40 and 80 MB hard drives that have been bundled with 68030 machines. The symptom is an intermittent failure to boot from and/or recognize the drive. Apple and Quantum have worked out a fix for a specific series of machines that involves replacing a ROM chip on the hard drive board with a new version that generates a higher startup voltage to help the drive get underway. All failed drives will be repaired free of charge. Owners who have paid to replace affected drives out of warranty may be eligible for reimbursement. If you think you may have a flaky Quantum hard disk contact your dealer or Apple customer service for more information.

### New TCS Disk for Mac Users

As a final note, for those of you thinking good thoughts about the possibility of getting involved in Mac telecomm, let me make it easier for you. We have put together a disk for the Mac Disk Library that includes a shareware telecommunications program and a number of text files written to help you get on the TCS and find your way around with a minimum of difficulty. You can pick it up at the next meeting or call the office with a credit card and they'll drop it in the mail.

That's it for this installment of "As the TCS Turns." If there's a subject you'd like to hear more about or a question you'd like answered, let me know and I'll do my best to accomodate your wishes. Better yet, send your \$6 to the office, go out and get a modem and a cable and explore the wonderful world of telecommunications on your own.



**Data  
Conversion  
Services, Ltd.**

10875 Main St.  
Suite 207  
Fairfax, VA 22030

### DATA CONVERSION

OPTICAL CHARACTER SCANNING

DISK & TAPE CONVERSIONS

OVER 1,500 FORMATS SUPPORTED

**(703) 352-2210**

# MacInOffice<sup>®</sup>

101 W. Broad Street  
• Suite 400 •  
Falls Church, VA 22046  
(703) 532-7400

What do you get when you buy  
a Macintosh<sup>®</sup> for the “best price?”

Needs Analysis?

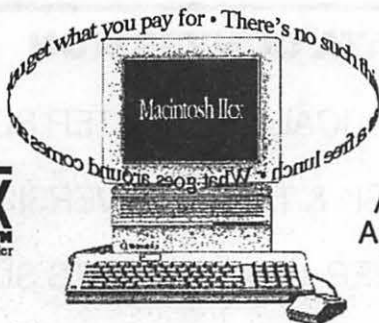
System Design & Integration?

Custom Training & Support?

Application Development?

On-site Maintenance?

Want the real “best price?”



## MacInOffice<sup>®</sup>

“When the best makes sense”

# Call us! 532-7400



# The Care and Feeding of Technical Support

by Mike Berganski and Jay Heller

Jack - Hello, Technical Support, may I help you?

Customer - I have a Laserwriter IINT and when I try to print, I get an error telling me that no printer can be found on the SCSI bus.

Jack - Hmm... If you open the Chooser from the Apple menu do you see an Icon marked Laserwriter?

Customer - I don't need to do this! I have been doing it this way for one and a half years and it has worked this way all the time!

Unfortunately calls like this do happen but if you take the following steps, this scenario may be avoided and your experience with service or technical support made more productive.

Step 1 - Take a deep breath and collect yourself. The support person is there to assist you and with your cooperation can and will resolve your problem. Remember we need your information but most of all we need your cooperation.

Step 2 - Know what type of equipment you are using. A large number of callers are unfamiliar with the equipment in front of them. Before calling Technical Support or Service have the following information available for the support person:

- Model of CPU (e.g., Macintosh IIx)
- Model and size of Hard Disk.(e.g., Rodime 140 Plus)
- Amount of memory
- Serial number and warranty information if this is a service call.

If there appears to be a software problem:

- System Software Version.
- Using Finder or MultiFinder.
- List of Inits, CDev's, and DA's used.
- Program being used, including the version number.
- Other applications (MultiFinder) or DAs being used at the time.
- What were you doing and what happened when the problem occurred?
- If you restarted the machine, did everything work properly after restarting?

or a hardware problem:

- Normal startup sounds? If not what type of sound.
- What do you see on the screen.
- Do you see or smell smoke?

- Any abnormal noises (squeaks, grinding)?

Step 3 - Call Technical Support or Service. Remember Step 1 and have the information from step 2 handy. Our goal is to answer each call immediately. Occasionally other calls will precede yours and you may not reach us directly. Please be patient. Remember, even though your call is very important, another person with an inquiry called before you and their call is also important.

Step 4 - Follow the directions. Some questions that the Technical Support or Service person might ask you may sound absurd but are the result of experience. It is often necessary to start at the beginning and proceed step by step to find an answer. Had the person in the example followed the prompting by the support person, the problem would have been solved within a shorter amount of time. Many problems are solved by simply making sure that everything was plugged in or insuring that software was installed correctly. We all are human and even the experts make mistakes.

The End - After you are done, let your service provider know how they did. We need your feedback, problems cannot be corrected and service improved without it.

*Mike Berganski and Jay Heller provide technical support for Falcon Microsystems. Both have worked with Apple products for over 6 years each.*

## Technical & Sales & Service

I . N . C 1 . 9 . 8 . 0

**MAINTENANCE  
REPAIRS  
SERVICE**



**Maintenance Contracts**  
Macs • Laserwriters •  
Imagewriters •  
Networks • Tops • Novell  
Ram Upgrades •  
Hard Disk Installations

**On Site &  
Carry In**

**2820 Dorr Ave., Fairfax, VA**

**698-0347**

a b c d e f g h i j k l m n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m  
n o p q r s t u v w x y z a b c d e f g h i j k l m

# Feel free to compare Bitstream fonts to Adobe's. Absolutely free.

Right now, Bitstream is offering anyone who has purchased an Adobe® font a free Bitstream® typeface family for the Macintosh® One that Adobe doesn't offer.\* A \$180 value. Plus a typeface that Adobe does offer, so you can compare. The design. The character spacing. The kerning. And the overall quality. We think you'll like what you see. And the fact that Bitstream offers the largest library of typefaces for both Adobe PostScript® printers and clones. In fact, hundreds more faces than Adobe. Naturally, an offer this good is valid for a limited time only. Call 1-800-848-8220 ext. 619 for your free typeface.



This offer is made in the U.S. and Canada only. Limit one per customer. Offer starts October 1, 1989 and expires January 15, 1990. Allow 4-6 weeks for delivery. © 1989 Bitstream Inc. Bitstream is a registered trademark of Bitstream Inc. Adobe and PostScript are registered trademarks of Adobe Systems, Inc. Macintosh is a registered trademark of Apple Computer Inc. \*As of September 15, 1989.

a b c d e f g h i j k l m n o p q r s t u v w x y z a b c d e f g h i j k l m

# Fastat

by David Morganstein

**1. Overview.** Fastat is unique among the packages we reviewed for several reasons. It is the only package with a genesis, though not current form, in another operating system. Second, all of the other packages operate by having you select the dependent and independent variables before any analysis is attempted. When using Fastat, you select the analysis you wish and then identify the variables to be included and their role in the analysis. It is a solid, third generation product with many features. It comes in two versions, one for 68000 equipped machines and one for 68020/030 equipped machines.

The origins of Fastat are in the widely used and well-tested Systat programs. These routines, written in FORTRAN, first appeared on personal computers as programs for the CP/M operating system (there is a mini-computer version as well). The routines were ported to MS-DOS and then to the Macintosh. While SYSTAT has undergone extensive modifications to make it more 'Mac-like', it remains a command language statistical package in which text commands in correct grammatical form are typed in and executed.

Whereas the SYSTAT programs are very complete, FASTAT represents only a sub-set of that analytic power. However, it is totally Mac-like in operation and does most of the analysis offered by the other packages. Prior to the release of FASTAT, the Systat, Inc. developed a mini-package called Mystat which it distributes free of charge. A very useful program, Mystat was a marketing test of the direction being taken by the company. FASTAT shares the Mystat fully menu-driven, windowing approach to statistical analyses.

While we won't dwell on this aspect, underlying FASTAT is the Systat command language. It is possible to drive the program in a batch mode by submitting a file of Systat commands contained in a text mode. While most novice users will rely upon FASTAT's menu driven interface, it may be important to more experienced data analysts to know that this option is available.

**2. Interface.** Similar to Statview, the FASTAT interface is that of a spreadsheet or data table. After running FASTAT, the screen shows a data window with rows and columns. At the top of each column is the variable name; character variables (e.g. CAR\$ below) are indicated by a '\$' as the terminating character in the name. Data can be entered into the window

	CAR\$	MILEAGE	HEADROOM	REARSEAT
1	AMC Concord	22.000	2.500	27.500
2	AMC Pacer	17.000	3.000	25.500
3	AMC Spirit	22.000	3.000	18.500
4	Audi 5000	17.000	3.000	27.000
5	Audi Fox	23.000	2.500	28.000
6	BMW 320i	25.000	2.500	26.000
7	B Century	20.000	4.500	29.000
8	B Electra	15.000	4.000	31.500
9	B Le Sabre	18.000	4.000	30.500
10	B Opel	26.000	3.000	24.000

## Data Window

The choice of how and when to identify the roles of variables in the statistical analysis represents a choice in philosophy of the software designer. When using FASTAT the user selects an analysis, such as requesting graphics, descriptive statistics or linear modelling. After making this analysis choice, an appropriate variables selection box appears. If the request is a univariate one, a single scrolling list of variables appears from which the user makes a selection. If a multivariate

analysis has been requested as in the screen below, two scrolling lists appear, one for selecting the 'dependent' variable and one for the selecting one or more 'independent' variables.

## Variable Selection for Multiple Regression

After the variables and any other options are chosen (e.g. identifying a variable as continuous or categorical, requesting that residuals be displayed, etc.), the analysis is performed and the results displayed in a separate output window.

The FASTAT approach is in contrast to the other programs we examined in which flags are set on each variable identifying each as a dependent, independent or 'unused' variable. All subsequent analyses use the currently identified variables until the flags are changed. Our preference is for the FASTAT approach given that the analyses we perform usually involve a variety of dependent/independent variable combinations. The later approach requires that the indicator flags be removed after each analysis and re-entered

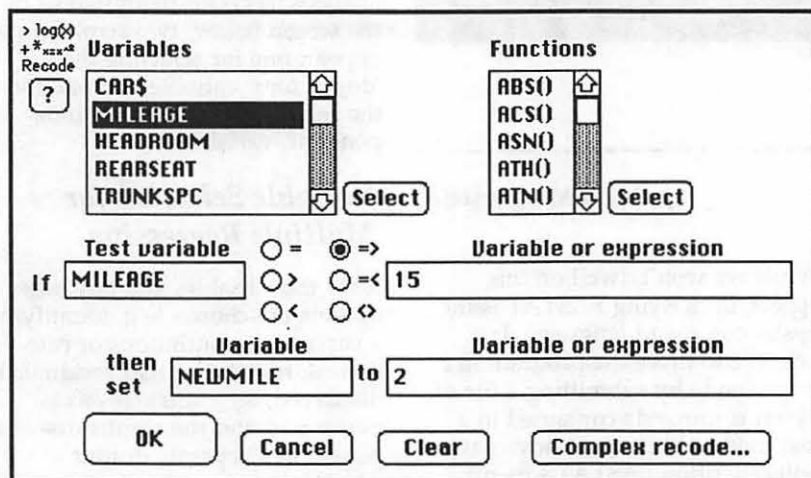
for those variables to be used in the next analysis.

**3. Working with Data.** FASTAT offers a number of methods for modifying the data file and creating new variables. One or more variables can be sorted, ranked or standardized. In order to use these options, however, FASTAT creates a new, permanent version of the data file for subsequent access. This is something of an inconvenience and can result in the creation of space-wasting variations of the original data.

New variables can be created easily







New variables can be created easily from old ones using monadic functions or combinations of several variables. It is not necessary to create new variables since old ones can be replaced by specifying a functional transformation. In the following view of the Transformation dialog box, the variable MILEAGE will be replaced with the log of MILEAGE. It should be mentioned that these transformations are static. Should the source data change, the 'transformed' variable does not. Only JMP and Exstatix offer dynamically transformed variables that contain formulae.

#### Transformation Window

In addition to easy-to-implement transformations, FASTAT provides offers the ability to recode data in a similarly facile manner. The following Dialog box is used to specify break points and conditions for setting the value of the recoded result. Clicking the 'complex recode' button, allows additional conditions which can be 'and'ed and 'or'ed together.

#### Recode Window

FASTAT does not offer a method of aggregating data using a stratifying variable. That is, it is not possible to combine across records to obtain a smaller file containing one record for every level of the stratifying variable. It will however perform certain analysis on a group basis, that is, repeating the analysis for

each level of the grouping variable. Although FASTAT does not offer specific commands for joining and merging files, this can be accomplished via the clipboard. An  $r \times c$  array of numbers pasted from the clipboard will add  $r$  additional rows at the bottom of a data set that contains  $c$  columns (variables) or  $c$  new variables to the right of an existing set of variables. FASTAT does exclude from analysis records containing missing items. A missing item appears as a decimal point in the data table.

#### Multiple Regression Analysis Window

1 cases deleted due to missing data.

##### Regression

Dep var: MILEAGE	N: 74	Multiple R: .827	Squared Multiple R: .684			
Adjusted Squared Multiple R: .671		Standard Error of Estimate: 3.320				
Variable	Coefficient	Std Error	Std Coef Tolerance	T	PC2 tail)	
CONSTANT	42.926	6.390	0.000	6.718	0.000	
HEIGHT	-0.007	0.002	-0.915	0.0539118	-3.163	0.002
DISPLCAT	0.011	0.010	0.179	0.1832274	1.142	0.257
LENGTH	-0.019	0.059	-0.073	0.0850147	-0.315	0.754

##### Analysis of Variance

Source	Sum-of-Squares	DF	Mean-Square	F-Ratio	P
Regression	1671.971	3	557.324	50.568	0.000
Residual	771.488	70	11.021		

The following screen shot shows the ANOVA request dialog box. The dependent variable is selected in the left box and the dependent variable(s) in the right. Unfortunately, for each independent

variable selected, FASTAT requests that you provide the number of levels for that variable. This is an unnecessary and confusing request. If you enter a value that is smaller than the number of levels taken by the variable, FASTAT will not perform the analysis and indicate that the number of levels you enter manually must match the number present in the file. Also, only numeric variables can be used as independent variables, a serious drawback. Most of the other packages perform analyses using character data to define levels of an independent variable in an ANOVA (in contrast, FASTAT does allow the cross-tabulation of character variables).

#### ANOVA Dialog Box

FASTAT's Plot option is particularly powerful. It can produce scatterplots, influence plots or line plots. A set of scatterplots, arranged as in a correlation matrix, can be requested by clicking on a SPLOM icon. It will place a line of regression on the plot as well as a confidence band around the line. A check for normality can be performed with a probability plot. Considerable flexibility is offered since the user can specify the XY ranges, the location of axes and optional horizontal or vertical

grids. Another variable can be used to provide the data needed to draw error bars or to define the size of the plotting symbol.

Below you see a 3-D scatter plot, including a fitted quadratic surface.

Optionally, a 'spike' or drop line

solution to a mapping problem. If

number is provided.

can be added from the plotted points to the bottom plane. The tools in the upper left hand corner serve several useful purposes. They can identify individual points, or select a set of points. The 'flash-light' icon performs a projection onto one of the bottom-most pair of axes when viewing a 3-D plot. Alternatively, it can be used to highlight data records in the data window so that they appear selected in a 2-D scatter plot.

### 3-D Scatter Plot

Virtually all FASTAT 020 graphs can be embellished in color.

Two plots can be mixed together to create a more valuable display. After the first plot is prepared, additional plotting requests are accompanied by the option to Overlay or Stack the subsequent plot. Selecting Overlay allows for two plots to appear in the same window either one atop the other or side by side. The Stack option adds the plot to the bottom of a scrolling window, similar to the effect offered for scrolling text output. A sequence of displays that have been saved can be 're-played' using a movie option which displays each member of the sequence for a predetermined time. FASTAT offers one unusual analysis option not found in any other package, the shortest distance

you provide a series of XY coordinates as records, FASTAT will find and display a graph connecting the points such that the length of the connecting line is minimized.

6 Support. The FASTAT manual is well written and fairly complete. While there are a few instances where more detail would be helpful, the novice user will have no trouble learning how to use the program. The manual begins with a 'Plunging In' section that quickly emmers the new user in the workings of the program. The balance of the manual is laid out to follow the menus of the program, making it easy to find the necessary reference to any topic. A final section discussed the command language underlying Systat/FASTAT for the more experienced user who wished to perform a series of analyses without manual intervention, ala a 'batch job'.

The accompanying diskette contains several sample data files for use in experimentation. Many of these files are referenced in the text. In combination, the overall effect is that of a good tutorial on the use of the program. In addition, the FASTAT manual offers some good advice to the novice data analyst.

The Systat, Inc. staff assigned to answer phone inquiries are polite, knowledgeable and professional. Like the other vendors, no 800

7 Summary. We did encounter some problems when using the original version 1.0 with Multifinder. One problem involved leaving FASTAT and switching volumes to load data into other applications. Upon returning to FASTAT to continue the analysis we were frequently greeted by a message indicating that the program was unable to find a required module. We had to use the Finder file selection box to locate the FASTAT folder and required module. This kind of problem reflects that fact that the program is written in FORTRAN and consists of more than 100 separate files which are called into memory when needed.

By way of suggested improvements, more work would benefit the data window interface. A number of features found in spreadsheets would improve the usability of the editor. For example, a provision to split the screen would be useful to view multiple parts of the data table. To be fair, none of the competing programs offered this feature.

FASTAT allows only 12 characters in a character variable field. There are many situations where this would be inadequate. Perhaps the most serious drawback is the exclusion in ANOVA analyses of character data, only numeric data can be used. Most of the competing programs permit the use of character variables to define levels of an independent variable. In addition, there are a number of diagnostic options that could be added to enhance the regression output. Although some of these diagnostics, such as influence, are found in the Plot routine; they can be used only in a bi-variate situation.

We believe that any novice data analyst would find FASTAT to meet their needs. It does offer Time Series options not found in the other packages. Some of the graphics options are un-matched by the other programs.

Systat, Inc. 1800 Sherman Avenue, Evanston, IL. 60201. Phone 312 864-5670





# SimCity — A Planner's Perspective

by Chris Bastian

The really great feature of SIMCITY is its ability to bring to life the dry, academic planning principles I learned in graduate school. Principles such as:

- commercial development in an urban setting generates additional traffic flow.
- additional automobile traffic without transit alternatives causes increased pollution.
- pollution causes monsters to stomp all over your downtown region (actually, I think that last point is usually covered in the PhD program...).

Seriously, while trying to satisfy the computer gamer's desire to let both creative and destructive juices flow, SimCity (by MAXIS Software) does a fairly good job of simulating the joys and pains of urban design and operation.

The game begins with a 10 sq. mile undeveloped landscape of water, grassland and forest (in theory, the terrain is randomly generated, but I seem to keep recognizing the same layouts time after time). A highlight box can be moved to display a closeup view of a 1 square mile box (in which development is conducted). To the left of the map are icons representing your construction options.

The first stage of play is the fun part: construction and development. Using from \$5,000 to \$20,000 in public funds, you (as Mayor) lay out zoning districts, place roads and transit lines, or construct public facilities such as parks, stadiums, power plants and airports. While all development is carried out in square grids of varying sizes, there is still a lot of room for creative expression at this point, as you spread out along the riverfront, or opt for a starkly traditional grid pattern. Gratifica-

tion is almost instantaneous; as soon as land is cleared (part of the zoning process), houses will begin to spring up, factories will start operating (churning out smoke in the process), and tiny cars will begin to fill up the main roads, watched over by roving traffic helicopters.

Faster than you can imagine, however, you will notice that your cash balance has been exhausted. It is at this point that one of the ugly realities of urban planning will set in: it's a lot more fun to build a city than to manage it. And manage it you must. Budgets (paid out of woefully inadequate tax revenues) must be set to pay for the police, fire and highway departments. Each year you will have an opportunity to change tax levels, either high for a quick fix of cash (tax! tax! tax! spend! spend! spend!), or cut to the bone (Read My Lips! No new...). Taxes must be set high enough to bring in revenue, but low enough not to alienate the voters. All the while, you will be inundated, as all bureaucrats are, with endless reams of data; SimCity will chart constantly updated population figures, crime statistics, traffic density maps—and public opinion polls charting your popularity and the issues on the voter's minds (dunces that they are, they'll never vote you out of office, but they WILL leave, thus dropping your tax base).

And, urban growth will bring with it traffic congestion, pollution, energy shortages, crime—problems which cry out for solutions you can't pay for. And it will take YEARS before your tax base is sturdy enough to cover expenses and allow a little extra capital for growth (time is reckoned in months, which pass at a user-selected speed).

Another irritating reality is that development doesn't usually occur QUITE the way planners in their ivory towers envision it. Market forces (can YOU say "unfettered free trade"?) and random chance play a strong role in determining which areas prosper and which do not. Your public may clamor loudly for more housing, while refusing to move into a residential district next to a power plant. The flashy central business district you envisioned may emerge as a bunch of seedy shopping malls, while a fringe commercial development across the river takes off, causing gridlock on the one bridge you built to it.

It is after an hour or so of such aggravations that the bored and desperate will be tempted to resort to embezzlement of funds (an "undocumented extra" feature made available to registered users) to speed things up, and the less civic-minded will be tempted to reach for the Disasters menu. A range of calamities (floods, tornadoes, monster attacks, etc.) may be inflicted upon the populace at will, although the actual location of each incident is randomly determined. Be warned! "Accidents can happen," and do so at random intervals throughout play (nuclear meltdowns are particularly nasty...).

SimCity's quality as an "simulator" (not a GAME, heavens, no!) derives from its use of genuine (if technically crude) models and algorithms to calculate urban conditions. Particularly dear to my heart is the transportation model used to determine traffic volume. Each zone of the city "generates" a certain number of trips, depending on its land use characteristics. These trips are then distributed onto the roads and transit lines adjoining the zone. The more zones along the road (or route), the more traffic, and bingo!, congestion. Not exactly the pivot-point logit modal split model (with stochastic traffic assignment) that I work with in the office, but what do you want for \$30?

SimCity requires 1 megabyte of memory to operate, and will not function under MultiFinder. The program is copyable, but requires



insertion of the original disk to start up. A color version is available for Mac II systems, as is a 'terrain editor' utility. Program documentation is fairly good, and includes a chapter on the history and theory of urban planning, along with a bibliography of classic urban studies texts. If you're looking for a program that's both diverting and informative, SimCity is worth the money.

[Chris Bastian is a Transportation Engineer for the Metropolitan Washington Council of Governments, and holds a Master's Degree in Urban Planning from Hunter College.]

# The Power of our People.



## MACTEMPS

Exclusively Macintosh Services

### 948-9857

Temporaries • Consulting • Solutions • Support

MacTemps & B.O.S.S. are Divisions of Nicklas Associates, Inc.



MACINTOSH

## Satellite Scientific

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

2400 Baud Zoom Modems \$129

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

We have memory for the Mac and GS and II

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

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

Crate comes with Apple SCSI

Authorized Applied Engineering Dealer

Applied Ingenuity Dealer  
1meg RAM card \$295  
Call about InnerDrive

Allan Levy  
301 - 340 - 7839  
Satellite Scientific  
15200-A Shady Grove Road, Suite 800  
Rockville, MD 20850



# Macinations

by Robb Wolov

With only a few shopping days left before the December holidays, you may still be looking for something special for your favorite Mac user (who, coincidentally, may just be you!). Multimegabyte hard disks or a new Mac IIci possess a certain style (I know I wouldn't mind either one—hint, hint!). Your budget, though, may dictate something...well...more affordable. Software utilities fit that bill nicely, style at a modest cost. Mac utilities enhance function and power on a Mac, yet their purchase rarely involves budget busting or a leveraged buyout. As a shopping service for our readers, here's a quick rundown of utilities I've found useful.

### Checkin' It Twice: Utilities:

On Cue (ICOM Simulations, Inc.). This handy little INIT is so logical Apple should have incorporated something like it into its Finder years ago. Rumor has it that a similar function is promised in System 7. On Cue creates a pull-down menu on your screen, into which you can put any application on your hard disk or any document file linked to an application. The documents so loaded appear as hierarchical menus off the main menu. In the Mac world anything that avoids returning to the Finder to accomplish a task saves time. On Cue is one of the best utilities for this purpose. You can, for instance, bypass the Home Card and launch specific HyperCard stacks (or specific data files) from database applications without having to delve through nested windows.

DiskTop (CE Software). Encompassed in the simple format of a Desk Accessory (DA), DiskTop functions as a complete Finder replacement and contains a few additional functions not found in the Finder. If you have ever wished

you could create a folder, change the name of a file or alter the "creator" or "type" of a file while running a loaded application, then DiskTop is for you. I created a macro to launch DiskTop from a single function key. The current version (3.0.4) should be updated to version 4.0 by the time you read this. Gopher 2.0, a very powerful text searching utility, is now bundled with DiskTop.

SuitCase II and Master Juggler (Fifth Generation Systems, Inc. and AL Soft). If all these two utilities did was increase the number of usable DA's beyond the System's limit of 15, they would be worth their asking price. Each does considerably more. Each can increase the number of useable fonts and compress sounds and typefaces to better use disk space. Either is considered a "must-have" for anyone wishing to do serious work on the Mac.

DATabase (Preferred Publishers, Inc.). For a comprehensive review of this flat-file database that thinks it's a DA, I refer you to Ryan Edelstein's in the October journal. Unlike the more complex requirements of a business user, most home users' needs can be accommodated by a flat-file database, i.e., one that deals with one collection of information at a time. In addition to being affordable and powerful, as a desk accessory DATabase is right there "under the Apple."

### Gonna Find Out: Accessories

Moving out of the arena of affordable software into the realm of affordable hardware, I suggest one of my favorite accessories, the trackball (admittedly an acquired taste). This device functions like an upside-down mouse. For those

with cluttered desktops (the furniture kind) a trackball buys you about 2 square feet of extra space. Even though I keep my own desk fairly clear, I personally prefer the trackball as an input device. I just rest my hand on the ball and with slight finger movements place the cursor anywhere I choose. My computer feels like a true physical extension of my hand.

Most of the trackballs on the market have buttons on both sides of the ball to accommodate both right and left hand users. (To be fair, I would note that Abaton seems to have forgotten the lefties). My personal favorite (for construction and styling) is manufactured by Kensington. It's sculpted to match and tuck next to my Apple keyboard.

### Who's Naughty and Nice: Books

The Macintosh Bible (edited by Arthur Naiman, Goldstein & Blair, publishers). Now in its second edition, The Macintosh Bible is, page for page, one of the best compilations of Macintosh and Mac software advice. In its 760 pages, it has something for everyone, from novice to expert. The publisher makes two "upgrades" available to each purchaser, as well as a 30-day money-back guarantee. How can you beat that?

*Dr. Macintosh* by Bob LeVitus (Addison Wesley) gives The Macintosh Bible a run for its money for useful information. It, too, makes for a good read of a good resource volume.

But, for entertainment, try Guy Kawasaki's *The Macintosh Way* (Scott, Foresman and Company). Kawasaki's concoction combines a "how to succeed in business"—according to Chairman Guy—manual with a lighthearted kiss-and-tell volume on the computer industry in general and Apple Computer in particular. It makes for a pleasant holiday brew.

I hope the holidays find you well. Take this time to look up from the keyboard and say hello to people you may not have seen for awhile...like your family! Have a great new decade! Till next time...



# Macintosh Meetings

by Eric Rall

October was a busy month for the Macintosh meetings.

## *Marc Canter and MacroMind Director.*

On Monday night, October 2, Marc Canter came down to demonstrate MacroMind Director. Marc was recently named by News Week Magazine as one of America's top 20 innovators. MacroMind Director is one of the reasons behind News Week's accolade.

You have all heard Apple tout desktop Multimedia as the next big thing in the world of personal computing. You may have even seen Apple's "helo car" commercial. Those of you that came to see and hear Marc got to see and understand what this is all about. It is the future!

I know that sounds terribly dramatic, but you really had to be there to appreciate that point. Multimedia is an integration of sounds, graphics, text, animation and more. There is no real way in which I can do justice to the topic in a magazine article. Multimedia presentation is best explained with a multimedia presentation. If you can picture the interactive qualities of HyperCard combined with the graphics, animation and sounds of MTV<sup>1</sup> you have a vague concept of what this is all about. If you have a need to communicate a complex idea in an entertaining and thought provoking manner, consider looking at MacroMind Director to help you make your point.

## *Mathematica and Virtual INIT*

Kevin McIsaac, a physicist with Wolfram Research, visited us on October 28, to show Mathematica. As a side treat he also brought a copy of Connectix Virtual INIT.

Before I tell you about Mathematica, let me briefly describe the Virtual INIT. If you're fortunate to have a Macintosh with a 68030 microprocessor (SE/30, IICx, IIX or a IICI) and a hard drive with 14 megabytes of continuous free space than this baby is for you! The Virtual INIT is an INIT (what did you expect?) that will give your machine 14 megabytes of virtual memory. For all practical purposes your Macintosh will think it has 14 megs of RAM. If you need lots of RAM for a large Multimedia program, a 24 bit color scan or a large mathematical formula than the Virtual INIT from Connectix can help today. For those of you with a Macintosh II you can buy Virtual INIT from Connectix and a PMMU (Page Memory Management Unit) chip. This will give the 68020 microprocessor in your Macintosh II the ability to use Virtual INIT.

Mathematica is a powerful software package which allows you to do complex mathematical computations. Mathematica is powerful enough to do some extremely complex calculations. Many of our resident scientists came by to see Kevin show the power of Mathematica.

Don't think this heady stuff is only for the academic types. Mathematica is simple enough for high school students to use. Mathematica's ability to handle graphics, symbolic transformations and numerical calculations with ease makes it of interest to anyone that has the need to handle computational mathematics.

You can purchase Mathematica for your main frame for only \$10,000. Or you can spend considerably less (\$495 for a 68000 Mac version or \$795 for a 68020 or 68030 Macintosh version.) With the money left over you can buy that IICI you

always wanted and still tell everyone how you "saved" money.

## *Prodigy*

Prodigy is a new online telecommunications service available for MS DOS machines and the Macintosh. The MS DOS roots of Prodigy were very evident in the Macintosh version. The forty column text and blocky graphics are not well suited to the Macintosh. Prodigy claims to look better on color Macintoshes. Unfortunately the meeting setup didn't allow our members the opportunity to see that for themselves.

Prodigy's low fixed cost is a plus. A monthly flat rate charge of \$6.95 allows up to four family members to access a reasonable range of services such as shopping, airline and travel schedule, educational topics, various forums and other services. You pay only \$6.95 each month no matter how much or how little you and your family use the service.

All screens you see while online with Prodigy contains a targeted advertisement. Each family member is required to enter personal data such as age and sex so that Prodigy's advertiser's can target you. Presumably this advertisement subsidizes the low fixed rate.

Prodigy is not currently multifinder compatible and may not be compatible with your current modem. If you are willing to endure advertising and a less than Macintosh like environment for low cost, Prodigy may satisfy your needs.

## *Contacts, Activities and Time...C•A•T*

On January 28, Washington Apple Pi will be honored to have Dash Chang of Chang Labs come out to demonstrate C•A•T. C•A•T is a relational database for business people with the need to organize their business contacts, activities and time. Can you guess where they got the name from?

With luck Dash will be giving Washington Apple Pi a first look at

(Continued on next page)







# Bits & Bytes

by Lynn R. Trusal

## Macintosh Hard Disk Problems Continue

In August, I discussed Apple's problem with Quantum hard disks (HDs). Apple finally wrote back about my HD failure, and the check is NOT in the mail. It seems Apple's recall was for one batch of 3.5 inch HDs, so no cigar since mine was 5.25 inch. I didn't know that Apple had put 3.5 inch HDs into the original Mac II's?! Much of the print media emphasizes problems with the 3.5 inch HDs, but there are plenty of failures with 5.25 inch HDs in the original Mac II, both the 40 and 80 MB variety. The designated Apple-recall rep just got another letter from me, and I sent a correspondence copy to CEO John Sculley. I'm no fool, so I don't expect Sculley to see it. It felt good anyway.

Recent MacWeek and InfoWorld

issues report that Quantum 40 and 80 MB HDs have been failing at alarming rates in Mac II's. In fact, each new issue of MacWeek relates more information on Quantum's HD problems. Although Quantum reports a 2 percent failure rate, two federal agencies at Fort Detrick, MD disclose failure rates of 29 percent and 50 percent for their 40 MB drives in Mac II's.

Supposedly the problem stems from the grease that Quantum uses to lubricate the spindle: it can freeze up when the heads are parked. Banging on the HD, or running it upside down, can be temporary fixes. Also, removing the HD and gently twisting it in your hand seems to free the heads. If you get this to work, immediately back up all the data on the HD.

It is interesting that Quantum offers Apple a 2-year warranty on its HDs but Apple offers its end users a 90-day warranty. Could it

be that offering a 2-year warranty on the HD would spur demand for a 1-year warranty on all Apple products? A phone call to Quantum established that the warranty they offer to companies varies by proprietary agreement and is based on volume ordered and other considerations. Tandy gets a 90-day warranty. I assume that Apple would get 2 years on volume alone. Apple must acknowledge and rectify this problem immediately or risk losing user community confidence and support. Stonewalling only produces more ill will and could do Apple irreparable harm. Take the high road Apple and admit that a major problem exists. Then rectify it!

If you have a 3.5 inch Quantum drive that failed and meets the criteria outlined in my August column, write to Ms. Darlene Souders, Apple Computer, Inc., 20525 Miriani Ave, Mail Stop 37S, Cupertino, CA 95014. Quantum serial numbers between 00335507-01023016 qualify for the recall. Be sure to include a copy of your repair order and a cover letter. The recall lasts until June 1990. If your HD has already been replaced you may have no way of knowing what the serial number was, but give it a try anyway.

If your failed drive doesn't fit into the recall criteria, you can write to me at P.O. Box 2, Walkersville, MD, 21793. I am asking WAP members who have had Quantum 40 or 80 MB HD failures to write. When you do, include Macintosh model, HD size (3.5 or 5.25 inch), MB capacity (40 or 80), and age when HD failed. I will compile the information and attempt to get Apple or Quantum to recognize the problem.

## User Recommendation

Although I remain a strong supporter of Apple Computer, I do have a recommendation, stemming from the high failure rate of Quantum HDs (3.5 and 5.25 inch, 40 and 80 MB sizes), Apple's limited (90 day) warranty and the dramatic drop in the prices for RAM.

Apple HD prices are about equal to third party prices for a 40 MB HD when purchased in a Mac II, but

(Continued from previous page)

C•A•T version 3.0. We should be one of the first people getting a peek at the new release.

If have need for a database to organize you day to day business dealings and don't want (or have the time) to learn a powerhouse database engine like 4D, Foxbase or Double Helix then come by and see what Chang Labs has to offer. I have been very impressed with what I've seen so far from C•A•T. Maybe you will be, too.

## Macintax

While I haven't really confirmed this at this writing, I hope to be able to show Macintax at our January 28 meeting. Last year I ordered Macintax from MacConnection and I have to say that it

almost makes doing your taxes tolerable. This is the most powerful complete and user friendly tax program I have ever seen. I've already ordered my upgrade. Macintax even prints out schedule 1040's on a dot matrix that are acceptable to submit to the IRS!

February

I haven't the faintest idea what we will have in February. I guess you'll have to wait until next month's journal to find out.

*Eric Rall is vice president for Macintosh meetings has lost a considerable amount of hair trying to figure out who and what our members want to see each month. Fortunately, Eric is married to Karen Rall and therefore can be presumed to have impeccable taste.*



are substantially higher if purchased separately (\$1,199 vs. \$500). The list price for an Apple (Quantum) 80 MB hard disk is \$1,699 when purchased separately or with a Mac II, which is more than twice the street price for the same HD. MacCorner is one source of Quantum hard disks for Mac II models. Purchase of a non-Apple Quantum HD, whether by mail order or from a local store, is likely to come with a 2 year warranty compared to Apple's 90 days. Mail order RAM has a lifetime warranty with 24-hr replacement compared to 90 days for Apple RAM. Apple's list price for 4MB of 1 megabit SIMMs is \$1,999; that same product can be purchased for \$400 or less by mail order.

Anyone planning to purchase any model of Mac II should purchase it with the minimum RAM (1MB) configuration and without a HD. Then, purchase the additional RAM and HD from reputable mail order or local suppliers and have them installed by authorized reps., e.g., MacCorner installs HDs for \$50. In doing this you will save a substantial amount of money (\$1-\$2,000), and get a 2-year warranty on the HD and lifetime guarantee on the RAM. Perhaps if enough people follow this path, Apple will get the message and make some fundamental changes in how it does business with the public.

### Other Mac Hardware/ Software Problems

Two problems with the Mac II may affect other Macs. The first occurs if two disks are simultaneously inserted into the two internal floppy disk drives. This often locks up the computer and requires rebooting. Solution: insert disks one second apart.

The second problem is more annoying. If you save a file to a floppy disk and then kick the disk out to take it to another location to print, the Mac does not always recognize the disk when it is reinserted into the computer. This occurs when the Mac asks via a dialog box to have the disk reinserted and asks for it by name. Even though the disk is the correct disk and named correctly, the Mac

still won't recognize it, meaning essentially the computer is locked up and must be rebooted. Therefore, it is always wise to save the file before taking it to print. Typing "Command "" has been reported to solve the problem, but it didn't work for me.

### Real Bits

1. Apple donated Macintosh computers valued at \$216,000 to the Peace Corps. They will be used in 35 offices, about half in foreign countries. Both Claris and Microsoft are providing free software.

2. I would like to have the capability to do non-sequential printing. With the Mac you can print "all" pages or a "range" of pages, but you can't print, e.g., pages 1-5, 10, and 20-25. It should be easy to do. How about it Apple?

3. My impression is that it isn't worth the extra expense to put 12 MB of memory into a Tektronix color thermal printer. With 12 MB of RAM the printer is able to "receive, image and print" different images at the same time, but the actual printing process is no faster. It still takes about 4 minutes to print each image even if they are multiple copies of the same vugraph. The only speeding up of the entire process is that the Macintosh attached to the printer is freed up sooner. In my opinion, that does not justify the extra expense of the additional 4 MB. I should point out, I do feel that 8 MB of RAM is worthwhile compared to the 4 MB of the base model.

4. Personal Computing magazine just did a recent survey of personal computer use in America's corporations with some interesting results. Overall, companies have an average of one PC per 6.2 workers and although 100% of the companies use IBM PCs, 89% also use Macintoshes. General Electric is the number one PC user but 25% of its 11,250 PCs are Macintoshes. (Source - USA Today, August 21, 1989)

5. With all the emphasis on "desktop media" and "multi-media," Apple is apparently trying to "storm the fort" and emphasize a new technology. Technology is what got Apple where it is today,

and staying ahead has helped keep IBM at bay, but it must not lose sight of its existing markets. Technological improvements must continue to drive Apple, but it should also include technology that helps home and business users to do things and more easily and intuitively.

6. More Intel CPU's are on the way. The 80486 just appeared for the first time in, believe it or not, the Apricot VX FT Server. The "486" contains 1 million transistors; the "586" will have 4 million transistors. The Intel "486" corresponds to the Motorola 68040; it has not appeared in a personal computer CPU as of this writing. By 1996, Intel will introduce the "i686" with 22 million transistors, and a 100 million transistor version, called the "i786" running at 250 MHz, will be out by the year 2000. Talk about announcing release dates early! (Source - InfoWorld, August 28, 1989)

7. Apple has cut Mac SE prices by \$300 and started installing the SuperDrive (FDHD) in all SE's. This drive can read 3.5 inch ProDOS and MS-DOS disks in 400K, 800K, 720K and 1.4 MB formats. SE sales have slowed considerably since the introduction of the Mac IIcx.

8. MacWorlds for 1990 and 1991 are as follows. 1990: San Francisco, April 10-13; Boston, August 8-11. 1991: San Francisco, January 10-13; Washington, D.C., April 16-19 and Boston, August 6-9.

9. Adobe is suffering from the font technology agreement between Apple and Microsoft and plans to make public most of the proprietary font technology it had kept secret for so long. It is fighting to keep PostScript the industry standard. It now says that it was planning to make the technology public in about 6 months anyway. The computer industry sure does make strange bed fellows!

### Apple Lands Three Federal Contracts

Apple Federal Systems has landed its first federal government contract to sell Macintoshes to the U.S. Postal Service. This is the first time





Apple has bid as the "prime contractor." The contract is "open ended," i.e., it does not call for a specific number of computers or dollar amount. By supplying Mac Ix's to the Postal Service, the contract could be worth \$30 million.

In addition, Apple Federal Systems landed its largest-ever federal award: an Air Force contract to supply from 10-80,000 Mac Ix's and cx's running Unix. The contract is valued at \$164 million over 5 years. It is being protested by Martin Marietta, one of the losers.

NASA continues to buy Macintoshes with a third contract calling for 2,500 Mac Ix's and cx's for use at the Johnson Space Center in Houston, TX. The contract will run over 5 years. No dollar figure was attached.

Apple is having more success from asking federal agencies to break up their contract awards than from trying to stop agencies from specifying MS-DOS or PS/2 computers. The emphasis is on "functional specifications" rather than "design specifications." It is ironic that Falcon Microsystems, Apple's GSA contractor, bid on the MS-DOS portion of the Postal Service contract. This is evidently not the first time they have done so. (Source - Federal Computer Week, InfoWorld, August 28, 1989)

### Software Upgrades

Aldus Persuasion 2.0 Aldus has released its first major upgrade of Persuasion, called version 2.0. In my opinion, it was already the best of the presentation graphic pro-

grams and has now gotten better. In addition to 12 new templates, version 2.0 offers importation of PowerPoint files, a must if you are trying to take business from the competition. Enhancements have been made to "speaker's notes" and "handouts," with the ability to type notes directly into the outline. The new retail cost will be \$495 with current owners able to upgrade for \$75, or \$50 for subscribers to the extended technical support service. (Source - PC Week, August 14, 1989)

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

Webster's Ninth New Collegiate™ Dictionary Macintosh® CD-ROM shown actual size



## After we put everything in Webster's under the label, we added sound to redefine "dictionary"!

Putting all the text and all the graphics of Webster's Ninth New Collegiate Dictionary into electronic form took more than 50 megabytes of storage, but that still left plenty of room on a CD-ROM. So with Merriam-Webster's approval, we had each entry word in the main A-Z section professionally pronounced and digitally recorded for playback through your Macintosh® - more than 100 hours of original audio compressed and edited so that you can hear each entry word spoken as you look at its entry.

- Everything in the best-selling print edition is here:
  - 160,000 entries and 200,000 definitions.
  - Line drawings which illustrate approximately 1,000 entries
  - Guides to good usage for commonly confused words
  - Biographical Names and Geographical Names
  - Handbook of Style

• plus additional exclusive features not found in printed dictionaries:

- A choice of type sizes makes it a comprehensive large print dictionary;
- Entry words pronounced by a human voice;
- Point and click to check cross-referenced words.

• Only \$199.95. Visa, MasterCard, POs and personal checks accepted.

A Merriam-Webster  
Webster's Ninth New Collegiate Dictionary

The 50+ megabytes of the print edition take up less than 10% of the CD-ROM's capacity and could fit in an area smaller than this label



P.O. Box 17229 • Washington, DC 20041 • (703) 533-19



# Minimum LaserWriter margins in MS Word 4: Trial and Error

by Harris. J. Silverstone

It is well known that you cannot print up to the edge of the paper on an Apple LaserWriter. How close can you print when using Microsoft Word? The minimum margin, according to the *LaserWriter® IINT/NTX Owner's Guide* (p. 130, Appendix E), is 0.5 cm or 0.197 in. The *Guide* continues, "actual imageable area may vary depending on the the application." The *Reference Manual to Microsoft Word* (version 4) specifically states in the section entitled *Margins*, "The Apple LaserWriter does not print less than a half inch from the edge of the page." The agreement between these two sources is less than perfect.

For this author, the margin question arose in the context of setting up a template to print labels of size  $3\frac{1}{3} \times 4$  inch on a LaserWriter. The labels start 0.167 in. from the edge of the paper.

There are in fact two answers to the

minimum margin question, depending on whether the "Larger Print Area (Fewer Downloadable Fonts)" option is checked in the dialog box accessed through the "Options" button on the "LaserWriter Page Setup" dialog box. In both cases, one can print a page with margins set too small and observe that some text is cut off. Then the margins can be increased until no text is missing. That is how the information in the Table was obtained.

These trial-and-error results do not agree with the numbers given in either manual. They also reveal an interesting point about how Microsoft Word keeps margin information: in terms of *points*. One point is  $1/72 = 0.013888$  inch. When you enter margin settings in inches, the settings sometimes seem to change with a mind of their own. For instance, try entering 1.1

inches. After closing and opening the Document... dialog box, you find instead 1.097, which is  $79$  points =  $79/72 = 1.097222$  inches. The next higher number of points is 80, which is 1.111111 inches. The closer of the two is 1.097. The inches you enter are always changed to an integer multiple of 0.013888....

Given the widespread use of Word with a LaserWriter, it is difficult to understand why neither Apple nor Microsoft have specified more carefully the minimum margin settings.



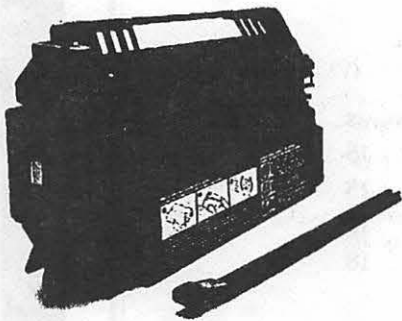
TABLE. Minimum margins without loss of text when using Microsoft Word 4.0 with an Apple LaserWriter and 8.5x11 inch (U.S. letter size) paper.

Margin	Normal Print Area			Larger Print Area		
	inches	cm	points	inches	cm	points
Top	0.431	1.094	31	0.208	0.529	15
Bottom	0.431	1.094	31	0.208	0.529	15
Left	0.431	1.094	31	0.250	0.645	18
Right	0.431	1.094	31	0.250	0.645	18

If "Night" is what you need  
from Your Laser Printer ...



Mid Atlantic Telesis Can Show You the Light!



• We support your quality printing needs with our *Long -Life* Recharged toner cartridges. All of our cartridges come with a 100% satisfaction guarantee and are delivered FREE. Recharged cartridges last 30-50% longer than new and cost half as much!

- We have recharged toner cartridges in a variety of colors
- We have trained staff that can service and maintain your laser printers for maximum quality printing and printer life
- We have a complete selection of Macintosh hardware and software which we support with a staff of experienced, Apple certified technicians
- We have the solutions for all of your Macintosh computer and laser printer needs



Complete Computer Solutions  
4930-A Eisenhower Avenue Alexandria Virginia 22304  
(703) 823-4788

## Hotline Coordinator

Larry Feldman (202) 546-9556

## Apple II

### General

Dave Harvey (703) 578-4621  
John Wiegley after 2:15 (703) 437-1808

### Accounting Packages

BPI Programs  
Jaxon Brown (301) 350-3283

### BPI & Howardsoft (Tax)

Otis Greever (615) 638-1525

### Dollars & Sense

Barry Fox (717) 566-6709

### Home Accountant

Leon Raesly (301) 220-0717

### Managing Your Money

Bill North (703) 560-2769

### Quicken

Gary Hayman (301) 345-3230

### Apple SSC

Bernie Benson (301) 951-5294

### AppleWorks

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

### AppleWorks Database

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) 566-6709

#### DataBases

##### dBase II

John Staples (703) 255-6955

##### dBase II&III, Data Perfect

Leon Raesly (301) 220-0717

##### Profiler 3.0

Barry Fox (717) 566-6709

##### Dvorak Keyboard

Ginny Spevak (202) 362-3887

##### Hard Disk

Barry Fox (717) 566-6709

##### CMC (not CMS)

Barry Fox (717) 566-6709

##### 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

Peter Combes (301) 251-6369

Leon Raesly (301) 220-0717

John Love

(703) 569-2294

### Integer Basic

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

John Love (703) 569-2294

### Machine

Ray Hobbs (BBS) (301) 490-7484

John Love (703) 569-2294

### Pascal

Michael Hartman (301) 445-1583

C and TML Pascal

Harry Erwin (703) 391-0295

### Operating Systems

#### Apple DOS

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

#### CP/M

Art Wilson (301) 774-8043

#### ProDOS

John Love (703) 569-2294

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

#### ProDOS 8 and 16

Barry Fox (717) 566-6709

#### RWTS, Disk structure

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

#### Print Shop

Thomas O'Hagan (301) 593-9683

#### Spreadsheets

##### General

Walt Francis (202) 966-5742

##### MagicCalc/SuperCalc2.0

Leon Raesly (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) 566-6709

##### 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) 566-6709

###### Publish.It!

Gary Hayman (301) 345-3230

###### ScreenWriter II

Peter Combes (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) 566-6709

###### General/PaintWorks+

Paul Tarantino (703) 455-7670

###### //e Upgrade

Morgan Jopling

(301) 261-3886

### APW

Andy Gavin (703) 734-3049

Jim Frison (703) 525-9395

### Deluxe Paint II

Rich Sanders (703) 450-4371

### GS BASIC

Barry Fox (717) 652-2899

### Multiscribe GS

Ray Settle (301) 647-9192

### Telecommunications

Dale Smith (301) 762-5158

Allan Levy (301) 340-7839

Bob Sherman (305) 944-2111

### TimeOut Series & Utilities: ProSel

Chuck Ward bef. 9 pm (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

### Apple II Hardware Epson printers, hard drives,

Guy Durant (515) 294-5727

### Apple IIGS

Paul Tarantino (703) 451-7670 (before 10P)

Neil Laubenthal (703) 691-1360

Fred Tillman (703) 503-8895

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

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

## Beagle Buddies

### MARYLAND

Paul Schlosser (Mt. Airy) (301) 831-9166

Ray Settles (Annapolis) (301) 647-9192

Kevin Condon (Columbia) (301) 652-0303

Gary Hayman (Greenbelt) (301) 345-3230

Lee Raesly (Adelphi) (301) 220-0717

Harvey Kaye (Bethesda) (301) 299-8994

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

David Page (301) 599-7630

### VIRGINIA

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

Lou Pastura (Annandale) (703) 560-1477



# DECEMBER

- 2 Saturday**
  - 8:00 AM AppleWorks SIG.....USUHS
  - 9:00 AM WAP General Meeting .....USUHS
  - noon AppleWorks SIG.....USUHS
  - noon HyperCard SIG .....USUHS
  - noon Telecomm SIG .....USUHS
- 4 Monday**
  - 👁 Writers' Deadline—January Issue
- 5 Tuesday**
  - 7:30 PM PI-SIG .....office
- 6 Wednesday**
  - 👁 Ad Space deadline—January Issue
  - 7:30 PM dPub SIG .....PEPCO
  - 7:30 PM Mac Programmers .....office
- 7 Thursday**
  - 7:00 PM Columbia Slice .....Columbia
  - 7:30 PM GameSIG .....office
- 9 Saturday**
  - 9:30 AM Annapolis Slice .....Anne Arundel Co.
  - 9:30 AM Frederick Slice .....Frederick Music SIG .....Call
- 11 Monday**
  - 👁 Editorial deadline —January Issue
- 13 Wednesday**
  - « Ad Copy Deadline—January Issue
  - 7:30 PM Board of Directors Meeting.....office
  - 7:30 PM Database SIG/4D.....Computer Factory
- 14 Thursday**
  - 8:00 PM StockSIG .....office
- 16 Saturday**
  - Garage Sale .....Call
- 18 Monday**
  - 7:00 PM Apple IIGs SIG .....Bethesda
- 20 Wednesday**
  - 7:00 PM WorksSIG .....office
  - 7:30 PM Excel SIG .....office
  - 7:30 PM Fed SIG.....Call
- 27 Wednesday**
  - 👁 Writers' Deadline—February Issue
  - 7:30 PM Apple III SIG .....Call
  - 7:30 AVSIG Party .....Call
- 28 Thursday**
  - 7:30 PM Business SIG .....office

## WAP General Meetings

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

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

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

## Meeting Notices

**Annapolis Slice 2nd Saturday;** Anne Arundel Community College - Careers Bldg. Lecture Hall, Arnold, MD, 9:30 AM.

**Apple IIGs SIG** Apple IIGS SIG (normally) the Monday after the regular WAP meeting; alternates between Dolley Madison Library in McLean and (NEW) NIH (building 31) in Bethesda at 7:00 PM. (December meeting Dolley Madison, December 18.) Call Gary Hayman 345-3230 for information.

**Apple III SIG 4th Wednesday;** WAP office, 7:30 PM.

**AppleWorks SIG** just prior to the regular WAP meeting at 8:00 AM in the USUHS cafeteria or other meeting room.

**AV SIG** (arts and video) . Call Rob Sugar (202) 745-0088 or Nancy Seferian (202) 333-0126 for further information.

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

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

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

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

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

## December

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

## Meeting Notices

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

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

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

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

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

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

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

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

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

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

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

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

## JANUARY

### 1 Monday

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

💡 Editorial Deadline—February Issue

### 3 Wednesday

7:30 PM dPub SIG .....PEPCO

7:30 PM Mac Programmers .....office

💡 Ad Space Reservations deadline—February Issue

### 4 Thursday

7:00 PM Columbia Slice .....Columbia

7:30 PM GameSIG .....office

### 10 Wednesday

💡 Ad Copy Deadline—February Issue

7:30 PM Board of Directors Meeting .....office

7:30 PM Database SIG/4D .....Computer Factory

### 11 Thursday

8:00 PM StockSIG .....office

### 13 Saturday

9:30 AM Annapolis Slice .....Anne Arundel Co.

9:30 AM Frederick Slice .....Frederick

Music SIG .....Call

### 17 Wednesday

7:00 PM WorksSIG .....office

7:30 PM Excel SIG .....office

7:30 PM Fed SIG .....Call

7:30 PM HyperTalk SIG .....Arlington

### 24 Wednesday

7:30 PM Apple III SIG .....Call

7:30 PM AV SIG Studio Tour .....Call

### 27 Saturday

8:00 AM AppleWorks SIG .....USUHS

9:00 AM WAP General Meeting .....USUHS

noon AppleWorks SIG .....USUHS

noon Telecomm SIG .....USUHS

noon HyperCard SIG .....USUHS

### 29 Monday

7:00 PM Apple IIgs SIG .....Call

### 28 Thursday

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

## January

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

**Macintosh**

**General**

Jeff Alpher to midnight (301) 630-2036  
 Bob Wilbur (703) 379-2960  
 Donald Schmitt (717) 334-3265  
 David Gursky (703) 522-8345

**Art & Video**

Nancy Seferian (202) 333-5817

**Borland Products**

Doug Ferris day only (800) 826-4768

**Databases**

Fourth Dimension  
 Bob Pulgino (301) 474-0634

**FileMaker II**

Tom Parrish (301) 654-8784

**Helix**

Jim Barry to midnight (703) 662-0640  
 David Gursky (703) 522-8345  
 Harvey Levine (301) 288-9380

**MS-File**

John Love (703) 569-2294  
 John Spencer (301) 730-1084

**Omnis 3 & 3+**

Paul Tabler (703) 278-8657  
 Jeff Alpher to midnight (301) 630-2036

**OverVue**

J.T. Tom DeMay, Jr. (301) 461-1798  
 Tom Parrish (301) 654-8784

**Pro-Cite**

Elizabeth Mangan (703) 750-2710

**Desktop Publishing**

**General**

Frank Potter bef. 9 pm (703) 620-8886  
 Jay Rohr (301) 655-0875

**ReadySetGo**

Jim Graham (703) 370-5737  
 Marty Milrod (301) 464-5981

**Graphics**

**General**

Bill Baldrige (301) 779-8271  
 Jay Rohr (301) 655-0875  
 David Gursky (703) 522-8345

**Adobe Illustrator**

Ling Wong (703) 378-5102

**Canvas**

David Gursky (703) 522-8345  
 Bill Baldrige (301) 779-8271  
 Tom Parrish (301) 654-8784

**MacDraft**

Bob Wilbur (703) 379-2960

**MacDraw**

Tom Berilla (301) 434-3256  
 Tom Parrish (301) 654-8784  
 John Spencer (301) 730-1084

**HyperCard**

Holger Sommer (301) 474-3467  
 Rick Chapman (301) 989-9708

**Inside Mac**

Jon Hardis (301) 330-1422  
 John Love (703) 569-2294

**Languages**

**Pascal**

Michael Hartman (301) 445-1583

**Machine**

Ray Hobbs (301) 490-7484

**MS BASIC**

John Love (703) 569-2294

**MacMoney**

Chuck Sicard (301) 963-2879

**MacProject**

Jay Lucas (703) 751-3332

**Spreadsheets & Graphics**

**General**

David Morganstein (301) 972-4263  
 Bob Pulgino (301) 474-0634  
 Tom Cavanaugh (703) 750-9449

**Excel**

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

**MultiPlan**

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

**Telecommunications**

**General**

Allan Levy (301) 340-7839  
 David Gursky (703) 522-8345

**MacTerminal**

David Gursky (703) 522-8345

**Versaterm**

David Gursky (703) 522-8345

**ThinkTank-More**

Jim Graham (703) 370-5737  
 Tom Parrish (301) 654-8784

**Word Processors**

**Word**

Marty Milrod (301) 464-5981  
 Harris Silverstone (301) 435-3582  
 Tom Cavanaugh (703) 750-9449

**WriteNow**

Bill Baldrige (301) 779-8271

**WordPerfect—Mac**

Curt Harpold (202) 547-8272

**General**

**Franklin & Laser 128**

Bob Martz (301) 795-5689

**Games-Apple II**

Charles Don Hall (703) 356-4229  
 John Wiegley after 2:15 (703) 437-1808

**IBM**

Ray Hobbs (301) 490-7484  
 Leon Raesly (301) 220-0717

**Math-OR Applns**

Mark Pankin (703) 524-0937

**Modems-General**

Allan Levy (301) 340-7839

**Hayes Smartmodem**

Bernie Benson (301) 951-5294

**Practical Peripherals**

Allan Levy (301) 340-7839

**Music Systems**

Ray Hobbs (301) 490-7484

**Printers-General**

Walt Francis (202) 966-5742  
 Leon Raesly (301) 220-0717

**MX-80**

Jeff Dillon (301) 662-2070

**Stat Packages**

David Morganstein (301) 972-4263

**Stock Market**

Robert Wood (703) 893-9591

**Volunteer  
on the Hotline**

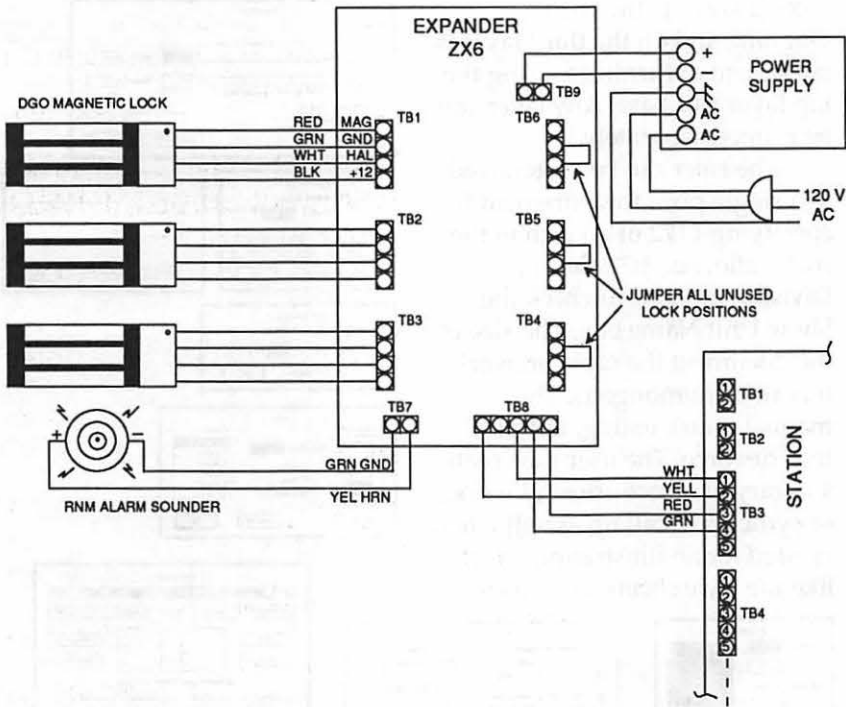
**Call us  
(so we can call you)  
654-8060**

**Frederick Apple Core Help Line**

Please limit calls to reasonable evening and weekend hours and never after 10 P.M.

Oscar Fisher (Frederick) 694-9237 Apple II  
 Dick Grosbier (Frederick) 898-5461 Apple II, GS, & Mac  
 Harold Polk (Frederick) 662-6399 Apple II  
 Tony Svajlenka (Frederick) 694-6209 Apple II  
 Doug Tallman (Frederick) 663-3268 Mac  
 Scott Galbraith (Monrovia) 865-3035 Apple II & GS  
 Stephen Hadley (Mt. Airy) 831-5353 Mac  
 R. Carl Myers (Smithsburg) 824-7122 Mac & GS





the LaserWriter or typesetting equipment. Additionally, it complimented MacPaint™ so well by allowing Paint files to be imported and manipulated for better appearance by reduction factors. Back in 1986, MacDraw was the one single program that allowed me to incorporate the Mac into a newspaper chain—one of the first of six nationwide to use them—and ads for these papers as well as charts and maps were produced directly in this program. What followed from this, of course, was typesetting from the Mac, also used for textual matter. *USA Today* was the first national newspaper chain to use MacDraw for graphics, with its corporate headquarters in northern Virginia.

On the heels of the MacDraw success (and frustrations) came MacDraft™, and then a host of similar CAD-like programs, but MacDraw maintained its strong lead, and, thanks to significant upgrades to 1.6 to the present MacDraw II 1.1, maintains that

## A Review: MacDraw II

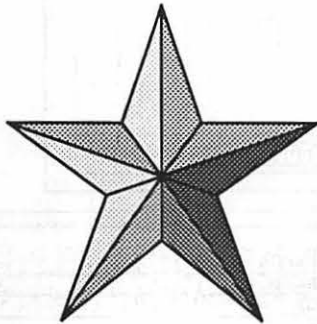


by Jay Rohr

In the last review of SuperPaint™, I mentioned that the best way to review it was to show by example and then explain the examples. The same is true of Claris' MacDraw II, version 1.1.

All of these examples are original MacDraw II illustrations (altered slightly to protect my clients), with the exception of the star, which is a remake of a piece of MacDraw™ clip art into the MacDraw II format.

Ten or twenty graphics-oriented users could very aptly review this program, and no one review would suffice: each would be different and more informative in its own right because of the variety of ways one can express



oneself in a drawing application.

The upgrade from MacDraw to MacDraw two was one of the longest, most intense and anxiously-awaited upgrades in the history of Mac software. There were serious

doubts there would ever be another upgrade and that the program would succumb to limboland.

Despite the many quirks (particularly with font manipulation and unstable font positions) in the earlier versions, MacDraw was one of the first and the best graphics program for high resolution output, either from

### Print Job Estimate

Customer Name

Address

City, State, Zip

Telephone

Job Number

Date:

This estimate is good for  days

Description


November 1989

Washington Apple Pi Journal 51



lead today. Deservedly. The font problems have been resolved as well as exporting text and rotated text into page layout programs without the necessity of placing a large white box behind the text graphic in order for it to pick up properly in these page layout programs—a problem which Canvas 2.0™ still has, and which it seems to have inherited from the earlier MacDraw programs.

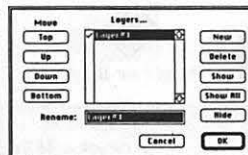
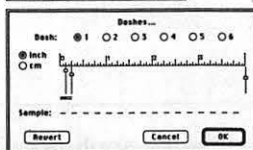
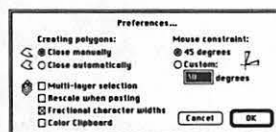
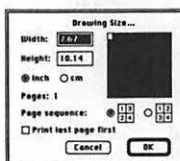
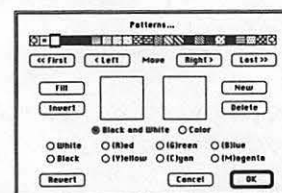
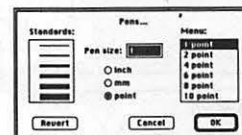
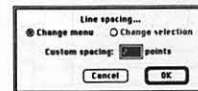
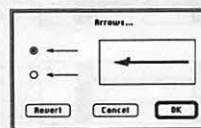
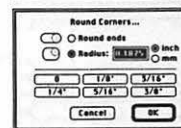
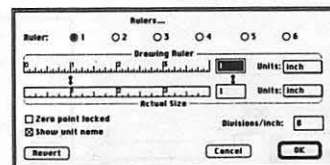
From the illustrations shown, MacDraw is very versatile and very accurate. It is QuickDraw™ based and its Snap-To and Alignment features as well as Mouse Tracking are indispensable tools often sorely missed in other graphics applications. The menus have been greatly expanded, and more importantly, many are customizable, as seen in the screen snapshots on this page.

Claris, the producers of MacDraw II, have done a fantastic job of maintaining the simplicity of the original MacDraw while at the same time giving the user many more options to accomplish his or her work. These include custom arrows, adjustable line weights, fonts in all sizes, styles and forms, dash customization, rules, pattern fills, layering, pen styles, smooth and unsmooth polygons that can be edited, and so forth. Still missing, for those who care, are the keyboard command equivalents for mouse moves in the menus. But these can be rectified easily by making use of QuicKeys™, AutoMac III™ or MasterStrokes™ utilities to assign these moves to key strokes.

The Grid can be manipulated or turned off entirely. Text can be set flush left, flush right, centered, AND with full line justification. Layering techniques have to be learned, but once learned, it becomes a very useful tool for showing several aspects of the same illustration. In the MacDraw II tutorial, the Claris manual gives an example of a floor plan. On the

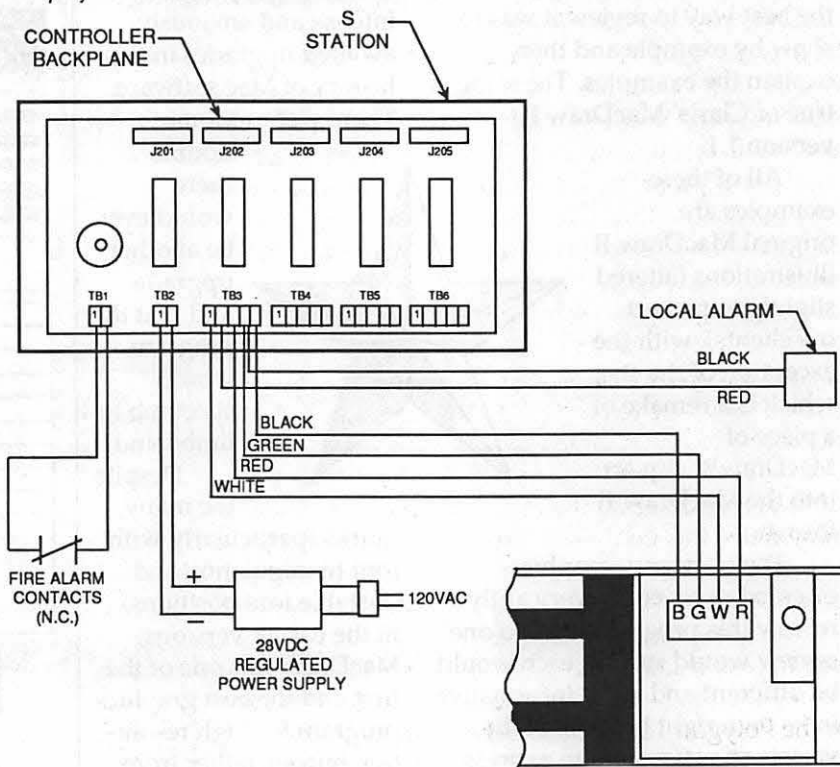
second layer, is the wiring diagram, and on the third layer is placement of furniture, using the top layer as a base. Any layer can be printed separately.

The ruler can be customized to a single pixel measurement by specifying 1/72 of an inch in the scale ratio, i.e., 1:72. Set the Division to 1 and uncheck the Show Unit Name box. The size of the document the user can work on can be humongous. The manual is an exciting, technical tour de force. The user can create a library of object-oriented work or symbols to call up at will when needed for an illustration, much like the style sheets some page



*A sampling of the many manipulative dialog boxes available in MacDraw II. MacDraw has come a long way, and the upgrade was well worth it.*

*Using the Zoom features in MacDraw, the user can achieve almost pinpoint accuracy with schematics and diagrams of this type. Many of the smaller, more detailed illustrations for this project were done at the 400-600% level.*





layout programs use.

MacDraw contains a dictionary, and can easily be used as a bona fide page layout program complete with text justification.

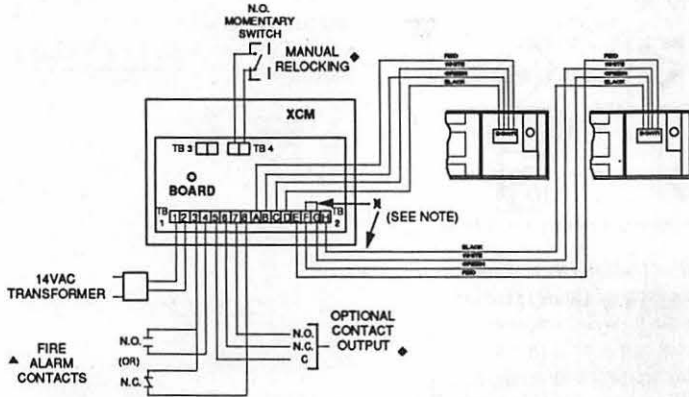
handles after selecting Reshape. (These are also known as bezier curves.)

It is hard to be negative about an outstanding application such

as MacDraw when it has more than paid for itself in four years of use. The original program sold for about \$195, while the current version is

Zoom feature on screen, approximating the final output most exactly. Neither of these peculiarities are flaws in these programs, but rather a result of the built-in 72 dpi (dot per inch) and 300 dpi Mac QuickDraw translations through the LaserPrep and Aldus Prep files. The new System 7.0 is said to compensate for this by correcting these routines, and already there is available a 32-bit QuickDraw utility for color and gray scale expansion on larger screens, monitors and boards.

At the beginning of the Mac success story, this translation problem between what is shown on the screen and what the LaserWriter prints out was pretty serious to those of us who vied for more accuracy in the graphics business necessitating in many constant long distance calls to both Apple™ and a horde of software companies to achieve this end. Today, thanks to the tremendous amount of work



Line Spacing can be manipulated, and can be specified in points. Text can be "colored"; i.e., changed to white text on a darker pattern or a black background, a feature that was previously available only by using the Outline Style of a font. Text can also be changed from Upper Case to Lower Case and vice versa—another innovation. Text Size and Style can be intermixed in the same text object box. This gives the user much more control than was previously available in MacDraw, and thus allows the user to use this program as their page layout program, if desired.

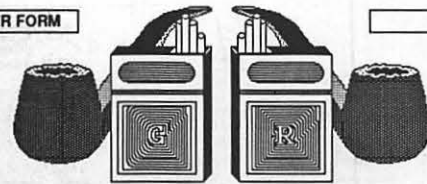
I used to do thumbnails in MacDraw for 64-page publications and newspapers. As the advertising space was sold and the information relayed to us, we blocked out an area on a page where the ad was to be placed and we could always tell how much space was left to fill in for editorial matter. From these thumbnails, this guide was used for final text placement and layout of the finished product.

The Freehand Tool can be used in both a smooth and unsmoothed manner, as is true for the Polygon Tool. Both can be Reshaped by dragging on the

\$200 more. But for someone in the graphics business who has some abilities and who desires precision work with slick output, I'll lay my money down on MacDraw any day for a solid return on that investment. Did I forget to say that MacDraw is also fun?

When working on the schematics illustrated here, there were several minor instances where the Zoomed In screen showed correct alignment but when printed out, they became slightly altered misalignments. This same situation occurs in PageMaker™ at the 400% View and the 100% View. In both MacDraw and PageMaker, the most accuracy seems to reside in the 200% View of the

MAIL ORDER FORM



Blue River Tobacco Co.

1500 TRIPLE STREET • P.O. BOX 1111 • WENSBORO, KENTUCKY 42000 • (502) 666-4444

DATE \_\_\_\_\_ NAME \_\_\_\_\_ (Please Print) ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

METHOD OF PAYMENT (NO C.O.D.'S)  
 CHECK  MASTERCARD  
 MONEY ORDER  VISA

CHARGE ACCOUNT NUMBER \_\_\_\_\_ EXP. DATE \_\_\_\_\_

ALL PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

CAT. NO.	PRICE	QTY.	DESCRIPTION OF ITEM	TOTAL

SHIPPING AND HANDLING CHARGES	MERCHANDISE TOTAL
Add the following Shipping Charges	SHIPPING AND HANDLING (U.P.S.)
\$10.00 Or Lower _____ \$2.50	SHIPPING AND HANDLING (P.P.)
\$10.01 - \$25.00 _____ \$3.00	SALES TAX (KY. RESIDENTS ONLY)
\$25.01 - \$50.00 _____ \$4.00	PREVIOUS BALANCE
\$50.01 - \$75.00 _____ \$5.00	TOTAL AMOUNT
\$75.01 - \$100.00 _____ \$6.00	
Over \$100.00 _____ \$7.00	

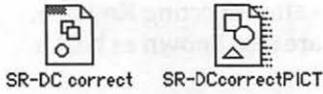




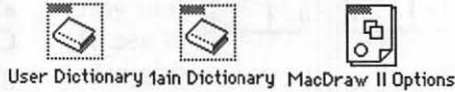
done by all these concerned parties, and particularly Apple in their various System and Finder upgrade packages, this is no longer a serious problems.

MacDraw II version 1.1 is a product of Claris™ Corp., 440 Clyde Ave., Mountain View, CA 94043. Phone: (415) 960-1500. Several disks with tutorials and samples, an excellent 368 page manual plus keyboard shortcuts and quick access charts. Fine technical support. Retail price: \$395; Street price: \$309. Upgrade price from 1.1 to 2.0 unavailable as of this writing. NCP.

Jay Rohr owns operates a successful graphics business—J.Rohr Graphics—with his wife, Jean, out of his home in Randallstown, MD. He is a "Hotline" volunteer with WAP. For further information about this article or graphics, call (301) 655-0875.



Above: MacDraw file icon (l) and MacDraw PICT icon (r). Below are the various icons for on the program disk. Note the Dictionaries, Help File, Option File, and the Send PostScript Utility included.



These technical illustrations were done for an 8-1/2 x 11" landscaped (wide) size for a specification manual for a Baltimore manufacturer. It the user can obtain this kind of work, it is quite lucrative: there seems to be so few people willing to tackle this kind of work (but it does take time and patience). In MacDraw II, however, such jobs become an absolute pleasure. No matter how the work is scaled, whether upward or downward, these PICT files always come out crisp and sharp. The only area one has to watch, however, is the use of patterned screen fills

which may break up if not scaled properly. And these cannot always be controlled by the user.

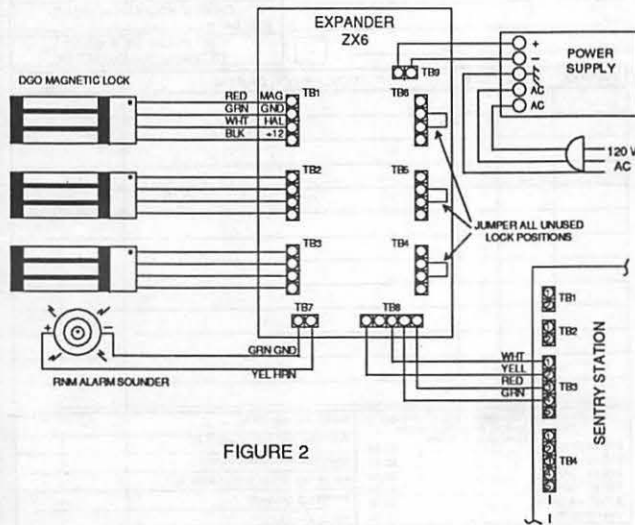
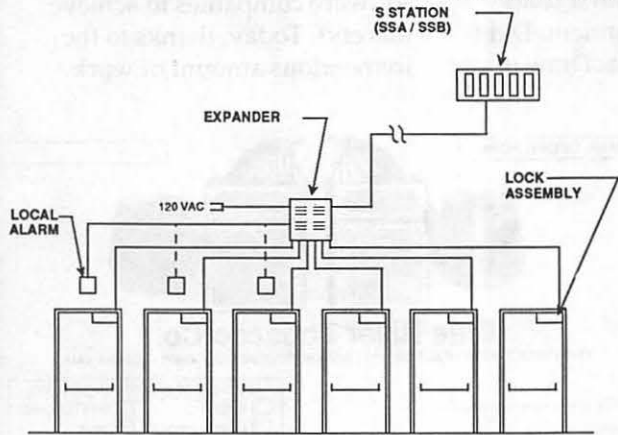


FIGURE 2

"The illustrations used in this article and portions of the article itself contain copyrighted material for inclusion in a forthcoming book on graphics in particular by the author, who requests these works not be distributed unless requested in writing and prior written permission is given by him.

# Happy holidays!

by David Ottalini

There have been great changes in the world this year, III SIGers, but I'm happy to say our little SARA just keeps chugging along at a "personal" level we can all understand and enjoy. We all have a lot to be thankful for, not the least of which are the friendships we've seen grow this year within our little group. Despite the WAP's problems, I'm glad to say I found our III SIG a little oasis of calm. Let's keep it that way as the new decade begins!

## 1989 and 1990

I'd like to express special thanks this year to members who have gone out of their way to keep the SIG going and have been willing to volunteer time towards the effort: Our out-going Co-Chairman Tom Bartkiewitz for his excellent Pascal Menu.Maker program and time spent helping IIIers on the phone; Jim Jutzin our new Co-Chairman for taking over the hard copy library; John Ruffatto for all the disks he's copied; Jim Suthard for taking over the III SIG board on the TCS; and Jim Salerno for all his counsel and contributions.

As for your III SIG this year, we gained another Apple III donation for a total of four machines. Our PD library grew by leaps and bounds. From our humble beginnings in July, 1986 of four disks, we now have 80 disks as of this month, with the prospects for many more in 1990. I am especially proud of that! Your SIG exists to help you get the most out of your machine. Most of you do not make meetings (though we keep hoping), so the next best way we can serve you is to 1) Make the PD library as useful as possible; 2) Continue publishing articles each month in the Journal and 3) Make ourselves available by phone when you have questions. Next month we'll talk a little more

about our plans for 1990 and hopefully, how you can get more involved in making the SIG more useful to everyone.

## More On Three news

I was finally able to get through to Bob Consorti, the President of On Three. He gave me their complete NEW order address which is:

ON THREE, Inc.  
6519 57th Place, NE.  
Marysville, WA 98270  
(206) 659-6245

Consorti is now working for First Class Peripherals, the folks who make the Sider drives (that On Three sells). He says he's doing "all of their Apple II rom, driver and installation software."

As for new products, Bob says he's got a utility that maps out bad blocks on hard disks, followed later this month with a directory structure fixer. The GOBACK hard disk backup utility is still on tap, now for the early part of 1990. They are also offering a new hard disk and the latest flyer has some good savings on a number of programs. Call for a free sample magazine and to get on their mailing list if you're not already on it.

The new On Three Magazine did finally show up in late October. It was thin, but it did come out and that's the best news right now. By the way, it included an article by my favorite author!

If you want to get in touch with Bob on CompuServe, by the way, he's got a new account number: 76004,1523.

## Trust

Talk about that word... Ron Corbet, a III member in Panama recently sent the SIG his sick Corvus hard disk asking for help to

get it repaired. Not only that, but he included his credit card numbers too and told us to do what we had to to get it repaired and working.

A call to Sun Remarketing seemed to take care of the request. They still sell and repair Corvus drives and agreed to take a look. Thanks to our crack Office Manager Nancy Pochepko, the drive was bundled up snugly and sent on its way.

## TCS notes

The III board on the TCS continues to be lightly used. I hope all our SIG members ask Santa for a cheap 1200 baud modem and the \$6.00 yearly TCS fee so you can start communing with the rest of us. I've recently been uploading some graphics and other files into our Data Library area, and the conversation is always (well, almost!) interesting. Why not join us in 1990?

## Graphics and the PD library

I continue to have a great deal of fun putting together all sorts of graphics disks for you. We introduce six new disks this month, including five double-sided disks with nothing but graphics on them (they cover all the A's and a chunk of the B's...still a long way to go!). None of these are self-booting, but with Sketchpad, Graphics Manager, Draw On III or some other graphics program, you can have a lot of fun with them. By the way, those fotofiles I uploaded into the TCS included graphics suitable for use at Halloween, Thanksgiving and Christmas.

The more I work with On Three's Graphics Manager, the more I realize what a truly powerful program it is. It's tremendously versatile and with a little patience can give you some great results (it is NOT Print Shop though and does take more work to get expected results). It could be used for at least some desktop publishing projects, such as newsletter banners, which you could print and then use Applewriter for the copy. I used it recently to print mailing labels and you could use it to print on address labels (like the //





program Labels, Labels, Labels) or design letterhead.

In concert with Chartmaker, you can get some interesting fonts to transfer. And with our graphics disks, you'll be able to choose from a tremendous variety of subjects.

I demonstrated some of the things you can do with Graphics Manager during the October SIG meeting, and if there's interest, I'll be happy to to an encore performance. The key here, I think is simply to let your imagination go and try it with the program. The manual is simple and straight forward, and help is always available. There is a version for use as a stand-alone and with Desktop Manger, as well as a color version if you have an Imagewriter // or similar color printer.

One final note. While GM will load many Apple // hires and double hires graphics, it CAN'T load GS or Mac graphics. However, I think there may be a way around that. I've found a GS program called "The Graphics Exchange" that the ad says will "pass virtually any Apple // graphics image between different programs." It supports a tremendous number of graphics formats including Macintosh! I think this may be our vehicle to get access to many newer graphics that can add spice to our III. I'll report on this soon, so stay tuned.

### Graphics again

I mentioned last time that Graphics Manager can load Publish It!2 graphics files with hardly a blink. I did a little investigating and found that while Publish It! saves its graphics as binary files, they are 33 blocks long. That's the same size as Apple III graphics files.

Further, if you change the binary file type (06) to Apple III graphics file (08), GM will load it perfectly as well. The only difference is that there's no warning that the file is not a foto!

If you want to use Publish It!2 files in Sketchpad or Draw On III, you'll have to load it into Graphics Manager first, and then save it to disk. Neither program will load binary files directly and once changed to a fotofile (type 08), Sketchpad loads it in the wrong graphics mode (you can't change

modes in this program, something you CAN do in GM.) Draw On appears to have similar problems, but I am not as familiar with it and will plead ignorance until I can read the manual a little more closely.

### Finally

These comments about Apple and its orphan machines from Apple Users Group International's President Joe Dobrowolski:

"My life with the III went from one of eager anticipation, to joy of owning, to purchasing a second, updated model, to frustration when Apple dropped the line, to anger and bitterness at being made an "orphan", to understanding that Apple is NOT the "free spirit" many of us had thought of it as...it WAS corporate America the same as the "three letter word" they all looked at with disdain. I must admit that I was to the point of total understanding and forgiveness until the recent news that they've done it to me again...canceled MY computer, the Mac //...I don't know if I'll Apple again. But the question is not what IS Apple doing to us, but what DID it do to us?"

## Apple III Disks

by Dave Ottalini

Your III PD library breaks 80 disks this month with SIX offerings.

Disk 1075 is called "Graphics Utilities." Side one contains a number of interesting programs by long-time IIIer Carlo Infante. Most of these programs deal with plotting on your III by using an Apple Plotter. However, for those studying graphics on the III, the routines used and other pertinent information may prove useful. See the file "Instructions" for help and examples. This disk is self-booting

on side one, but we did NOT fix the programs to return to Menu.Maker.

Side two of this disk has two Pascal utilities from a company called "D.C.Merc Design." One program will dump a graphic screen in 560 black and white mode (this is the Apple IIIs' Mode 2 graphics display) to an Epson MX 80 printer. . Check the file DCMA.ASCII for more information. The second is a program that reads data files of binary or text in format and then plots the data. This side is NOT self booting and you Pascal programmers out there will enjoy trying these out (neither is compiled). By the way, even if you are not interested in these programs, their discussions about Apple III graphics and plotting is worth reading.

Now to the fun disks. 1076 to 1080 begins what will be a long odyssey over the next few years. Thanks to John Ruffatto, we've gotten ahold of a tremendous Apple // Print Shop graphics library containing literally hundreds of pictures from A to Z. With these five disks, we will start the process of converting them to Apple III format for you.

As you might have guessed, our vehicle for doing this is On Three's Graphics Manager. To save space, we are putting a MINIMUM of six graphics on each fotofile. Each file has a header and each graphic is titled for you. In addition, each disk contains an ASCII file listing each file and what it contains. You can turn this into a data base or just print it out for reference.

Over the course of time, I hope our graphics offerings will also include some compilations of holiday and other themes to make the graphics more useful. As I mentioned in my Trail article, I've uploaded some fotofiles to the Apple III TCS board already.

I hope you enjoy these disks! Next month, Dr. Al Bloom returns with some more graphics offerings. Until then, we again appreciate your support and welcome any comments or suggestions you might have to help us improve your PD library.



# Public domain presents

by Dave Ottalini

Christmas is once again almost upon us, III SIGers. That means it's my chance to suggest some cheap presents you might want to get your little SARA to keep her happy as she moves into her second decade of use.

You III SIG's own public domain library is an excellent place to begin, since there are many titles to chose from, all at low cost. To begin with, everyone should have five of our most popular disks. 1000 is the catalog containing descriptions of all our offerings. Disk 1004 is the latest version of the System Utilities disk, which allows you to format, copy, list, set the date and time as well as configure your SOS.Driver file. 1005 is our "New Member" disk which actually contains two sides of basic Apple III information for all users, new and old alike. Disk 1013 is our Apple III diagnostics disk so important to help keep your computer going. Finally, 1014 is Jim Salerno's Basic Boot Disk that contains a number of useful utilities.

Now, if you were interested in a little fun, I can suggest disks 1001 and 1007. Both are Business Basic disks, 1007 aimed more at the kids in the family. Disk 1041 has Capt'n Magneto, a Pascal-based game for young or old alike that shows what can be done with Apple III fonts if you have a little imagination.

For those of you wishing to do a little writing, we offer disk 1006 which contains the 4.1 version of AppleWriter. It includes extensive tutorials and help files on disk. Our other word processing disk is called Ink Well. Disk 1029 has the entire manual on disk. 1030 has the actual program. Written in Business Basic, it provides you a true "What You See is What You Get" document on screen (that is, you know how it will print because you

can see it on your screen.)

Many of our disks have Business Basic programs. But what if you want to learn more about writing programs in BB? You're in luck because Apple's own Taylor Pohlman wrote a series of articles on that subject for the old Softalk Magazine. We got him to donate them all to the PD, and you'll find them on disks 1017 through 1021. Not only do these disks include the articles but ALL of the programs he discusses.

Graphics has become one of my favorite subjects on the Apple III. And while your SARA will never really give you the quality of a MAC or a GS, you can do some pretty amazing things. We offer a number of graphics and font disks you can use to spruce up your printouts. Disk 1012 includes a great little graphics program called Sketchpad. It will do just about anything you want by way of drawing pictures or changing pictures you load from other sources. It also includes Slideshow, which turns your III into a slide projector on screen to great effect.

One other program I really like is an old-time PD program called Chartmaker, disk 1074. I like it because it gives you three different fonts (Roman, Italic and Script) in a number of point sizes (that is height and width) that can be saved to disk and used with On Three's Draw On III or Graphics Manager.

One other program that might be fun to try is called Fig Factory. We have the manual on 1069. The black and white version is 1070 and the color version is 1071.

As for graphics, your III SIG now offers SIX double-sided disks full of fotofiles you can use. Five of those disks are new, coming into your PD this month as part of a long-term project to convert literally

hundreds of Print Shop (tm) graphics into Apple III format. Each 33 block Fotofile by the way contains AT LEAST six actual pictures!

By way of fonts, we offer disks 1037 and 1038. CustomFont will allow you to create your own fonts, or adapt those already available. You'll find a whole disk full on 1039. Many of these fonts can be used in On Graphics Manager to help create mailing labels, textual descriptions, etc.

Looking for telecommunications on your III? We have a tremendous resource for you. Disk 1067 offers XMODEM III, a program you can use to upload and download files from our own TCS, CompuServe or other services. Disk 1064 has the interpreter version of Access III, one of the most popular telecom programs for our machine. On that same disk is a super tutorial on how to get started with telecommunications on your Apple III.

III SIGers wishing to find out more information about their III may want to consider a number of our disks. 1008 includes information and help found over the electronic pages of MAUG (MicroNetworked Apple Users Group) on CompuServe. 1009 has material from the old III SIG on the Source. 1015 and 1057 contains information from Ed Gooding's wonderful III's Company BBS in Richmond, Virginia. Disk 1035 is "The Best of Bloom" and offers many of his columns from the Third Apple User's Group. Of interest here is material on file conversions from one machine to another. Disk 1047 has transcriptions from seminars held at the Phase III Conference in Wheaton, Illinois in October, 1987. And if you are really desperate, you can try 1040, 1058 and 59, which have a number of this author's articles from past Trail columns and other sources. Finally, we also offer "Best of" disks from both the Third Apple Users (TAU) Group (1010) and the Apple III Users of Northern California (ATUNC)(1055).

There are also two emulation program disks (1043-44), two disks full of programs and information contributed by III SIGers and





A  
P  
P  
L  
E  
  
I  
I  
I

# MacSource

2121 Crystal Drive  
Arlington, Virginia 22202  
(703)521-9292  
... just across the river

We sell software and peripherals for the  
**Macintosh**

- Laser and color printers
- Hard drives and Laser drives
- Fax/modems
- Monitors
- Scanners
- Software

We rent time on our Mac workstations

- **Mac II and SE**
- **Laser printer**
- **MS/DOS file translation**
- **Scanner (graphics & OCR)**

We have the new cordless mouse...it's neat!

others (1053 and 1061), a disk full of device drivers (1052) and even most of the excellent set of programs written by Daryl Anderson, including PowerKeys DM+ (1034) and two of my favorites, Powercat (1027) and Power Print (1024).

These are certainly not all the disks available in our PD (now up to 80 disks this month) but I hope this gives you an idea of what we have to offer. Most of these programs are described in greater detail on disk 1000. The WAP office also has a hard copy catalog of all Apple // and III PD disks (to time of publication) for only \$2.00. You can purchase disks in person at the WAP office, or by phone with a credit card. Mail is the other option with credit card or check. An order form should be in the back of the Journal. 🍏

Electronic Map Cabinet™  
CD-ROM  
shown  
actual  
size

electronic  
*Map  
Cabinet*

COMPACT  
disc  
DATA DISC

highlighted  
data

## We put the whole US into less space than this ad so you could have it at your fingertips!

- 327 SMSAs (Standard Metropolitan Statistical Areas) from an overview down to individual street corners.
- You can show airports, bodies of water, power lines, state and county boundaries, all interstates, state roads, city streets or any one or combination thereof.
- Maps can be annotated and saved to your hard disk
- Map can be exported in PICT format
- User selectable colors
- Magnification to one meter per pixel
- For map makers in government agencies, newspapers and TV stations or networks, newsletter publishers, marketing departments or agencies, schools and libraries, real estate offices, state and local governments, development offices, service businesses
- For desktop presentations and for anyone who has a need for accurate, detailed maps.
- One disc takes the place of hundreds of paper maps
- Maps in compressed vector format, originally more than 4 gigabytes, on one CD-ROM.
- Only \$199.95. Visa, MasterCard, POs and personal checks accepted.

highlighted  
data

P.O. Box 17229 • Washington, DC 20041 • (703) 533-1939

# LINO 300 IMAGING

## \$5.20

AS  
LOW  
AS

## \$3.64

Per 8.5 X 11 Page  
RC Paper, 1270 DPI

Per 8.5 X 11 Page  
RC Paper, 1270 DPI

### 24-HR TURNAROUND

### 72-HR TURNAROUND

### WITH ORDERS OF 100+ PAGES

## COLOR POSTSCRIPT PRINTING!

**NEW!**

## AWARD PUBLICATIONS

5301 Shawnee Rd., Suite 400 • Alexandria, VA 22312  
(703)354-1600 • FAX (703)354-1027 • BBS (703)354-0966

## HARD-TO-FIND, UNIQUE PRODUCTS FOR APPLE II ENTHUSIASTS

from the most reputable fax/phone/mail order company serving the Apple II community

### Quiet Fans

General system flakiness can often be traced to heat buildup inside your computer. You know you need a fan, but you can't stand the noise, either acoustical or electrical. Neither could the guys at Cirtech, so they designed a pair of whisper quiet fans using high-quality bearings, special PBT fan blades, and anti-vibration mounts. Installs in about 2 minutes; three times quieter than Apple's own fan. Specs: 65mA, 0.78 W, 22dB.

FAN-E Cirtech fan for Iie \$49.00  
FAN-GS Cirtech fan for Iigs \$49.00

### Cheap 3.5 drives

For months you've been asking us to carry inexpensive 3.5 drives. For months what you've wanted simply wasn't available in a drive we could support. But now AMR has produced an 800K 3.5 drive that's just like an Apple 3.5 at a fraction of Apple's \$429 price. Plugs into Iigs or Iic-Plus disk daisychain. Also works on a file with AMR's disk controller.

AM-001 AMR 3.5 drive \$259.00  
AM-002 AMR 3.5 controller for Iie \$79.00

### Apple II books

We carry in stock virtually every book in print that's about the Apple II. From Addison-Wesley's **Apple Technical Library** to **Sams Computerfacts** manuals to **AppleWorks Tips and Techniques**, we have them all. Write for our free catalog or call and ask about the book you're interested in. We also have in stock the accompanying disks for many books.

### ImageWriter clones

You know all about Laser Computer, Inc's Apple II-compatible computers, but did you know that Laser also makes an ImageWriter-compatible printer that costs less than half what Apple's does? It won't do color and it has a different ribbon, but we've used it with AppleWorks and GS/OS and ProDOS 8 graphics programs with results that match our ImageWriters. Just tell your software you're using an ImageWriter.

LC-001 Laser 190A serial printer \$299.00  
LC-002 Laser 190A ribbons \$5.95  
RC-001 8-pin cable for Iigs, Iic-Plus \$15.00  
RC-002 5-pin cable for Iic \$15.00  
RC-003 25-pin cable for serial cards \$15.00

### StatDisk

OK, it's expensive. But there isn't a faster or more reliable disk storage device available for any computer. Your Apple Iigs or Iie thinks the StatDisk is an Apple standard-slot RAM card. But the StatDisk uses very-low-power static RAM chips instead of the dynamic chips used by other cards. A small battery, built right on the card and automatically recharged when the computer is on, keeps your data safe for over two months. You can even remove the card from the slot; ship it to deepest, darkest, Macland; put in another Apple II and your data will still be there!

No other data storage medium is faster, quieter, or more reliable. Instant-on reliability (turn on your computer and boot into AppleWorks before your monitor warms up). 1 Meg card blocks next higher slot.

SD-004 512K StatDisk \$389.00  
SD-008 1 Meg StatDisk \$699.00

### News and solutions

Are you tired of Apple Computer's incessant message that only the Macintosh is a serious computer? Thousands of people like you subscribe to our monthly Apple II newsletter, **A2-Central**. It's a small, personalized publication concerned only with the exchange of meaningful information about the Apple II.

Just 8 pages thin, each issue is professionally typeset and packed tight with answers to the questions Apple II users around the world are asking. It's punched for a three-ring binder, indexed each February, and is considered by many to be the single most important information resource in the Apple II world.

A 3.5 disk subscription is also available, which includes both a paper newsletter and the full text of that issue in a disk file for full-text searches. The remainder of the disk is filled with programs from our subscribers, from our library on GENie, tech notes, system disk updates, and other hot stuff.

A2-N1 **A2-Central**, paper, 1 yr \$28.00  
A2-D1 **A2-Central**, 3.5 disk, 1 yr \$84.00

### Stack Support

Stacks have arrived in the Apple II kingdom and we're ready to offer charter subscriptions to the first Apple II publication about hypermedia. It's published 6 times a year as a set of stacks and distributed on 3.5 disks. **Stack-Central** includes the latest information on Apple II hypermedia developments, authoring tips, clip art and sounds, and samples of the best public domain and shareware stacks we can find.

SC-D1 **Stack-Central**, six 3.5 disks \$42.00

### Full Set Specials

You can get every issue of **A2-Central** we've ever published—five years worth of Apple II tips, tricks, and solutions to your problems—for just \$39. Paper back issues are bound and indexed. Disk back issues are for full-text searches using software such as **FastData Pro**.

FS-N **Indexed back issues, paper** \$39.00  
FS-D **Back issue text on 3.5 disks** \$39.00  
FD-001 **FastData Pro**, for searches \$49.00

**A2-Central** PO Box 11250, Overland Park, KS 66207 voice: 913-469-6502  
fax: 913-469-6507

item #	qty	price	
			<input type="checkbox"/> Send me your full catalog FREE!
			name _____
			adr _____
			<input type="checkbox"/> check <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard
			Amount enclosed \$ _____
			card number _____ expiration date _____
			WAP-A

**No shipping charges!**

**No Risk Guarantee!** If you aren't completely satisfied with your purchase, return the merchandise in its original package and we will refund your money in full. **We back our products!** Our 45-day unconditional guarantee means you take no risk on any product you buy from us.





# Modifications of "LIST"

by Chester H. Page

## First problem

Did you ever have an APPLESOFT program that announced a syntax error in a line that looked perfect when LISTed, or stopped on a READ command because the file was not open, but then printed a FILE(S) STILL OPEN message?

These situations can arise when a control-letter sneaks into a program line, sometimes control-A because it is so easy to accidentally press adjacent keys, sometimes from hitting CONTROL instead of SHIFT.

The program defect is not apparent because LIST doesn't display control letters. Changing this by running a SHOW utility is fine for listing, but most annoying when entering commands. If you hit a wrong key and backspace, the screen ordinarily backspaces and lets you retype the character. But under SHOW, the backspace is printed as an inverse H, followed by the replacement typing. For example, "TA[H]EST", where the square brackets indicate an inverse letter. Under normal conditions, "TEST" would be displayed. The SHOW display does not interfere with proper entry of TEST, but makes it difficult to correct mistypings.

My solution to this dilemma was to create a ProDOS command, LIST, which LISTs a program with control letters highlighted, but reverts to normal display when it is finished. LIST can have its own meaning in ProDOS, separate from that in Applesoft. When a command is entered, ProDOS checks it; if it is recognized as a ProDOS command, it is executed. If it is not recognized, Applesoft is requested to check it, thus ProDOS can "steal" the word "LIST", since ProDOS gets the first chance to identify it.

## Solution

My idea was to detour the output (via the CSW hook at \$36,\$37) to a routine that converts control letters to inverse capital letters, and call LIST from Applesoft ROM. When the LISTing is finished, the program should restore the normal output path. This requires calling LIST via machine code, restoring the output path via machine code, then using RTS to return to ProDOS and the Applesoft prompt.

The first difficulty encountered is in calling LIST from machine code. It turns out that the normal entry point at \$D6A5 cannot be used; it is necessary to set the carry and enter at \$D6B1. The program now LISTs in the desired fashion, but the LIST routine has an internal return to Applesoft, so that the routine for restoring normal output is never reached! It can be reached only by a CALL from Applesoft taking effect at the end of LISTing.

The Applesoft command, CALL 1234, shows up in memory as  
00 XX XX YY YY 8C 31 32 33 34  
where XXXX is the address of the next program line, YYYY is the number of the line being executed, 8C is the Applesoft token for CALL, and 31 32 33 34 is the ASCII code for 1234. In setting up a dummy command, it is convenient to use

00 FF FF FF FF 8C 31 32 33 34  
which could never interfere with a real line. (It gives the next address as \$FFFF and the current line number as 65535) This dummy line is activated on the return from LIST by putting its memory location into the TXTPTR at \$B8,\$B9 before the LIST routine is run.

The next problem is to determine the address to be CALLED by the dummy line; in principle, it

should be the starting address of the NOSHOW routine which restores the output hook, but that address is not known in advance, and if it is figured out, then any change in the program code could change it. It would take a complicated routine to convert the address of a label in an assembly listing to the ASCII representation of the proper sequence of decimal digits. The easy way out is to use a fixed relay point: put the label address into the relay and CALL the fixed relay location. Conveniently, the last four bytes of the BI Global page are not used, so we can set up a relay at \$BFEC, safe from interference.

With all these adjustments, the XLIST program works, but only once! A second attempt to use XLIST results in the standard Applesoft LIST, unless RESET has been used. For some reason, probably Murphy's Law, the messing around with the system changes the INPUT hook (\$38,\$39) so that the next attempt to parse LIST fails. This is corrected by changing the NOSHOW routine to a restoration of the INPUT hook instead of the OUTPUT hook. It then turns out that the output hook is also restored! This is done by the \$C300 firmware in the 80-column card; an Apple ][+ without an 80-column card would probably require explicit restoration of both hooks, by adding the following fragment to the NOSHOW routine:  
LDA #\$F0  
STA \$36  
LDA #\$FD  
STA \$37

## Program: LISTING 1

The program is composed at \$2100; an installation routine at \$2000 assigns a buffer and relocates the program to that buffer (\$9900 if no other buffers have been previously assigned). Assigning this buffer space automatically moves HIMEM down by \$100 bytes. (For information on adding ProDOS commands, see:



ProDOS Technical Reference Manual (for the Apple II family), App. A

"Beneath Apple ProDOS", Worth and Lechner, pp A30-A35

"ProDOS BASIC's Global Page", Sandy Mossberg, NIBBLE Vol. 6/ No. 1

"Command Set", Jon Hyland, NIBBLE Vol. 9/No. 5)

The \$21 high byte in absolute addresses in the XLIST source code must be changed because of the move (normally to \$99). The addresses involved are found using the labels RL1/RLA.

Data entered at the keyboard are moved automatically by ProDOS to a pathname buffer, normally at \$BCBC. The COMPR routine compares the first four bytes in this buffer with the command name LIST, and checks that this is followed by a RETURN. If all 5 bytes match, the command is executed.

SHOW sends all non-control characters to the output routine, COUT1; control characters are converted to inverse capital letters, then sent to COUT1.

### Special properties of the program

All the above literature references are relevant to commands that allow parameters. After ProDOS identifies a command, it returns for further parsing for possible parameters, checks on their legitimacy, etc., then goes to the command execution routine. This involves storing data on the length of the command name, the allowable parameters, and the address at which the command execution is located. In the programs of this paper, LIST is not allowed to have parameters (the requirement of a CR after "LIST"), so all the steps relating to parameters are omitted. This makes the program seem much more straightforward; if the command is identified, it is executed immediately.

The standard form of LIST is still available: if parameters are entered, e.g., LIST 1- , the command is not recognized and the search is referred to Applesoft, where the

conventional LIST is found and executed.

XLIST is installed by entering BRUN XLIST or -XLIST.

### Second program- PLIST: LISTING 2

When programs are LISTed to the printer, long lines cause my printer to overwrite the line, because under startup conditions it does not automatically advance the line except on a RETURN character. Also, programs list continuously for lack of automatic form feed (page advance). So I wrote a utility, LISTER, which takes care of these problems (provided I remember to run it beforehand!).

When LISTing a set of programs to the printer, I am also slightly annoyed by the fact that each listing ends at a random page position, requiring manual manipulation of printer pushbuttons to form feed for the next listing. This lack of a terminating form feed can be overcome by having ProDOS "steal" LIST from Applesoft whenever PR#1 is in effect. This conditional steal is handled as follows: when LIST is recognized, the output hook is examined for slot 1. If PR#1 is not in effect, the parser is told that the command

was not found, causing the search to be handed over to Applesoft. The ProDOS version of LIST simply adds a form feed command at the end of each listing. By doing this only when the printer is active, listing to the screen is not affected (the form feed would clear the screen). After LISTing to the printer, the output hook should be restored, and PR#1 turned off (by calling ProDOS WARM START).

### Final program: LISTING 3

These two ideas can be combined into a version of LIST which

- (1) Lists to the screen with control letters displayed (inverse).
- (2) If PR#1 is in effect, sends normal listing to the printer, ends with a form feed, and returns to screen display.
- (3) Executes the standard LIST command if parameters are given, such as LIST 100-250, or LIST 1- for listing the entire program.

In the final version, NEWLIST, if LIST is recognized (with no parameter), then the output hook is checked to see if PR#1 is in effect. If it is, operation continues at PAPER, otherwise it jumps to SCREEN.

## ATTENTION FEDERAL EMPLOYEES



### What can **FEDERAL JOBLINK** do for you?

- Provides SF 171 on screen for easy completion.
- Has modified pages to accommodate your needs.
- Contains 27 pages of popular forms; not copy protected.
- See review in WAP July 1988 or call us to obtain a copy.

### *Isn't career advancement worth \$49.95 ?*

(Add \$3.00 s/h; MD res. add 5% sales tax)

MULTISOFT RESOURCES

P.O. Box 235 Washington Grove, MD 20880 (301)-977-6972

Requires Macintosh & MacDraw (specify 1 or II)

**Makes a great holiday gift, too!**





A  
P  
P  
L  
E

II

```

*****
*
*          NEWLIST
*
*      LIST to printer
*      ends with form advance
*
*      LIST to screen
*      displays control letters
*
*      Chester H. Page
*      July 27, 1989
*****
*
* The LIST command is "stolen" by ProDOS
*
PTR EQU 6
OUTHOOK EQU $36
INHOOK EQU $38
A1L EQU $3C
A2L EQU $3E
A4L EQU $42
TXTPTR EQU $B8
WARMSTART EQU $BE00
EXTRNCMD EQU $BE06
ERROUT EQU $BE09
VPATH1 EQU $BE6C
GETBUFR EQU $BEF5
RELAY EQU $BEFC
DOLIST EQU $D6B1
COUT EQU $FDED
COUT1 EQU $FDF0
MOVE EQU $FE2C
ORG $2000
* Installation
LDA #1
JSR GETBUFR
BCS BUFERR
PHA
* High byte of addresses of relocated code
STA A4L+1
STA RL1+2
STA RL2+1
STA RL3+1
STA RL4+1
STA RL5+1
LDY EXTRNCMD+1
LDA EXTRNCMD+2
STY CMDLINK+1
STA CMDLINK+2
LDA #>CMDSTART
STA EXTRNCMD+1
PLA
STA EXTRNCMD+2
LDY #>CMDSTART
LDA #<CMDSTART
STY A1L
STA A1L+1
LDY #>CMDEND
LDA #<CMDEND
STY A2L
STA A2L+1
LDY #0
STY A4L
JMP MOVE
BUFERR JMP ERROUT
HEREL EQU >*
DS $100-HEREL
* Parsing command
CMDSTART CLD
LDA VPATH1
STA PTR
LDA VPATH1+1
STA PTR+1

```

```

LDY #1
COMPR LDA (PTR),Y
RL1 CMP CMDNAME-1,Y
BNE NOTIT
INY
CPY #6
BCC COMPR
LDA OUTHOOK+1 If PR#1 is not in effect,
CMP #$C1 go to SCREEN routine
BNE SCREEN
PAPER LDA #$4C
STA RELAY
LDA #>RESTORE
STA RELAY+1
RL2 LDA #<RESTORE
STA RELAY+2
BNE SETDUMMY
SCREEN LDA #>SHOW
STA OUTHOOK
RL3 LDA #<SHOW
STA OUTHOOK+1
LDA #$4C
STA RELAY
LDA #>NOSHOW
STA RELAY+1
RL4 LDA #<NOSHOW
STA RELAY+2
SETDUMMY LDA #>DUMMYCOM
STA TXTPTR
RL5 LDA #<DUMMYCOM
STA TXTPTR+1
SEC
JSR DOLIST
*****
SHOW CMP #$80
BCC OUT
CMP #$A0
BCS OUT
CMP #$8D
BEQ OUT
ORA #$40 Convert control letter to
AND #$7F a capital and invert it
OUT JSR COUT1
*****
NOTIT SEC
CMDLINK JMP $0000
CMDNAME ASC .LIST.
DB $D Require CR after LIST
RTS
* Dummy APPLESOFT line; with next line at $FFFF
* Dummy line number 65535 ($FFFF)
DUMMYCOM DB 0,$FF,$FF,$FF,$FF
DB $8C,$34,$38,$38,$39,$32,00,00,00
* The dummy line reads CALL 48892 ($BFEC)
RESTORE LDA #$C
JSR COUT
LDA #$F0
STA $36
LDA #$FD
STA $37
JMP WARMSTART
NOSHOW LDA #$F4
STA INHOOK
LDA #$B7
STA INHOOK+1
CMDEND RTS
LST NOA

```



```

*****
*
*          PLIST          *
*
*   On LIST to printer   *
* ends with form advance *
*
*
*   Chester H. Page     *
*   July 27, 1989      *
*****
*
* If PR#1 is in effect when LIST is entered
* the command is "stolen" by ProDOS
*
PTR EQU 6
OUTHOOK EQU $36
INHOOK EQU $38
A1L EQU $3C
A2L EQU $3E
A4L EQU $42
TXTPTR EQU $B8
EXTRNCMD EQU $BE06
ERRROUT EQU $BE09
VPATH1 EQU $BE6C
GETBUFR EQU $BEF5
RELAY EQU $BEFC
DOLIST EQU $D6B1
COUT EQU $FDED
MOVE EQU $FE2C
ORG $2000
* Installation
LDA #1
JSR GETBUFR
BCS BUFERR
PHA
* High byte of addresses of relocated code
STA A4L+1
STA RL1+2
STA RL2+1
STA RL3+1
LDY EXTRNCMD+1
LDA EXTRNCMD+2
STY CMDLINK+1
STA CMDLINK+2
LDA #>CMDSTART
STA EXTRNCMD+1
PLA
STA EXTRNCMD+2
LDY #>CMDSTART
LDA #<CMDSTART
STY A1L
STA A1L+1
LDY #>CMDEND
LDA #<CMDEND
STY A2L
STA A2L+1
LDY #0
STY A4L
JMP MOVE
BUFERR JMP ERRROUT
HERELE EQU >*
DS $100-HERELE
* Parsing command
CMDSTART CLD
LDA VPATH1
STA PTR
LDA VPATH1+1
STA PTR+1
LDY #1
COMPR LDA (PTR),Y
RL1 CMP CMDNAME-1,Y
BNE NOTIT
INY

```

```

CPY #6
BCC COMPR
LDA OUTHOOK+1 LIST found, but if PR#1
CMP #$C1 not in effect, claim
BNE NOTIT not found
LDA #$4C
STA RELAY
LDA #>RESTORE
STA RELAY+1
RL2 LDA #<RESTORE
STA RELAY+2
LDA #>DUMMYCOM
STA TXTPTR
RL3 LDA #<DUMMYCOM
STA TXTPTR+1
SEC
JSR DOLIST
NOTIT SEC
CMDLINK JMP $0000
CMDNAME ASC .LIST.
DB $D Require CR at end
* Dummy APPLESOFT line; with next line at $FFFF
* Dummy line number 65535 ($FFFF)
DUMMYCOM DB 0,$FF,$FF,$FF,$FF
DB $8C,$34,$38,$38,$39,$32,00,00,00
* The dummy line reads CALL 48892 ($BFEC)
RESTORE LDA #$C
JSR COUT
LDA #$F0
STA $36
LDA #$FD
STA $37
JMP $BE00 DOS WARM START
CMDEND LST NOA

```



## Toner Cartridges Remanufactured

- Highest Quality Available  
We Guarantee It!
- Black, Long Lasting Toners With:  
up to 25% more prints on our std. line.
- Prompt Service - Free pickup and Delivery.

Call about our competitive prices and our  
substantial quantity discounts.

We cut your Laser Printer  
Cartridge Costs in Half!

Remanufacturing Cartridges since 1987...  
Find out why many Major Law Firms,  
Accounting Firms, and Universities in the  
DC area now source their cartridges from us!



**THE LASER'S RE-SOURCE**

Silver Spring, Maryland

681-4516

(We also buy used EPS-SeriesII cartridges)



A  
P  
P  
L  
E

11

```

*****
*
*          XLIST
*
*   LISTs BASIC PROGRAM
* with control characters
*   displayed
*
*   Chester H. Page
*   July 27, 1989
*****
PTR EQU 6
OUTHOOK EQU $36
INHOOK EQU $38
A1L EQU $3C
A2L EQU $3E
A4L EQU $42
TXTPTR EQU $B8
EXTRNCMD EQU $BE06
ERROUT EQU $BE09
VPATH1 EQU $BE6C
GETBUFR EQU $BEF5
RELAY EQU $BEFC
DOLIST EQU $D6B1
COUT1 EQU $FDF0
MOVE EQU $FE2C
ORG $2000
* Installation
LDA #1
JSR GETBUFR
BCS BUFERR
PHA
* High byte of addresses of relocated code
STA A4L+1
STA RL1+2
STA RL2+1
STA RL3+1
STA RL4+1
LDY EXTRNCMD+1
LDA EXTRNCMD+2
STY CMDLINK+1
STA CMDLINK+2
LDA #>CMDSTART
STA EXTRNCMD+1
PLA
STA EXTRNCMD+2
LDY #>CMDSTART
LDA #<CMDSTART
STY A1L
STA A1L+1
LDY #>CMDEND
LDA #<CMDEND
STY A2L
STA A2L+1
LDY #0
STY A4L
JMP MOVE
BUFERR JMP ERROUT

```

```

HEREL EQU >*
DS $100-HEREL
* Parsing command
CMDSTART CLD
LDA VPATH1
STA PTR
LDA VPATH1+1
STA PTR+1
LDY #1
COMPR LDA (PTR),Y
RL1 CMP CMDNAME-1,Y
BNE NOTIT
INY
CPY #6
BCC COMPR
LDA #>SHOW
STA OUTHOOK
RL2 LDA #<SHOW
STA OUTHOOK+1
LDA #$4C
STA RELAY
LDA #>NOSHOW
STA RELAY+1
RL3 LDA #<NOSHOW
STA RELAY+2
LDA #>DUMMYCOM
STA TXTPTR
RL4 LDA #<DUMMYCOM
STA TXTPTR+1
SEC
JSR DOLIST
*****
NOTIT SEC
CMDLINK JMP $0000
CMDNAME ASC .LIST.
DB $D Require CR
* Dummy APPLESOFT line; with next line at $FFFF
* Dummy line number 65535 ($FFFF)
DUMMYCOM DB 0,$FF,$FF,$FF,$FF
DB $8C,$34,$38,$38,$39,$32,00,00,00
* The dummy line reads CALL 48892 ($BFEC)
SHOW CMP #$80
BCC OUT
CMP #$A0
BCS OUT
CMP #$8D
BEQ OUT
ORA #$40 Convert control letter to
AND #$7F a capital and invert it
OUT JSR COUT1
RTS
NOSHOW LDA #$F4
STA INHOOK
LDA #$B7
STA INHOOK+1
CMDEND RTS
LST NOA

```



# New Newsletter on the II

by Phil Shapiro

Yesterday I received my first copy of a new Apple II quarterly newsletter titled, "II at Work: Apple Productivity News." It's free to those persons who use the Apple II in their business, profession, or other productivity application. Since I occasionally send my mother a Print Shop birthday card, I fall squarely into one of these categories.

All kidding aside, II at Work is a breath of fresh air in a drought of Apple II publications. It has an interesting blend of articles, editorials and advertisements. The articles, as you might expect, deal with the concerns of those who use the Apple II as a serious productivity tool. So II at Work is not the place to go looking for game reviews or the latest educational software.

The current issue, the second to be published, brims with interesting reading. The cover page article discusses the Apple II Developer Conference in Kansas City this past summer and the formation of a new union of software developers, publishers, and resellers. Barney Stone, editor of the newsletter and author of DB Master, had an active role in the formation of this new group.

Other articles detail how specific software applications have helped in a variety of different business and professional settings. You can read how a podiatrist uses a relational data base to keep track of his billings and insurance. Predictably, you can read about how AppleWorks is used to track orders, invoices, and commissions.

But the newsletter goes beyond the predictable in explaining how an Apple II GS is being used in a news service company, and how a tree surgeon has automated his business using an Apple II. (Many of his satisfied clients have put down

roots in the neighborhood, which is not surprising considering his practice went way out on a limb.)

Reviews include the new ReportWriter, from Beagle Bros., and if you've lost your data on an AppleWorks data disk, you would do well to read the article about RepairWorks.

The feature on HyperStudio is packed with information. The article describes how HyperStudio brings exciting new possibilities to the Apple II GS, and further details how the program could be used by a realtor, a securities broker, and a surgeon.

Why, you might ask, is this fine newsletter distributed free of charge? What's the catch? Well, there is a small catch. The newsletter is sprinkled with promotional material disguised as news articles. In more than a few articles you quickly realize that the author of the article is writing about none

other than his or her own product. Yet taking this marketing sleight-of-hand into account, the newsletter is still a fine assembly of interesting articles. Just be forewarned that the authors of the articles might have a financial interest in the product being described.

The editorials are well crafted. A lengthy editorial by the editor of Nibble magazine, and another by Barney Stone, hit the nail on the head. These folks are committed Apple II users and speak eloquently on behalf of the Apple II community at large. Stone deserves much credit for his initiative in bringing this newsletter to life.

To receive a subscription to II at Work, write or call: II at Work, P.O. Box 3200, Maple Glen, PA 19002, (215) 641-1825. If you do not use the Apple II in your work or business, but would still like to receive the newsletter, the subscription rate is a reasonable \$8 per year. In support of this fine newsletter, I am willingly sending in my \$8 of support. And I'll still send my mother a Print Shop birthday card.

The author develops educational and productivity software for the Apple II. 🍏

**Letraset® "Studio Line" Learning Center**

- ◆ DesignStudio™
- ◆ ColorStudio™
- ◆ ImageStudio™
- ◆ FontStudio™
- ◆ LetraStudio™

Competitive Pricing

**Macintosh Desktop Media Services**

COLOR OUTPUT ◆ QMS ColorScript™ 100 Model 30 ◆ TABLOID TRANSPARENCIES

**PC RESOURCES LTD**  
 1850 Centennial Park Dr ◆ Suite 300  
 Dulles Access Rd at Wiehle Ave Exit  
 Reston, VA 22091 ◆ 703 860 1100

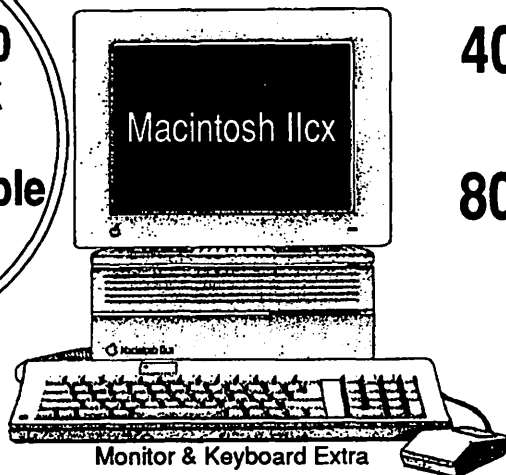


# COMPUTER AGE Macintosh® Sale!

Get a  
\$200 to \$300  
Cash-Back  
Rebate  
on select Apple  
add-ons\*  
Call for details.



Authorized Dealer



Monitor & Keyboard Extra

**40 Meg Macintosh IIcx**

*\*After  
Rebate* **\$3395**

**80 Meg Macintosh IIcx**

*\*After  
Rebate* **\$3695**

Macintosh IIcx With 68030 Processor, 1 Meg RAM, One 1.4M FDHD SuperDrive, Quantum Hard Drive, 2 Year Hard Drive Warranty, Mouse, and *HD Prepare*.

**Apple  
Two Page Display**  
With Video Card **\$1999**



Compact, Transportable, The Macintosh SE Has A Built-In Expansion Slot, Mouse, And Now Includes One 1.4M FDHD SuperDrive.

**20 Meg SE**

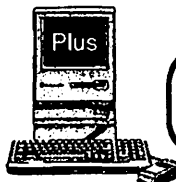
1 Meg RAM, *\*After  
Rebate* **\$2139**  
20 Meg Seagate HD,  
1 Year Hard Drive Warranty, and *HD Prepare*.

**2/40 Meg SE**

2 Meg RAM, *\*After  
Rebate* **\$2549**  
40 Meg Quantum HD,  
2 Year Hard Drive Warranty, and *HD Prepare*.

**Macintosh Plus**

*\*After  
Rebate* **\$999**



Keyboard Included.

**2 Meg Plus**  
*\*After  
Rebate* **\$1199**

Ideal Entry-Level Macintosh Plus With an 800K Floppy Drive, Mouse.

**20 Meg Plus**

1 Meg RAM, *\*After  
Rebate* **\$1388**  
20 Meg Seagate HD,  
1 Year Hard Drive Warranty, and *HD Prepare*.

**30 Meg Plus**

1 Meg RAM, *\*After  
Rebate* **\$1438**  
30 Meg Seagate HD,  
1 Year Hard Drive Warranty, and *HD Prepare*.

**Apple  
Portrait Display**  
With Video Card **\$1249**



Compact, High-Performance, The Macintosh SE/30 With 68030 Technology, Internal 030 Direct Slot, 1.4M FDHD SuperDrive, and Mouse.

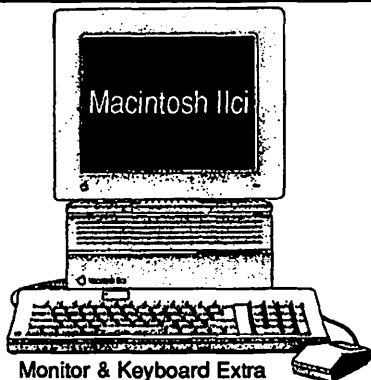
**40 Meg SE/30**

1 Meg RAM, *\*After  
Rebate* **\$3145**  
40 Meg Apple HD,  
Apple Hard Drive Warranty.

**80 Meg SE/30**

1 Meg RAM, *\*After  
Rebate* **\$3545**  
80 Meg Quantum HD,  
2 Year Hard Drive Warranty, and *HD Prepare*.

**COMPUTER AGE**  
588-6565 937-0300



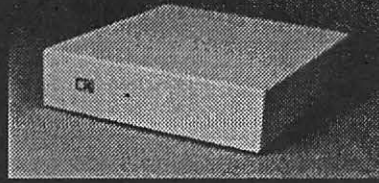
Monitor & Keyboard Extra

**40 Meg Macintosh IIci \$4799**

**80 Meg Macintosh IIci \$5099**

High-Performance Macintosh IIci With 25 MHz 68030 Processor, Built-In Video Support, A 1.4M FDHD SuperDrive, 1 Meg RAM, Quantum HD, 2 Year Hard Drive Warranty, Mouse, & *HD Prepare*.

# The Lowest Prices On CAi External SCSI Hard Disk Drives



**20 Meg \$389**      **Seagate**      **30 Meg \$439**  
1 Year Warranty

**CAi 40Q**  
RATED  
"THE BEST BUY"  
BY THE  
BERKELEY  
MACINTOSH  
USERS GROUP

**Quantum**  
2 Year Warranty  
19ms/12ms With Built-In 64K Cache  
**40 Meg \$599**  
**80 Meg \$799**  
**100 Meg \$999**

**CAi**  
"Q" SERIES  
HARD DRIVES  
INCLUDE  
SOFTWARE  
SELECTABLE  
SCSI ID

•COMPLETE WITH CABLES, MANUAL  
•LED BUSY LIGHT  
•TRUE PARTITIONING OPTION

Featuring  
**HD Prepare**

•ZERO FOOTPRINT METAL CASE  
•TWIN SCSI PORTS  
•FULLY TESTED AND "BURNED-IN"

**Service Center  
Specials**  
Installation Included

## RAM Upgrades

For Mac Plus or SE  
1 To 2 Meg \$249  
1 To 2.5 Meg \$299  
1 To 4 Meg \$599  
2 To 4 Meg \$349

For Mac II, IIx,  
IIcx or SE/30  
1 To 2 Meg \$199  
1 To 4 Meg \$549  
1 To 5 Meg \$649  
1 To 8 Meg \$999

**Apple IIe  
To Apple IIgs  
System  
Upgrade  
\$299**

### Apple Printers

**ImageWriter II \$429**

**LaserWriter II NT**  
With Toner \$3495

**LaserWriter II NTX**  
With Toner \$4699

**COMPUTER AGE**  
LaserWriter Prices Always  
Include A Toner Cartridge!

Apple Standard Keyboard \$99  
Apple Extended Keyboard \$165

**Apple Scanner**  
For Macintosh \$1299

**Apple PC 5.25" Drive**  
For Macintosh \$249

**Apple 5.25" Disk Drive**  
For Apple II Family \$199

**AppleCD SC**  
CD-ROM Drive \$899

**2400 Baud Modem**  
With TermWare \$139

**Pagemaker 3.0**  
For Macintosh \$349

Microsoft For Macintosh  
**Excel 2.2 \$239**  
**Word 4.0 \$239**  
**Works 2.0 \$199**

**Intuit Quicken**  
For Macintosh \$59.95

SONY 3.5" DISKS 10 PAK  
DS/DD \$16.95 DS/HD \$44.95

**COMPUTER AGE**<sup>sm</sup>

A MicroAge Affiliate

### Sales Showrooms

9433 GEORGIA AVENUE  
SILVER SPRING, MD  
(301) 588-6565

10606 US ROUTE 1  
BELTSVILLE, MD  
(301) 937-0300

### Service Center

9431 GEORGIA AVENUE  
SILVER SPRING, MD  
565-9130



Authorized Dealer

\*APPLE REBATE &  
SALE ENDS 12-31-89



Gary Hayman on...

A  
P  
P  
L  
E  
  
II

# AppleWorks 3.0 & Publish.It! 2 Compatibility

by Gary Hayman

Perhaps you already have discovered that you can't use an AppleWorks 3.0 (AW3.0) document that contains any of the new commands, in Publish.It! 2 (PI2). A call to PI2's publisher, TimeWorks, revealed that they were unaware Claris was changing the file format, and they got caught short. TimeWorks plans an update to Publish.It! 2 this spring, but I would imagine that that is a little too long for you to wait, isn't it? Here is an easy work-around that allows PI2 to accept document files created with AW3.0. Go ahead and prepare your document as you normally would except that between paragraphs place two carriage returns. Save your docu-

ment in the regular manner but also print it as a "text file (ASCII) on disk" using the OA-P command. Choose item number 2 on the next menu, "Spaces substituted for tab stops," and enter the Pathname (remember to include the name of the file and make sure that it is different from the AW file - I normally put a ".T" or ".txt" at the end of the file name to identify it as a text file).

Now boot up PI2. Draw a text block and place the "I" beam in the block. Pull down the file menu and select "Import a text file" (not an AppleWorks file). You may have to change drives to find your text file. After double clicking you will be asked, "Do you want to remove Carriage Returns at the end of each

line?" Select YES and Voila! your file is displayed correctly in the text block.

The real secret here is that if you did not put two carriage returns between each paragraph, PI2 would strip those returns on lines by themselves from the document. When you put two returns between paragraphs only one is stripped out, leaving your document as you would want it.

Those of you with Beagle Bros. Timeout PowerPack can use the TO.AWP.TO.TXT (version 3.0 - see your Beagle Buddy for your update) choice from your OA-ESC menu. When using the above returns are not placed at the end of each line, only at the end of the paragraph. It will not be necessary to place the extra return between paragraphs as I had earlier stated if you use this Timeout application.

If you discover any other problems please let me know so that I can advise everyone. There are many users of AW3.0 and PI2 who would like to know the problems and fixes. 🍏

# The Jabberwock Lanced

by Gary Hayman

One of the drawbacks of reporting on beta copies of a program is that many problems are eventually fixed and the final documentation is issued when the product is publicly introduced. So it happened when AppleWorks 3.0 finally appeared on the streets.

In my October WAP Journal article, "AppleWorks 3.0 Meets the Jabberwock," I reported about what strange things happen when you copy spreadsheet information to the clipboard and then paste it into the word processor. I gave a fix, or should I say a technique, that would work around the problem. The problem still exists, but there is now a better way to transfer information of this nature. Apple-

Works 3.0 allows you to "rint to the clipboard" (different from copying) a block of information. When you then paste the printed information from the clipboard into the word processing document, its appearance is now much neater.

When the information is transferred over, a file name, page number, and a date come along with it. You may want to remove these from your document. If you have formatted the numbers in the spreadsheet, they are lined up properly in the word processing document, so you won't have to use the decimal ruler. Also, you can take advantage of the centering command (CTRL-C) to present your table in an attractive manner.

Now you will find it easy to establish a quick table in the spreadsheet and transfer the results into your word processing document. If you want to get real fancy you can print the document using TimeOut SuperFonts from Beagle Bros. or even Publish.It! 2 from TimeWorks, but don't use proportional fonts for your tables if you want them to line up. 🍏



# Operant Systems

...since 1982

## )(-series Hardware

### DOT-MATRIX & LASER PRINTERS

Panasonic 1180 (192 cps, 9-pin, Epson-compatible)	199
1191 (240 cps, 9-pin)	249
1124 (192 cps, 24-pin)	349
Okidata 320 / 321 (300 cps, 9-pin, N/A mode, std / wide carriage)	379 / 525
390 / 391 (270 cps, 24-pin, std / wide carriage)	525 / 699
NEC 2200KE (192 cps, 24-pin quality at a bargain price)	349
6200 / 5300 (265 cps, 24-pin, std / wide carriage)	499 / 699
Toshiba 321SL (216 cps, 24-pin)	519
Olympia NP-30 (150 cps, Imagewriter-compatible)	285
HP LaserJet II (8 ppm, 512k)	1699
LaserJet IIP (4 ppm, 512k)	1095
DeskJet (240 cps inkjet, 300 dpi, LaserJet-compatible)	739
Panasonic 4450 (11 ppm, 512k, dual input bins, LaserJet-compatible)	1450

### MODEMS

Applied Engineering DataLink 1200 / 2400 (1200 / 2400 card w / software)	149 / 185
Anchor 1200E / 2400E (1200 / 2400 external, Hayes-compatible)	119 / 165
Prometheus Promodem 2400A (2400 card w / software)	135
Promodem 1200G / 2400G (1200 / 2400 external)	115 / 175

### MEMORY EXPANSION & VIDEO BOARDS & CPU'S

Applied Engineering RamWorks III (0k-1 meg, for ][e)	119
RamFactor (0k-1 meg, for ][+ or ][gs)	159
gaRam (0k-1.5 meg, for ][gs)	95
gaRAM Plus (0k-6 meg for ][gs)	139
Transwarp (3.6 mhz 6502e accelerator)	149
Transwarp GS (7-mhz accelerator for ][gs)	295
PC Transporter (IBM-on-a-card, 768k)	389
AMR 80-column card (64k, for ][e)	59
Zip chip (4 mhz / 8 mhz CPU chip replacement)	119 / 155

### HARD & FLOPPY DISKS

Sidor II (20 / 40-meg for ][+, ][e, ][gs or Mac)	489 / 639
Applied Engineering Vulcan 20 / 40 (internal hard disk for ][ series)	499 / 649
Half-hi floppy, 143k (for ][+ / ][e, ][c)	119
AMR A-5d (143k, daisychain port, for ][gs)	149
AS800 (3.5" 800k drive for ][gs, ][c+, Mac)	199

### INTERFACES & BUFFERS & CLOCKS

ProGrappler (parallel printer interface w / graphics)	89
Grappler c / mac / gs (use most parallel printers from your serial port)	95
Practical Peripherals Graphicard (parallel interface w / graphics)	59
SerialI (serial interface for modems or printers)	89
Microbuffer Mini (32k-512k printer buffer)	85

## )(-series Software

### WORD & PAGE PROCESSING

Appleworks 3.0	179
Appleworks GS	209
Word Perfect (for ][e, ][c, ][gs)	95
pta:Write (w / speller)	76
Bank Street Writer (64k and 128k Plus versions)	49 / 56
Newsroom	25
Publish It! 2.0	76
Sensible Grammar	65

### SPREADSHEETS

VIP Professional (][e, ][c / ][gs)	139 / 169
------------------------------------	-----------

### DATABASE

pta:File w / Report	76
---------------------	----

### HOME & BUSINESS ACCOUNTING

Managing Your Money 4.0	95
Quicken (easy home accounting)	35
BusinessWorks (best ][e / ][c / ][gs-series business accounting)	259
DAC-Easy Accounting	76
Peachtree Back-To-Basics Professional (GL / AR / AP / INV for ][e, ][c, ][gs)	169

### COMMUNICATIONS

Ascii Express Professional (PRODOS version)	79
MouseTalk	76
Applied Engineering ReadyLink (split screen, VT-100 emulation)	79
Compuserve Starter Kit / Prodigy Starter Kit	29 / 35

### MISCELLANEOUS SOFTWARE

Beagle Timeout SideSpread / FileMaster / DeskTools / Thesaurus	32
UltraMacros	39
QuickSpell / SuperFonts	42
Graph	55
pta:Workmates (includes Write, File, Report, Plan)	125
Print Shop / Print Shop Companion	35 / 29
Copy ][+ v8.4	29
Avery List & Mail	46
PaintWorks Plus w / clipart (for ][gs)	59
Flight Simulator II / Jet	35 / 29
Where in the World is Carmen Sandiego?	32

## Mac Hardware

### LASER & INKJET PRINTERS

General Computer Personal LaserPrinter (QuickDraw-compatible, six fonts)	1549
Personal LaserPrinter Plus (as above, w / seven additional fonts)	1649
Business LaserPrinter (6 ppm, Postscript, 2-meg)	2995
WriteMove (QuickDraw-compatible inkjet printer)	535
NEC LC-890 (8 ppm, Postscript / HP emulation, 3-meg, dual-bins)	3199
Qume CrystalPrint Publisher (8 ppm, Phoenix Postscript, 3-meg)	2895

### HARD & FLOPPY DRIVES

Peripheral Land PL 20 / 30 / 50 / 100 Turbo (1:1 SCSI for Plus, SE)	449 / 549 / 595 / 995
PL 30i / 50i / 100i Turbo (1:1 internal for SE, II)	449 / 495 / 895
Infinity (40-meg removable disk, also reads IBM floppy disks)	1089
Infinity Optical Disk (670-meg read / write removable, SCSI)	3949
TurboFloppy 1.4 (1.44-meg floppy, read / write Mac & IBM disks, SCSI)	365
CMS 20-meg SCSI	499
30-meg internal (SE only)	449
45-meg SCSI	649
60-meg SCSI	749
Rodime 100GRX (100-meg internal, Mac II, SE/30only)	949
DaynaFile (360k floppy, reads and writes IBM disks)	475

### 68020 / 030 ACCELERATORS

Dove Marathon 68020 accelerator (for SE)	475
68030 accelerator (for Mac II)	999
Irwin Excellerator XL 18 (16-mhz 68000 for SE)	345
Excellerator XL 20 (20-mhz 68020 for SE)	659
Excellerator XL 25 (25-mhz 68020 for SE)	1075

### MISCELLANEOUS HARDWARE

1-meg SIMM module (for SE or ][ series memory upgrade)	125
Datacopy 730GS scanner (64-level grey scale, software, cable)	1375
Microtek MSF-300QS scanner (64-level grey scale, software, cable)	1195
MSF-300GS scanner (256-level grey scale, software, cable)	1495
Cornerstone / Sigma / E-Machines full-page displays	(call)
NEC MacSync (14" analog color monitor for Mac II)	575
Anchor MacPac 2400E (2400 / 1200 bps modem w / software & cable)	179
Dove MacSnap & SIMM memory upgrades	(call)
Kensington System Saver Mac (fan & surge protector for 512, Plus)	69
System Saver SE	69
Turbo Mouse Plus ADB (trackball for mouse-haters)	125

## Mac Software

### WORD & PAGE PROCESSING

Microsoft Word 4.0	259
Write	89
MacWrite II	179
Word Perfect Mac	209
FullWrite Professional 1.1	249
Write Now 2.0	129
PageMaker 3.0	399
ReadySetGo 4.5	289
Springboard Publisher	119

### SPREADSHEET

WingZ (super spreadsheet--look out, Excel I)	255
Excel 2.2	259
Full Impact 1.1	259

### DATABASE

Filemaker II	209
FoxBase+ / Mac 2.0	259
SuperCard	135
4th Dimension 2.0	459
Double Helix III	349

### GRAPHICS

MacDraw II	275
Claris CAD	539
Adobe Illustrator 88	285
Crickit Draw / Graph / Paint	185 / 125 / 125
SuperPaint 2.0	135
MacDraft	159

### HOME & BUSINESS ACCOUNTING

Quicken 1.5	45
Managing Your Money 2.0	139
DAC-Easy Light	49
Peachtree Back-To-Basics Professional (GL / AR / AP / INV)	169
Bedford Simply Accounting	205

### MISCELLANEOUS SOFTWARE

Microsoft Works 2.0 (word proc, calc, database, commun, speller)	199
TOPS for MAC 2.1	155
Symantec Utilities for Mac II	109
Suitcase II 1.2	69
MacProject II 2.0	349
Smartcom II	89
Adobe Typeface Manager Plus (47 high-quality fonts for Imagewriter or DeskWriter)	129

**TO ORDER--Call Jeff Dillon**  
**(301) 942-1100**

We sell over 10,000 items--call for current prices.

UPS 1-day shipping is available. Md sales add 5% tax.

**Operant Systems**  
**3514 Plyers Mill Road**  
**Suite 207**  
**Kensington, MD 20895**



# Math Shop

by Phil Shapiro

As any elementary school teacher can tell you, math is much more than just arithmetic. Children practice arithmetic not to become good at doing sums, but to become good at solving mathematical problems involving sums.

Likewise, children don't memorize multiplication tables just to recite them for teachers. Learning multiplication tables is important because multiplication and division skills are essential to solving day to day numerical problems.

Drill-and-practice programs are good at getting children to learn the basic math facts. But to get children involved in solving math problems, you have to look beyond the drill-and-practice programs. The Math Shop by Scholastic Software gets children involved in doing everyday, practical math problems.

The basic premise of Math Shop is simple. Children assume the role of shopkeepers and serve customers in their stores. Children can choose from 10 different stores, each one emphasizing a different kind of math problem. The Donut store, for example, emphasizes fraction questions; the Boutique emphasizes practical "cash-register" questions; the Jewelry store emphasizes decimal additions; and the Pharmacy emphasizes percentages.

Children use the arrow keys to walk an animated figure around the 10 different stores on the screen. (The tacit understanding is that the animated figure represents the child/shopkeeper.) Pressing the space bar allows the animated figure to walk into any store.

The Math Shop can be played in a practice or game modes. The practice mode allows you to take as much time as you want in serving the customers, while the game mode requires you to perform under the pressure of the clock.

In the game mode you open all the stores in the mall and serve the customers by running back and forth solving math problems at the various stores. All the while new customers

are coming into the stores. (The customers are represented by little figures in the store window.)

If 10 customers line up in any one store, the customers get tired of waiting and all leave at once. The disgruntled customers leave the screen with an appropriately disappointing musical sound.

Kids quickly catch onto this true-to-life business enterprise, and thrive on the effort to become model shopkeepers. You can't help but smile when you hear a kid urge a friend to, "Hurry up, or you'll lose some more customers!"

In the practice mode you open up one store at a time and play at your own pace. Customers do not keep flooding into the mall, so you have no distractions from taking care of the store.

The practice game can also be played with or without a timer. My preference is to play the game without the timer. Many children will chafe at having to perform mental tasks under the watchful eye of the clock. Yet, for some children, the timer provides an added element of excitement.

As you serve customers in the various stores, the problems become increasing difficult. At the harder levels, the problems can be quite challenging. But even the hardest problems can be solved in your head. There really is no need for pencil and paper in working through any of the problems. (In certain circumstances, pencil and paper could be used as aids for individual students.)

For all its good qualities, Math Shop is the type of program that calls out for parental or teacher supervision. Or, better yet, parental or teacher involvement. The program teaches higher-order thinking skills, so kids can't really be left alone to practice by themselves. An active, involved adult can be beneficial in helping children learn the tricks and intricacies of solving the problems in each of the 10 stores.

By getting actively involved in playing the game, parents and teachers can bring to life the excite-

ment and fun of solving math problems. And there's a warm feeling of teamwork when people work together to solve higher-order problems.

Math Shop can provide hours and hours of fun and instruction. In time, all players of the Math Shop game develop preferences as to which of the shops are their favorites. My two favorite stores are the Lumber store and the Number store. Both of these stores give problems that really make you think. Each question is actually a puzzle of sorts, whose solution brings pangs of joy to those who solve them.

The documentation accompanying Math Shop says the disk is suitable for children in grades 6 and up. My own experience is that children in third, fourth, and fifth grade with solid arithmetic skills could also benefit from the disk. Of course, the younger the child, the greater the need for supervision.

As a side note, I might mention that I have also used Math Shop quite successfully with mathematically gifted first and second graders. To bring mathematics alive at such a tender age is one of the true gifts of personal computers. Yet, care should be taken never to impose this type of problem-solving on those who are not ready for it.

The original Math Shop was so well received that three spin-off disks have been introduced by Scholastic. Math Shop Junior is intended for children age six to nine. The layout and operation of the program is identical to the original Math Shop, with all the problems scaled down in difficulty.

Advanced Math Shop is intended for children 12 to 18, and develops pre-algebra and algebra skills. The harder levels of Advanced Math Shop present a challenge even to — ahem — math teachers.

Scholastic also sells Algebra Shop, which I have not had the chance to use. I presume it continues along the same lines as the other Math Shop disks.

The best price I've seen for Math Shop is for members the Big Red Computer Club, in Nebraska. The BRCC price for Math Shop is \$26, including postage and handling. BRCC's phone number is (402) 379-4680.

Math Shop runs on any 64K Apple II, including the Apple II Plus, IIe, IIc, IIGS, IIc+, and compatibles. A color monitor is not required. 🍏

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



# Do you need a Mac at home?

by Tim McGraw

If you use a Macintosh at work and are considering getting a Macintosh for home, don't! Buy an Apple IIGS. There are lots of reasons. I was advised—by such experts as Ph.D. candidates in computer science—to buy a Macintosh, or an Amiga, but definitely not a IIGS. Nearly two years ago I decided to ignore their advice, and I'm glad I did.

The Macintosh does fine for the work I do. It produces high-quality output on laser printers. As someone who has always worked close to the publishing world, the Mac represents the most extensive use of digital type today; prior to the Macintosh most typesetters used film and, before that, lead. But — unless your idea of a big weekend is bringing your Macintosh spreadsheets home — buying a Mac for home could be the biggest mistake you could make.

Perhaps you have children, who tend not to get too excited about 72 dot-per-inch black & white monitors after playing with the neighbor's Nintendo. Perhaps you like to have a little fun yourself, as in teeing off at one of the world's renown golf clubs. Or extinguish a threatening alien populace.

It's nice to know when you buy a computer, even an unfamiliar one, that you already know how to use it. If you are a Mac person, you already know how to use the IIGS. The Finder is identical to the one found on the Macintosh. Apple's latest system software snaps windows open faster than a Mac Plus. And it supports CDEVs, INITs, DAs and other Finder accoutrements that Mac owners have become accustomed to.

It's also nice to know that when you buy a computer, it's not going to eat your household budget alive. For roughly the cost of a Mac Plus, I bought a IIGS (keyboard in-

cluded!), color monitor (no video board required!) and an ImageWriter II. For half the price of a Mac IICx, color monitor and video board you could have a IIGS fully outfitted with 8M of RAM, hard disk, Bose Roommate speakers, sound digitizer, MIDI port, graphics digitizer and all the game and applications software you would need for the next few years! With the savings you could buy an electronic keyboard to hook up to the MIDI port (the IIGS already HAS a synthesizer built in), and the spare change from that would get you a decent Epson-compatible laser printer.

And after you spend all that money on the computer, it's good to know you won't need continuous-form greenbacks just to keep it in software. The average word processing program on a Macintosh is more than \$200. AppleWorks — the granddaddy of integrated packages and now upgraded to an extremely powerful package with version 3.0 — can be had for less than \$200. The best paint program you can buy for the IIGS is only about \$65. And how about a superb page-layout

program for \$80? The plain truth is Macintosh software is overpriced, and GS software is reasonable. I know, because I have to buy them both.

I don't mean to imply that the IIGS is ONLY a home computer. Considering the cost of Macintoshes, the IIGS is logical choice in Mac offices as a low-cost workstation. In any situation where MS-DOS is considered as an alternative in Mac offices, the IIGS would be an even better choice. It communicates smoothly through the Apple File Exchange, and some publishers provide filters to work with AFE and such standard-bearers as AppleWorks. The 10 years of programming heritage for the Apple II provides a rich selection of general and specialized applications that will run four times faster on a IIGS.

Since the GS supports AppleTalk, it can take advantage of most all of the resources available on any given network. Virtually every significant interface—from SCSI to IEEE specs—are supported through hardware. I know of several GSs that share the resources of the Mac-dominant AppleTalk networks they are connected to.

Apple, though confused at times about the Apple II's role in the big picture, continues to show its support through significant system software upgrades. Although Apple gives some IIGS users cause to wonder sometimes, the company continues to roll out improved firmware and such products as the

(Continued on next page)

## For Play...

**Start-up screens .....\$19.95**

Mail this ad, original photo or other flat art, and check to:

**SlideShow Presentation Graphics  
1100 6th St., SW - #215  
Washington, DC 20024**



Name \_\_\_\_\_  
Address \_\_\_\_\_  
Cty, St, Zip \_\_\_\_\_  
Monitor size: \_\_\_\_\_  color  gray-scale





# Sinking into QUICKEN-sand (2.0)

by Gary Hayman

Quicken, that highly popular and extremely useful check writing, bookkeeping, reconciling, financial whiz of a program by Intuit of Palo Alto, Calif., has been lauded by all the major publications. I, myself, am presently using it in financial management of two businesses with great success.

## *What they didn't tell you*

Even though Intuit advertises that Quicken works with AppleWorks, what is omitted is that it doesn't work with all versions of AppleWorks. First of all, when attempting to "transfer data to AppleWorks," if your AppleWorks spreadsheet that is to receive the information is made with the new AppleWorks 3.0, transfer will NOT

take place. Second, if you transfer data from Quicken to a spreadsheet that was prepared with AppleWorks 2.1, and you have formulas in the spreadsheet, the formulas may NOT "recalculate" even if you press an OA-K (recalculation). I can feel myself being sucked into the quicksand even now.

A call to the helpful customer service technical representative of Intuit revealed the following information: Yes, Quicken will not work with AppleWorks 3.0. According to new product policy, Intuit cannot announce if a Quicken Apple II upgrade is a part of work-in-progress (this type of response is not unique to Intuit—it is given all the time by various software developers, unfortunately). Yes, it is realized that

formulas may not recalculate after a Quicken transfer when using AppleWorks 2.1. That problem, according to the representative, is due to what Claris did, or didn't do, when producing the upgrade version of AppleWorks from 2.0 to 2.1. Quicken works fine with AppleWorks 2.0.

## *Solutions*

Well, if you have been reading my articles for the past several years, you know what is coming next. This is the part where I tell you how to WORK AROUND the problems, if possible.

**WORK-AROUND 1:** Only use AppleWorks 2.0 when importing information to a spreadsheet using Quicken. I don't like that one! Most of us have versions 2.1 or the new AppleWorks 3.0 by now and it is not too appealing to go back to version 2.0—if we still have it around.

**WORK-AROUND 2:** Use AppleWorks 2.1 when preparing your spreadsheet. Export your information from Quicken and observe if your formulas will work. Save your file to disk and load it into AppleWorks 3.0—it WILL load (see NOTE below). Now the formulas work (you may have to do an OA-K). Resave it to disk and then load it back into AppleWorks 2.1 and all will be fine now. I discovered this during experimentation with the problem. It takes quite a few steps, albeit simple, but I was willing to do this so that I could get the programs communicating and functioning as I desired. **NOTE:** Lee Raesly informs me that with some configurations involving Apple IIs, this may not work since they may not accept any AppleWorks 3.0 produced files in AppleWorks even though new AW 3.0 features were not used.

**WORK-AROUND 3:** I experimented and stumbled upon this one. In the Volume 11, Number 2, February 1989 edition of the Washington Apple Pi Journal, I wrote an article called "AppleWorks Spreadsheet Value Transfers" in which I discussed transferring information from one spreadsheet to another and a problem of incorrect data resulting. I talked

(Continued from previous page)

## II Video Overlay Card.

There are a lot of other compatibilities, such as the Apple Desktop Bus. If you've got the Kurta IS ADB tablet, bring it home and use it on the GS! You like your Mac's extended keyboard? Use it on the GS, too. Thanks also go to Apple for providing AFE for software compatibility. If you're forced to use Excel at work, you can bring your spreadsheets into the GS easily, formulas and all!

But even Apple's modest enhancements aren't enough. Apple needs to continue to encourage developers. Many software publishers have abandoned their Apple II development in order to support Mac development; I partially blame Apple for this, because their support of the II through the Apple Developers and Publishers Association has been waning. However,

the smart Macintosh publishers have ported Mac software to the GS. Dark Castle, one of the best-selling Mac games, was recently ported, and it's BETTER on the GS!

There's one more thing Apple can do to help the GS. For the 49 cents or so it would cost per unit, the company could add stereo output. The Mac has stereo output, and its sound reproduction isn't as faithful as the GS's Ensoniq chip. Most Mac users don't really care — or even realize — that their computer has stereo sound, while most GS users are shelling out \$50-\$60 for stereo cards. While Apple continues to upgrade the GS — the latest hardware improvements include innovative enhancements for the handicapped — the company could do more.

But that shouldn't hold you back. Don't just sit there — go buy your family a GS! 🍏



about a "fix" concerning referencing a cell which contained a formula in the copied block which would force correct information. (Too long and complicated to discuss here. If you desire the details, read the old article.)

I tried the system on the AppleWorks 2.1/Quicken spreadsheet by placing formulas that referred to all cells in a particular row in the spreadsheet, in a column outside of my normal spreadsheet matrix. THIS METHOD DIDN'T WORK, but as soon as I DELETED the column "...when what to my wondering eyes should appear..." the spreadsheet sprang into action and was suddenly A-Okay. Ten seconds later, Lee Raesly (... "the beard on his chin was as white as the snow..." ) called and we discussed this occurrence. Lee suggested that the recalculation "semaphores" were saying that the formula cells were already recalculated and therefore were "intelligently" NOT permitting recalculation. But apparently, once a row or column DELETE was done (we later found out that INSERT works too), the semaphores were reset to

permit recalculation. I now could climb out of the quicksand. Here is what you can do:

**QUICK METHOD:** Process your AppleWorks 2.1 spreadsheet with Quicken to import the necessary information. Load it to the desktop in AppleWorks 2.1. Do an OA-9 to get down to the bottom of the spreadsheet. Type one DOWN ARROW to move down one line. Type OA-I and insert one row. You will not see anything happen except when you look at your formulas (you may have press OA-K, depending upon if you are in manual or automatic recalculation mode), they are now functioning. This method should take you less than five seconds.

*Aux armes, citoyens!*

Although the above method is quick, we really shouldn't have to create all these work-arounds. Have you noticed that more and more major software companies are beginning to ignore the Apple II family as far as new products and updates go (I hope Intuit is not one

of them)? There have been over five million Apple II computers built. Add to that all the compatible Laser products and you have a gigantic user base and market. Apparently, the only way that we can ensure continued support is to contact the companies and tell them what we want—many, many times. Don't delay, call these companies up—better yet, write them a letter. The more communications they receive, the more they will be aware that people like you are using Apple II products, want current software support and can provide them with a profitable market.

At this time I don't know if Intuit will update their Apple II version of Quicken to be compatible with AppleWorks 3.0, but you can rest assured that "ALPHA CHECK" on it.

*The author is currently Director-At-Large of the Washington Apple Pi Board of Directors, is Chairman of both the AppleWorks and Apple IIGS Special Interest Groups and is SYSOP of several Boards on the WAP Telecommunications System.*



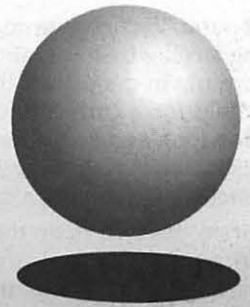
RODIME SYSTEMS

J. B. Graphics  
Serving the graphic and Macintosh® needs of Centreville, Virginia  
Presents the  
**Cobra Series of Internal/External Hard Drives**  
for the Macintosh® Computers  
P.O. Box 1252, Centreville, Virginia 22020-8252 (703) 631-6078/FAX 631-4660

External Drives				Internal Drives		
Sug.Retail	JB's Price	P/N	Capacity	P/N	Sug.Retail	JB's Price
\$1,399	\$878	45e	45 MB	45i	\$1,299	\$747
\$1,599	\$1,032	70e	70 MB	70i	\$1,499	\$891
\$1,949	\$1,191	100e	100 MB	100i	\$1,849	\$1,109
\$2,549	\$1,521	215e	215 MB	215i	\$2,449	\$1,402

TERMS: Our low overhead allows us to bring you these exceptional 18ms drives at an exceptionally low price. Cashier's checks/money orders accepted (VISA/MasterCard orders add 4%). Mail orders only. Shipping incl. (VA residents at 4.5%)

# BEYOND IMAGINATION



NOW AVAILABLE —  
THE "HRO HOTLINE"  
CALL 742-9649 FOR THE  
BEST PRICE & TURNAROUND  
ON LINOTRONIC OUTPUT

## DARBY GRAPHICS

### (703) 548-1512



**Darby Graphics, Inc.**

A Graphic Arts Service Bureau  
Specializing in Electronic Publishing

**(703) 548-1512**

ALEXANDRIA • RESTON  
WASHINGTON • BETHESDA

#### DARBY SERVICES

High Resolution Output (Linotronic 300 & 200)  
Desktop Publishing (Macintosh & IBM)  
Training (Ventura, PageMaker, etc)  
Scanning & Graphics  
Seminars  
24-Hour Bulletin Board Service

#### DARBY PRODUCTS

Newsletters • Logos  
Magazines • Brochures  
Directories • Manuals  
Newspapers • Annual Reports  
Illustrations • Charts  
RC Paper • Film



# Cheap Computing...

by Ron Evry

So you broke down and laid out all of your dough for a computer, for gosh sakes, and now that you've got the thing, you're not sure at all what to DO with it, are you? The man in the store told you that it runs over 10,000 (or 20,000, or 30,000) wonderful Apple II programs, but to your horror you now realize that they don't come with the computer! You've got to BUY them! And you're broke! What are you going to do?

The answer lies in the title of this article. Scrape up all the change in the fishbowl, dig inside the couch for some more and come with me. First stop: Washington Apple Pi! You have already shown yourself to be unusually perceptive in joining the Pi (if you haven't, what are you waiting for?), and now your thoughtfulness is going to pay off.

The Pi Disketeria is a collection of public domain, shareware, free-ware and other assorted programs covering hundreds of uses. Your membership includes a catalog of disks available, and more are added monthly. Members pay just three dollars for each disk, and there are some that are equivalent to commercial software running ten to a hundred times the price. There are games, word processors, communications programs, educational software, foreign language instruction, graphics disks, data bases, and programming aids.

It is difficult to recommend which disks would be appropriate for a beginner's library, but I would suggest at least WAP802 if you would like a word processor, WAP817 or 821 for running a modem, WAP 811 or Disk 181 for some nice games, and Disk 110 or Disk 159 for a few interesting home uses. Naturally, Disk 134, the new members disk, is a must-have for

any shelf, if only for its "File Cabinet" data base. If you have any particular needs or questions, the people at the Pi office are helpful and knowledgeable. Just drop by or give them a call.

Okay, so you've picked up the Pi disks, but now you want more. You want (shudder) COMMERCIAL SOFTWARE! Maybe you just got paid, or you pawned your old Atari, and the money is burning a hole in your pocket. Don't try to deny it—I've seen you drooling in the window at Egghead and flipping through mail order catalogs on the Metro. You want the REAL STUFF. But wait a moment! Before you shell out 40 bucks for a copy of Chuck Yeager's ADVANCED FLIGHT TRAINER, let me clue you in on a little secret: check the bargain bins!

Bargain bins? Yes indeed. Most computer stores have them. Sometimes they get a section of the store to themselves, sometimes just a shelf or two, and occasionally you will need to look through the regularly priced programs. But software publishers, just like their counterparts in the book and record industry, sometimes have to dump some of their stock on the market at giveaway prices. Programs released in this fashion are called REMAINDERED or sometimes CUT-OUT software. The publishers may have any one of a number of reasons for doing this. Usually, it has something to do with the tax advantages of not keeping a product in inventory after it ceases to sell well. What this means to you is that you can find top-quality software for a tiny fraction of what it originally sold for.

From time to time this column will try to track down what is currently available at different stores in the area's cut-out bins. Just remember

that quantities of these programs are usually extremely limited, and since they have been dumped on the market don't expect a store to order any of this stuff for you, or sell it to you for the same price. But if you look in the bins, you will find some great deals.

When you think of text-adventure games, the brand-name Infocom comes to mind. Since coming out with a line of all-new programs combining text and graphics they seem to have dumped all their classic text-only adventure games. I have found Zork I, Moonmist, Suspect, Witness, and the adult game, Leather Goddesses of Phobos, for under 10 dollars each at Walden Software and Babbage's. In fact, I was able to pick up a boxed edition of three of these games at WaldenBooks for 10 dollars. Babbage's also had a nice selection of High Tech Expressions' Sesame Street Activity programs for about eight dollars each, and some fine greeting card and poster programs from the same publisher. The above-mentioned Advanced Flight Trainer program was spotted at Egghead and Diskovery shops for about 12 dollars, along with other remaindered programs from Electronic Arts.

Finally, you will find that in using many of these programs, you will need blank disks for backups and data storage. I've seen cheaper through mail order, but the best buy I have found in a retail outlet are Bonus brand disks. Diskovery has been selling them for \$4.99 per box of 10, and I have found them to be extremely reliable. They are made by Verbatim, and if the blue labels and thin paper sleeves don't turn you off, they are a great bargain.

Next month, we will explore the world of telecommunications and your computer. Save your pennies—you will need to get a modem. We will discuss how to get the best deal on one of those, and then we will cover something even better than Cheap Software—FREE Software! 🍀



# I Vulcanized My GS!

by Joshua Adler

Applied Engineering's Vulcan internal hard disk drive for the Apple IIGS was in such demand after its release in late spring of this year that when it finally began shipping in September it took more than two months to catch up on the orders. Not a single distributor that I called — and I called all of them — had less than a ten-day waiting list.

The Vulcan is available in 20M, 40M, 100M, and 100+M versions. I purchased a 40M drive. The Vulcan is the second internal hard disk to be released for the Apple IIGS; the first internal drive, Applied Ingenuity's Innerdrive, was reviewed in the WAP Journal last August. AE also makes Vulcan drives for the IIe that are basically identical to the IIGS version.

When the UPS man roused me from an afternoon nap by rapping on the door, I found my bundle sitting on the porch. Inside was the hard drive unit, its controller card, a moderately thick instruction book, three disks and some miscellaneous papers from the mail-order vendor, including the receipt. I paid \$620 for the Vulcan 40 and less than \$10 shipping, although I have seen the drive advertised for as low as \$599. Applied Engineering's list price is \$850.

Installation was a breeze. The illustrated instructions gave a clear, step-by-step process. The Vulcan replaces the power supply. I did have one problem with the removal of the old power supply — it took me at least five minutes to figure out how to detach the internal cable from the motherboard. You will probably need a screwdriver or a mini-crowbar (which is what I used) to hold open the plastic clips that lock in the plug on the cable. Although I had to temporarily remove my ProGrappler parallel card from slot 1 to install the

Vulcan, the drive did not block any slots.

The only confusing instruction was a warning that one **MUST** put a



certain 2" x 6" insulator card between any slot 1 card and the drive. It was not clear what exactly this insulator card was, and it was not come labeled. Apparently, it was the plastic package that the controller card came in, so I stuffed that in the tight space between the ProGrappler card and the drive.

The controller card slipped easily into slot 7, but I decided that was too close for comfort to my AE GSRam with 1.5M in the auxiliary memory, so I put the card in slot 6 (it can go in ANY slot), and used a very useful dip switch configuration that AE supplies for slot 7 emulation. Thus, I could still use my 5.25" drive in slot 6 even though the slot was physically occupied by the Vulcan's controller card.

Zoom! The Vulcan and I were off and running. After closing up the computer, boot-up time was 19

seconds. With a floppy, it had taken 55 seconds. The Vulcan comes with two partitions: a 32M boot partition with various system utilities, and an empty 8M partition. The Vulcan can have up to four active ProDOS partitions at one time, although none can be larger than 32M. This allows you to configure the drive so that it seems to be the equivalent of four different, very large drives.

Up to 16 partitions can exist on the drive, but you can only use four si-

multaneously. One major advantage that the Vulcan has over the Applied Ingenuity Innerdrive is that it also has DOS 3.3, Pascal, and CP/M partition capabilities; the Innerdrive can only use ProDOS. If you boot up the computer using the GS/OS version that comes with the drive, a control panel option will be installed that will allow you to manage the partitions as well as park the drive heads. I partitioned my Vulcan into four drives of unequal sizes, each for a different type of system software. All was not coming up roses, however.

## Trouble...

Many of you are probably already familiar with the incompatibilities of GS/OS 5.0 with a number of software packages. I must admit, I was not. The problem is that all the software one works from the hard



drive must run off whatever operating system is on the boot disk. This meant that WordPerfect GS 2.0, my most-used program, was doing some very strange things. Appleworks GS 1.0 v.2 only had four fonts and no printer options.

After consulting an AE technician in Texas (when are they going to get an 800 number?) I replaced 5.0 with the operating system that came with AWGS. Note that this replacement can only be performed by booting from the 3.5" drive with the system disk one wants to use. Now the system still crashes when I try to use my WordPerfect thesaurus, but other than that everything works great. (Editor's note: WordPerfect GS 2.1 works under GS/OS 5.0 with no problems)

Disktimer GS, a public domain program designed to measure the speed of hard disks, refused to finish its multi-block reads and continually crashed with a "P16 multiblock Read error." I'm certain it has to do with my partitions (none are larger than 14M), since the Disktimer instructions say that it will not work on anything smaller than 16M. I'm not about to resize and format my partitions just to run it.

### The Good Stuff...


Regardless of the few problems I had, the Vulcan is one slick piece of

equipment. First, it's fast. So fast that I feel winded after using it. Wordperfect GS, my favorite program, usually takes 3 to 4 minutes to start up from scratch on a 3.5" drive. On the Vulcan it's 19 seconds from the Finder! AWGS desktop is under 20 seconds from the Finder. Another fantastic benefit regards printing speed. I often print long documents from Wordperfect on my Epson FX-850. The Epson is an extremely fast printer, at 300 cpi draft and 60 cpi near letter quality. But in the past, since WordPerfect must access the disk drive between every line, the printing went much slower than the Epson capability. Now that WordPerfect accesses the hard disk instead of the floppy, however, there's virtually no delay between lines.

A benefit that one would expect from any hard drive, but one that is still exciting, is simply how easy it is to switch between applications and storage files. I had eight full floppies of WordPerfect files, all named "Wp.Storage," but now I just have a single folder containing all of them. I can go from Proterm to ShrinkIt!, unshrink a downloaded file, put it in the partition and folder that I like best, and then run it, in just a few minutes. This same operation would take well over half-an-hour B.V. (Before Vulcan), and it would have involved just as much time hunting for blank disks for the new files and formatting them.

### I Like It, I Like It

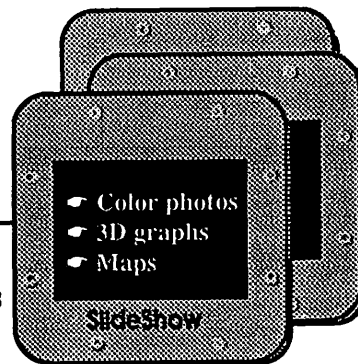
Applied Engineering has a long-standing reputation for quality. According to AE spokespeople, the Vulcan has about a two percent return rate. That's an amazingly low number in the computer industry. Should your drive fail in some way, though, it is covered by AE's one-year warranty for hardware. The software (a copy of GS/OS, ProDOS 8, and DOS 3.3) is warranted for 30 days. If you're interested in buying a hard drive, and the possibility ought to be considered by all computer users, the Vulcan is definitely a good choice. Its only competitor, the Innerdrive, is not as adaptable to other operating systems. The speed differences between the Innerdrive and the Vulcan are probably not significant, but my tests show that the Vulcan is no slower than the Innerdrive, and may be (comparing my times on the Vulcan to Dan Slaven's times in his review of the Innerdrive) noticeably faster. AE also provides a nice feature in that you can expand your Vulcan to a larger size without buying a new unit; the Innerdrive doesn't get any larger than 40M.

With the Vulcan hard drive, Applied Engineering again proves that its reputation as the #1 producer of economical, quality peripherals is a well-founded one. 

### For Work...

- 24-bit scans up to 11"x17"
- 24-bit slide imaging
- standard slide resolution - 4k
- in-house design/production

*For free samples, call or write:*  
**SlideShow Presentation Graphics**  
1100 6th St., SW - #215  
Washington, DC 20024  
(202) 479-1005





# The Legend of Blacksilver

by David Granite

I enjoyed this game; I'd give it an 8 out of 10. It's from EPYX and is played on the Apple 128K machines. (It's also playable on the IBM clones, which is another issue—unfortunately the majority of good games are coming out only for IBM, with frequently no conversions planned; a sad state of affairs.) The game can be played with the keyboard or joystick and it supports 2 disk drives. I had no crashes while playing it. The copy protection is keyword from the manual, so booting the discs was not a problem either.

before undertaking the final foray.

Gold and food are crucial in this game and you never have enough at the beginning. You can obtain gold by monster-bashing, but this is dangerous until you discover how to replenish your hit-points at the temple. Fortunately the authors have included several games of chance to allow you to increase (or eliminate) your grubstake.

Since food and gold are so crucial in this type of game, I have always wondered why there is never a peasant's revolt, perhaps led by

---

*Since food and gold are so crucial in this type of game, I have always wondered why there is never a peasant's revolt...*

---

The game itself is another one from those twin brothers who wrote Questron, and can be regarded as a sequel to those games. It also incorporated ideas from their Legacy of the Ancients and is similar to that game also. You begin as a lowly peasant who is called by a magical dream to the service of the royal family.

Your initial task is to free the kidnapped king and then to eradicate the iniquitous usurper who is using the magical ore blacksilver to destroy and/or conquer the world. As usual, in good quest games, there are several sub-quests you must undertake to build up your skills and abilities

you, which ends in a bucolic paradise with everyone producing enough so that all may benefit. Instead you have been programmed by your repressive monarchical society to only attempt to rise through the superstructure of that society to become a baron or counselor to the king, thus supporting the continued repression. To get around this issue, the authors have included gambling, the true opiate of the masses. You can always win enough gold to buy better armor and weapons and continue on your quest and not even think about all the other peasants.

With your better armor and weapons, you can do the most

important thing in this game—kill monsters. There are plenty of them, but the game also has friendly souls who will sell you food and hitpoints for a discount. This exemplifies several of the user-friendly aspects of this game. If you can restrain yourself from hacking up everyone who approaches you, you can survive the early game more easily. If you cannot restrain yourself, you will be resurrected with 150% of the hitpoints you had at your last start-up. Furthermore, you can SAVE IN THE DUNGEONS. You cannot save in the castles, but they are in overview, like the Ultima castles, while the dungeons are considerably more map intensive in the 3-D Wizardry mode. There are no impossible puzzles in this game; most of the problems are solved by going to a particular location and getting a particular object. The dungeons need not be mapped (although this is a good idea) and can be solved by perseverance and memory.

There were a few small problems with the game which prevented me from giving it a 9 or 10 out of 10: it really cannot be played without a color monitor. There is one small maze in the earliest castle that cannot be solved on a green/white monitor. I tried desperately, but I had to get an RF modulator to hook up to my color set to finish that problem. Hints can be purchased in many of the towns, but they are unclear as to the necessity of going back into the fourth dungeon several times; I spent a lot of time wandering around needlessly before it was made clear to me by Mr. Hall.

The ending of this game is much like the endings of the Questrons, with much hoopla and hooray. It is nice to have this sort of conclusion to a game, which took me about one month to finish.

This game was harder than its predecessors. If you are looking for a moderately challenging FRP game, I would recommend this one. 🍏

Software Ventures presents the all new 1990 model:

# MicroPhone II version 3.0

## A "Stunning" Achievement in Software Engineering

The software that takes the hassle out of telecommunications. Like a finely crafted European touring sedan, MicroPhone II offers you unsurpassed power and allows you to communicate with style and agility.

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

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

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

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

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



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

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

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

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

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

Jim Seymour:  
"... arguably the best communications software ever written."

John C. Dvorak:  
"... stunning. Fast, slick; it does everything except slice bread."



SOFTWARE  
VENTURES

# GameSIG November Meeting

by Paul Moore, GameSIG Chairman-for-Life

Chairman's Log, WAPdate  
11.02.89.

Note absence without leave of GameSIG Secretary Steve Payne. Recommend he be flogged through all the SIGs when apprehended and his cleric spell levels be drained.

Note: Ship's company continue to make mutinous noises, the swine! Conditions are much improved since October's free-and-fair election and subsequent imposition of martial law. Nothing seems to please them! Could not find a reviewer for Sierra's King's Quest IV: the Perils of Rosella, 128K Apple IIe/IIc, supposedly on account of its eight disks. The same story for Epyx's Sporting News Baseball for the Apple II. Not one of the dogs was interested! May go to "volunteer" system in the future.

Note: May offer review opportunities to WAP general membership, who must have more of the "right stuff" than my scurvy crew. Apply for crew berth (703) 532-1029 evenings. Good food (Shakey's after SIG meeting); light duties; room for advancement (below flag level); supervision very firm but very fair.

Note: If above doesn't work, may consider press-gang approach at Main Meeting or other SIGs. Time the WAP straightened up and flew right, anyway.

Note: Crew's short attention span was distracted from plots against me by demo of Sands of Fire war/simulation tank game from Electronic Arts. Crew also insisted on monthly Robot Wars contest. Crew had been assigned to bring in and

discuss examples of everyone's adventure game maps, but didn't get to it because of need for annual GameSIG Christmas Gift Suggestion parade.

Note: Meeting adjourned to nearby Shakey's, where Ray Hakim stumped all with a fiendish puzzle box. GameSIG Chairman was personally embarrassed by temporary lapse of renowned puzzle-solving abilities. Hakim has been moved to bottom of game software review eligibility list.

*[Ed.—sounds to us as though the peasants' revolt, about which you read on the preceding page, is alive and well. Members with pitchforks are advised to be on the alert...]*

## GameSIG Holiday Software Gift Suggestions

by Paul Moore, GameSIG Chairman-for-Life

GameSIGgers recommend the following for the Apple II family.

Adventures: the bundled sets of Infocom games are a particularly good buy, and Zork Zero and Arthur are highly recommended. Fantasy/Role-Playing games: Might and Magic II, Magic Candle, Neuromancer, and Dungeon Master (GS only) are what the discriminating GameSIGger would like to find under the Christmas tree. Arcade games: Arkanoid (GS) is far above the others. Strategy:

Chessmaster 2100, Panzer Strike, and Lode Runner are just what you need.

For the Macintosh, GameSIG makes these choices. Adventures: Infocom games. Fantasy/Role-Playing: Might and Magic I and Bard's Tale. Simulations: Sim City and Falcon. Arcade games: Arkanoid. Strategy: Sargon IV, Lode Runner, and Strategic Conquest.

But what about the people you don't necessarily want to enjoy the holiday season? GameSIG herewith

also provides two lump-of-coal suggestions for the Apple II family: Quarterstaff for Adventure players, and Wizardry IV for Fantasy/Role-Playing people (though Wizardry V is widely admired among the GameSIG crew). Either of these will provide hours and hours of tedious agony for those special people on your gift list.





# HyperStudio—What is It?

by Lee Cabana

I'm not a programmer. I've always wanted to learn (just like I've always wanted to learn French), but I never had the time. Even if I committed the time to learn, I know I'd never get around to writing the hundreds of lines of code that it would take to produce a decent product. If that's not bad enough, programmers frequently spend 90% of their time on the code itself, and only 10% of their time on the creative aspects of what the program will do. With the release of the finished version of HyperStudio by Roger Wagner Publishing, that has all changed!

HyperStudio brings the concept of "Hypermedia" to the Apple II family.

It helps to think of hypermedia as multimedia, in that you have the ability to combine text, graphics, sounds and animation in your computer.

For example, using HyperStudio, you can write a program (known as a Stack) that could display a map of the United States, give a test on state capitals, tell (yes, tell as in talk) in your voice whether each answer is correct or not, and then save the final score to a file on your disk. The time involved in writing such a stack would be about 30 to 40 minutes, depending how many bells and whistles (literally!) you want to add.

A stack is made up of a series of individual screens (called cards). Each card can contain graphics, sounds, text and animation. Using a simple process, you then add "buttons" to each card. These buttons, when pressed, move the user from card to card, play sounds, ask for input from the user, etc.

Writing a stack requires absolutely no knowledge of programming, and is done with pull down menus and other simple actions! Hyper-

Studio has incorporated in it several utilities to produce or modify stacks. These include a paint program, microphone and recording software, and external speaker. There is also a simple-to-use utility program that will let you display a picture upon system boot up, play a sound during boot up (currently my GS says, in its best HAL 9000, "I am fully operational..."), and change the beep to any sound you want.

To fully appreciate HyperStudio, you MUST see it in action—there is no way for me to adequately describe the sophistication and ease of operation. The manual is fairly well written, with several stack-writing examples that take you step by step through the process. The

package contains four disks: HyperStudio—Contains the program

HS.Art—Pictures and art

HS.Sounds—Sound files

HS.Demo—Several demo stacks

Not the least impressive feature of HyperStudio is the price—between 75 and 85 dollars. This includes the four disks, manual, microphone with a small card to connect it to the mother board, and external speaker. The program is not copy protected, and mounts on a hard drive with no problem.

If you have an Apple IIGS, HyperStudio is a MUST HAVE program. If you don't have an Apple IIGS, you should consider getting one so you can run HyperStudio!

## Index to Advertisers

A2 Central .....	59
Award .....	59
Bitstream .....	34
Brace .....	71, 77
Capital Presentations .....	26
Carver .....	23
Computer Age .....	62, 63
Computerland MidAtlantic .....	1
Darby Graphics .....	79
Data Conversions .....	31
Desktop Pub. Ctr .....	28, 29, Cover 4
Galaxy Graphics .....	12
Gestalt .....	8
Highlighted .....	44, 58
JB Graphics .....	73
Laser's resource .....	63
MacCorner .....	Cover 2
MacHeaven .....	10
MacInOffice .....	34
MacSource .....	53
MacTemps .....	19, 39
MacUpgrades .....	Cover 3
MidAtlantic Telesis .....	46
Multisoft .....	61
Operant Systems .....	68
PC Resources .....	65
Ringmasters .....	6
Satellite .....	39
Software Ventures .....	73
Symantec .....	5
Technical Sales & Service .....	33



# Holiday Specials

by Dave Weikert

In observance of the forthcoming holidays, the Disketeria is offering special pricing for Mac disks. During the month of December only, all disks are priced at \$3.50 per disk. The new Adobe Screen fonts set is offered at \$48.00 for the 16 disks an additional savings of \$.50 per disk.

## *New and Recent Disks*

We have seventeen new disks this month. They include one Telecommunications disk featuring WAP's own TCS and sixteen disks with Adobe screen fonts in the NFNT (New Font) format.

Recent disks include Anti-Virus Utilities (Mac Disks #1.01A and #1.02A), FKeys (Mac Disks #4.01A and #4.02A), ImageWriter Fonts (Mac Disks #5.05 through #5.15), LaserWriter Fonts (Mac Disks #6.04 and #6.05), the first of the INITs/cdevs Series (Mac Disk #9.01), the first of the Miscellaneous Series (Mac Disk #10.01 - Excel Templates), System Utilities (Mac Disks #16.07B and #16.08B) and Apple System Software LaserWriter Ver.. 6.0 and 32-Bit QuickDraw (Mac Disks SS.LW 6.0 and SS.32-BitQD). Remember, Mac Disk #1.01A now includes version 1.5 of Virus Rx. Members who purchased the recently reissued #1.01A with the older version of Virus Rx (1.4a2) may exchange it for this newest version at the office for no cost.

## *Telecommunications Series*

Our Mac Disk #13.09 is a must for new or infrequent users of the WAP TeleCommunications System (TCS) and includes useful information even for the old hands. The TCS Manual included on the disk contains all of the information necessary to navigate the TCS. There are also shareware programs including ZTerm, a communica-

tions program already configured to work with the TCS and Stuffit, a file archiver and dearchiver that is the standard used in the TCS download area. To save space, all of the files on this disk with the notation ".sit" are saved in Stuffit compressed archive format and will automatically unstuff themselves when you double click on them. Because of space limitations, you should move the sit files to one or more blank disks before unstuffing them. All files are in MacWrite format which most Mac word processors will open. The disk was assembled by Lou Pastura, Joe Chelena and Nancy Sefarian from information developed over the past few years by members of our TCS staff.

## *Adobe Screen Fonts Series*

We have completely reorganized and reissued the Adobe Screen Fonts disk series as Mac Disks #18.01A through #18.16A. These Adobe screen fonts work with the downloadable Adobe fonts for LaserWriters and other Postscript printers. The disks are now organized in order of the Adobe Font numbers and the collection now includes two more disks than the original series due to added fonts. The screen font files include the NFNT resource in addition to the Font ID numbers of the previous files. Since the Font/DA Mover reassigns Font IDs to prevent ID conflicts if necessary, switching to another system could cause fonts to display and print incorrectly. The NFNT ID will reduce the possibility of this happening. The NFNT provides a much larger range of ID numbers to reduce the potential of conflicts between IDs. Apple has also instituted a font registration program for NFNT ID numbers and has assigned blocks of non-

conflicting numbers to different developers. These screen fonts are a must for anybody doing serious desktop publishing using the downloadable Adobe LaserWriter fonts. The disks may be purchased individually at the normal price or all as a complete series of sixteen disks for the special price of \$48.00.

## *Help Received*

I would like to express my appreciation to Tim Buehrer for volunteering to test and annotate the Programmer/Hacker Utilities series. Tim sets the record for long distance as a disketeria volunteer, he resides in Somerville, Massachusetts, near Boston. Tim is neither a stranger to the Pi or to programming. He was previously chairman of the Mac Programming SIG when he last lived in the Washington metro area prior to moving to Micronesia. We still need volunteers to test and annotate disks for the Mac Disketeria particularly in the area of . The backlog of candidate programs for our library is expanding faster than our ability to test, annotate and assemble them. We need additional volunteer help. The skills required include enough writing ability to describe the function of the program in a few sentences, a general knowledge of Macintosh operations and an ability to assess a program's worth to our members. If you have these skills and can devote 15 to 30 hours per month to annotation and testing, call me at (301) 948-9646 and leave a message.

## *Donations 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 or loan on a long term basis, 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 other vendors. Thanks.

### About Shareware Requests

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

#### Disk #13.09 — T 9

##### TELECOMMUNICATIONS 9

**TCS Manual.sit** includes **BBS Commandments, Confessions of a Lurker, Guidelines, How to DL on the TCS-Mac, Local BBS List, Mac D/L List, TCS SAMPLE SESSION, TCS Command Card, TCS Commands Explained, TCS Map, TCS Message Base, TCS Msg Boards, TCS Phone Numbers and Upload/Download Help.**

**Gif.sit** includes **Giffer1.06** and **Giffer1.04Dox**. By Steve Blackstock. Giffer permits you to display and modify GIF, Thunderscan and Quantized Digiview files. GIF files are general purpose, machine independent graphics format that is popular on CompuServe. Neat graphics when the About... screen is terminated with a mouse click. **Beerware - send a case or \$20.**

**MakeScreen.sit** includes **Makescreen**. By Jerry Whitnell. Use this on a MacPaint file to create a startup screen. Select an area of the drawing, save the file with the name StartUpScreen, quit MakeScreen, place the StartUpScreen file in your System folder and restart your computer to see the new screen.

**SetClk2.0+.sit** includes **Set Clock 2.0, ClockAdjust** (a cdev; Control Panel Device) and **ClockAdjust Docs**. By Jim Leith. Call a master clock in Chesapeake, VA and sue ti to set the Mac's system clock to observatory time.

**Stuffit.sit** includes **Stuffit 1.5.1** and **Stuffit Users Guide**. By Raymond Lau. Permits grouping of multiple files into one "archive" and file compression to reduce

upload and download time and hassle. You may use Stuffit to unarchive files for free but pay up if you archive files. **Shareware - \$20.**

**Super Clock! 3.6.sit** includes **SuperClock!** and **Clock Doc**. By Steve Christensen. Put the SuperClock! in the system Folder to display a clock at the right hand side of the menu bar.

**TCS Sign.sit** includes **WAP BBS Sign PICT** and **ViewPaint 1.7**. ViewPaint, by Steve Dagley, may be used to view the TCS Sign. **Shareware - \$5.**

**ZTerm.sit** includes **ZTerm 0.85, ZPhoneList, ZTerm & Bin Files, ZTerm 0.85 Changes, ZTerm 0.85 Release Notes, ZTerm Doc** and **ZTerm Registration**. By David P. Alverson. This relatively full featured communications program supports ZModem transfers as well as XModem protocols. **Shareware \$30, \$40 for disk.**

#### Disk #18.01A — ASF 1

##### ADOBE NFonts PLUS PACK 1

Courier.  
Helvetica Condensed.  
Helvetica Narrow.  
Helvetica.  
Symbol.  
Times.

#### Disk #18.02A — ASF 2

##### ADOBE NFonts 1 - 7

#01 - Palatino.  
#02 - ITC Bookman.  
#03 - Zapf Chancery  
#03 - Zapf Dingbats.  
#04 - ITC Avant Garde.  
#05 - New Century Schoolbook.  
#06 - Optima.  
#07 - Souvenir.

#### Disk #18.03A — ASF 3

##### ADOBE NFonts 8 - 13

#08 - Lubalin Graph.  
#09 - ITC Garramond.  
#10 - American Typewriter.  
#10 - ITC Machine.  
#11 - Fritz Quadrata.  
#11 - ITC Benguiat  
#12 - Glypha.  
#13 - Helvetica Black and Helvetica Light.

#### Disk #18.04A — ASF 4

##### ADOBE NFonts 14 - 19

#14 - Helvetica Condensed.

#15 - Trump Mediaeval.  
#16 - Melior.  
#17 - Galliard.  
#18 - New Baskerville.  
#19 - ITC Korrina.

#### Disk #18.05A — ASF 5

##### ADOBE NFonts 20 - 26

#20 - Goudy Old Style.  
#21 - Sonata.  
#22 - Century Old Style.  
#23 - ITC Franklin Gothic.  
#24 - Cheltenham.  
#25 - Park Avenue.  
#26 - Bodoni.

#### Disk #18.06A — ASF 6

##### ADOBE NFonts 27 - 34

#27 - Letter Gothic.  
#28 - Prestige Elite.  
#29 - Orator.  
#30 - News Gothic.  
#31 - ITC Tiffany.  
#32 - Cooper Black.  
#33 - Brush Script.  
#33 - Hobo.  
#33 - Stencil.  
#34 - Aachen Bold  
#34 - Freestyle Script.  
#34 - Revue.  
#34 - University Roman.

#### Disk #18.07A — ASF 7

##### ADOBE NFonts 35 - 39

#35 - Carta.  
#36 - Lucida.  
#37 - Univers (45, 55, 65, 75).  
#38 - Universe Condensed.  
#39 - Futura Light.

#### Disk #18.08A — ASF 8

##### ADOBE NFonts 40 - 42

#40 - Stone Serif.  
#41 - Stone Sans.  
#42 - Stone Informal.

#### Disk #18.09A — ASF 9

##### ADOBE NFonts 43 - 47

#43 - Corona.  
#44 - Eurostile.  
#45 - Excelsior.





#46 - Futura.  
#47 - Futura Condensed.

**Disk #18.10A — ASF 10**

**ADOBE NFonts 48 — 54**

#48 - Lucida Sans.  
#49 - Memphis.  
#50 - Helvetica Compressed.  
#51 - Italia.  
#52 - Belwe.  
#53 - Caslon 3 and Caslon 540.  
#54 - Goudy Extra Bold and Heavyface.

**Disk #18.11A — ASF 11**

**ADOBE NFonts 55 — 60**

#55 - Janson Text.  
#56 - ITC Eras.  
#57 - ITC Kabel.  
#58 - MICR, OCRA and OCRB.  
#59 - Helvetica 1 (25, 26).  
#60 - Helvetica 2 (35, 36, 55, 56, 75, 76).

**Disk #18.12A — ASF 12**

**ADOBE NFonts 61 — 66**

#61 - Helvetica (45, 46, 65, 66, 85, 86).  
#62 - TimesTen Roman.  
#63 - Kaufman.  
#64 - Clarendon.  
#65 - Peignot.  
#66 - New Caledonia.

**Disk #18.13A — ASF 13**

**ADOBE NFonts 67 — 69**

#67 - Clearface.  
#68 - Americana.  
#69 - Serif Gothic.

**Disk #18.14A — ASF 14**

**ADOBE NFonts 70 — 74**

#70 - Century Expanded.  
#71 - Serifa.  
#72 - Caslon Open Face.  
#73 - Frutiger (45, 46, 55, 56, 65, 66, 75, 76, 95).  
#74 - Linotype Centennial.

**Disk #18.15A — ASF 15**

**ADOBE NFonts 75 — 80**

#75 - Stempel Garamond.  
#76 - Weiss.  
#77 - Garamond 3.  
#78 - Commercial Pi.  
#78 - Universal Greek + Math Pi.  
#78 - Universal News,  
#79 - Avenir 1 (35, 55, 85).  
#80 - Avenir (45, 65, 95).

**Disk #18.16A — ASF 16**

**ADOBE NFonts 81 — 85**

#81 - Walbaum.  
#82 - Antique Olive.  
#83 - Life  
#84 - Concorde.  
#85 - Gothic 13.  
#85 - Tempo Heavy Condensed.

## **CALL FOR ARTISTS!**

**AV SIG is looking for artists and designers to be part of a computer art exhibit this coming year.**

**All WAP artists and members are invited to participate by sending slides of work you would like to submit.**

**Call Marianne Giguere  
(301) 972 - 3083**

Mac Disk # 5.10 Fonts (60% Reduction)

London-18 font  
from "London (LQ)" on "5.XX" display size 18 3268 bytes

! " # \$ % & ' ( ) \* + , - . / 0 1 2 3 4 5  
6 7 8 9 ; : = < > ? @ A B C D E F G H I J K L M N O  
P Q R S T U V W X Y Z [ \ ] ^ \_ ` a b c d e f g h i j k l m  
n o p q r s t u v w x y z { | } ~                                   ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾

Madison-18 font  
from "Madison.font" on "5.XX" display size 18 6830 bytes

! " # \$ % & ' ( ) \* + , - . / 0 1 2 3 4 5 6 7 8 9  
: ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X  
Y Z [ \ ] ^ \_ ` A B C D E F G H I J K L M N O P Q R S T U V W X Y Z { |  
} ~                                   ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾

Mammoth-18 font  
from "Mammoth@smug" on "5.XX" display size 18 12746 bytes

Manhattan-24 font  
from "Manhattan" on "5.XX" display size 24 14488 bytes

! " # \$ % & ' ( ) \* + , - . / 0 1 2 3 4 5 6 7  
8 9 ; : < = > ? @ A B C D E F G H I J K L M N  
O P Q R S T U V W X Y Z [ \ ] ^ \_ ` a b c d e  
f g h i j k l m n o p q r s t u v w x y z  
[Left Arrow] [Right Arrow] [Double-Click] Ä Å Æ Ç È É Ñ Ö  
Û Ü Á À Å Ä Ã Å Ç È É Ê Ë Ì Í Î Ï Ó Ô Ò  
ó ù ú û ü ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
[Click] [Drag] [Tab] ©

Geneva w Hebrew Stick-24 font  
from "MacinHebrew2.1-Fonts" on "5.XX" display size 24 90

A B C D E F G H I J K L M N O P Q R S T  
U V W X Y Z [ \ ] ^ \_ ` a b c d e f g h i j k l  
m n o p q r s t u v w x y z { | } ~                                   ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾

Hebrew Cursive-24 font  
from "MacinHebrew2.1-Fonts" on "5.XX" display size 24 924

\* + , - . / 0 1 2 3 4 5 6 7 8 9 ; : < = > ? @  
A B C D E F G H I J K L M N O P Q R S T U  
V W X Y Z [ \ ] ^ \_ ` a b c d e f g h i j k l m  
n o p q r s t u v w x y z { | } ~                                   ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾

Monaco w Hebrew Typew...-9 font  
from "MacinHebrew2.1-Fonts" on "5.XX" display size 9 2356

! " # \$ % & ' ( ) \* + , - . / 0 1 2 3 4 5 6 7 8 9 ; : < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~                                   ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾

New York w Hebrew Block-24 font  
from "MacinHebrew2.1-Fonts" on "5.XX" display size 24 81

K L M N O P Q R S T U V W X Y Z [ \ ] ^ \_ ` a b c d e f g h i j k l m n o p q r s t u  
v w x y z { | } ~                                   ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾  
                 ¡ ¢ ¤ ¥ ¦ § ¨ © ª « ¯ ° ± ² ³ ´ µ ¶ · ¸  º » ¼ ½ ¾

Rehovot-24 font  
from "MacinHebrew2.1-Fonts" on "5.XX" display size 24 32

א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ ק ר ש ת ׀ ׁ ׂ ׃ ׄ ׅ ׆ ׇ ׈ ׉ ׊ ׋ ׌ ׍ ׎ ׏ א ב ג ד ה ו ז ח ט י ך ם ן נ ס ע ף ץ נ ס ע ף ץ נ ס ע ף ץ

Siloam-10 font  
from "MacinHebrew2.1-Fonts" on "5.XX" display size 10 1

א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ ק ר ש ת ׀ ׁ ׂ ׃ ׄ ׅ ׆ ׇ ׈ ׉ ׊ ׋ ׌ ׍ ׎ ׏ א ב ג ד ה ו ז ח ט י ך ם ן נ ס ע ף ץ נ ס ע ף ץ

Troyes-24 font  
from "MacinHebrew2.1-Fonts" on "5.XX" display size 24 45

א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ ק ר ש ת ׀ ׁ ׂ ׃ ׄ ׅ ׆ ׇ ׈ ׉ ׊ ׋ ׌ ׍ ׎ ׏ א ב ג ד ה ו ז ח ט י ך ם ן נ ס ע ף ץ נ ס ע ף ץ





**Monogram-24 font**  
 from "Monogram@smug" on "5.XX" display size 24 7026 bytes

!"#\$%&()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN OPQRSTUVWXYZ [\ ]\_`abcdefghijklmnopqrstuvwxyz{|}~

**Montecito-12 font**  
 from "Montecito@smug" on "5.XX" display size 12 2696 bytes

!"#\$%&()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN OPQRSTUVWXYZ [\ ]\_`abcdefghijklmnopqrstuvwxyz{|}~

**Armonk-24 font**  
 from "More Computer@smug" on "5.XX" display size 24 444

!"#\$%&'()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN OPQRSTUVWXYZ [\ ]\_`abcdefghijklmnopqrstuvwxyz{|}~

**Mos Eisley-24 font**  
 from "Mos Eisley" on "5.XX" display size 24 9246 bytes

!"#\$%&'()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN OPQRSTUVWXYZ [\ ]\_`abcdefghijklmnopqrstuvwxyz{|}~

**Moskva-24 font**  
 from "Moskva@smug" on "5.XX" display size 24 8078 bytes

!"#\$%&'()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN OPQRSTUVWXYZ [\ ]\_`abcdefghijklmnopqrstuvwxyz{|}~

**Mozart-24 font**  
 from "Mozart@smug" on "5.XX" display size 24 11476 bytes

**Music-18 font**  
 from "Music@smug" on "5.XX" display size 18 3930 bytes

**Navigator-9 font**  
 from "Navigator" on "5.XX" display size 9 2822 bytes

**NBC-24 font**  
 from "NBC" on "5.XX" display size 24 1012 bytes

BONANBANAN

**Dali-24 font**  
 from "New Dali" on "5.XX" display size 24 10918 bytes

\*\*\*\*\*!"#\$%&'()\*+,-./0123456789:;<=>?@ABCDEFGHIJKLMN OPQRSTUVWXYZ [\ ]\_`abcdefghijklmnopqrstuvwxyz{|}~

**Hiragana-24 font**  
 from "New Hiragana" on "5.XX" display size 24 12350 bytes

!"#\$%&'()\*+,-./0123456789人のふにべばやがぞづくよげごやづゆよわびばでどやわぎんちぜゆじだぎ;を;かそくうけこなつにぬねひはてとあえきおちせいしたさ







**Proxy-24 font**

from "Proxy" on "5.XX" display size 24 5746 bytes

□□□ !"#%&'()\*+,-./012345678  
 9;:<=>?@ABCDEFGHIJKLMN  
 OPQRSTUVWXYZ[\]^\_`ab  
 cdefghijklmnopqrstuvwxyz{|}  
 ~□□□□□□□□áàâ□□□çéèë□□í□□□  
 ô□□□ùúü°φξ•¶β@©™'"≠□□∞  
 ±≤≥□μδΣΠπ∫□□Ωæø□□□√f≈Δ◀  
 »... □□□□œ--→□□□□÷◊□□□□◊□□

**Rangers-18 font**

from "Rangers-smug" on "5.XX" display size 18 5526 bytes

██████████████████████████████████ !"#  
 \$%&'()\*+,-./0123456789;:<=>?  
 @ABCDEFGHIJKLMNQRST  
 UVWXYZ{|}\_`ABCDEFGHIJK  
 LMNOPQRSTUVWXYZ{|}~████████

**Relief-24 font**

from "Relief-smug" on "5.XX" display size 24 5240 bytes

□□ □□□□□□□□□□□□  
 □□□□□□ !"#%&'()\*+  
 ,-./0123456789;:<=>?  
 @ABCDEFGHIJKLMNQRST  
 STUVWXYZ[\]^\_`ABCDE  
 FGHJKLMNPOQRSTUUVW  
 XYZ{|}~□□□□□□□□□□□□

**Robust-24 font**

from "Robust-smug" on "5.XX" display size 24 5936 bytes

▲▲▲▲▲▲▲▲▲▲ !"#%&'()\*  
 +,-./0123456789;:<=>?@AB  
 CDEFGHIJKLMNQRST  
 UVWXYZ▲\▲▲▲▲`abcdef  
 ghijklmnopqrstuvwxyz▲

**Round-f-12 font**

from "Round-smug" on "5.XX" display size 12 3590 bytes

00000000 000000000000000000 !"#%&'  
 ()\*+,-./0123456789;:<=>?@ABCDEFGHIJKLMNO  
 PQRSTUVWXYZ[\]^\_`abcdefghijklmnopqrstu  
 vxyz{|}~ÀÁÇÈÉËÏÒóôõö÷øùúûü°φξ•¶β@©™'"  
 ≠□□∞±≤≥□μδΣΠπ∫□□Ωæø□□□√f≈Δ◀  
 »... □□□□œ--→□□□□÷◊□□□□◊□□

**Russell Square-24 font**

from "Russell Sq-smug" on "5.XX" display size 24 4938 by

□□□□□□ !"#%&'()\*+,-./  
 0123456789;:<=>?@ABCDE  
 FGHIJKLMNPOQRSTUUVWX  
 YZ[\]^\_`abcdefghijklmnopq  
 rstuvwxyz{|}~ □□□□□□



# Washington Apple Pi Tutorials

by Rob Clark

Information  
Tutorial Calendar  
Application Form

## Information

Washington Apple Pi provides training to its members and to nonmembers on a regular basis. Tutorials for January include basic courses for the Macintosh and for the Apple II e/c. Please note the change in the usual scheduling for our course offerings in January, due to the New Years holiday.

### *Apple II e/c Tutorials for January*

This month, we're providing the Apple II e/c Introductory Tutorials, a three-part series. Please refer to the calendar for times and course titles. You may sign up for just one, or for all three, if you wish. Of course all three courses provide you with the most benefit. This class is designed for beginners, not experienced users. The fee for each session is \$15 for members, \$20 for nonmembers. You are urged to bring your Apple II e/c (computer, monitor, & disk drives) with you to class, as we have no computers for you to use. If you can not bring your own computer, you will have to look over someone's shoulder. Tutorials without at least two students will be cancelled.

### *Macintosh Tutorials for January*

In the month of January, we are providing the Macintosh Introductory Courses, a three-part series. Please refer to the calendar for times and course titles. You may sign up for one or more. Of course all three courses provide you with the most benefit. This class is designed for beginners, not experienced users. The fee for each session is \$15 for members, \$20 for nonmembers. You are urged to bring your Mac with you to class, as we have no computers 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.) If you can not bring your own computer, you will have to look over someone's shoulder. Tutorials without at least two students will be cancelled.

### *Potentially New Courses*

We're looking to expanding our courses. New course proposals include a Font Manipulation course, PageMaker and Excel courses, and a one-on-one course for Macintosh beginners who want individualized training. We'll be expanding the Apple II training as well. So, contact me or Eileen O'Grady if you are interested in taking the courses above, if you are interested in becoming an Apple II or Mac Tutorial Instructor, or if you have questions of any nature. I can be reached at 301-428-9207, Eileen at 703-532-0641.

### *Application Form*

*Washington Apple Pi, LTD*  
7910 Woodmont Ave, Suite 910  
Bethesda MD 20814  
301-654-8060

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Bringing a computer? \_\_\_\_\_  
Class you wish to take: \_\_\_\_\_

*Please mail form to WAP Office or phone-in your registration—classes held at the WAP office*




# Washington Apple Pi Tutorial Calendar

 Washington Apple Pi, Ltd.

*Tutorial Calendar for January, 1990*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	Apple II e/c <i>Introduction to the Apple II e/c</i> 7 p.m. WAP Classroom	10	11	12	13
14	Macintosh <i>Introduction to Macintosh</i> 7 pm WAP Classroom	Apple II e/c <i>Intermediate Skills</i> 7 p.m. WAP Classroom	17	18	19	20
21	Macintosh <i>Intermediate Skills</i> 7 pm WAP Classroom	Apple II e/c <i>Other Applications</i> 7 p.m. WAP Classroom	24	25	26	27
28	Macintosh <i>Advanced Macintosh</i> 7 pm WAP Classroom	30	31			

 Scheduled Class Night

## Classified Ads

### FOR SALE

Apple 5.25 drive, almost new. \$190  
Charles 703/437-1056

### FOR SALE

Apple IIe, w drives, 64K, star card,  
lots of business software. \$950 or  
best offer. Clay Counts 703/347-  
0244

Traditional shelter for homeless  
women is looking for Macintosh  
computer equipment to be used in  
the operation of moving the  
homeless towards self-sufficiency.  
Please contact Laura Chambers at  
(202) 289-4840.

### FOR SALE

Laser Writer Plus; good as new; 2/  
11 fonts; \$2995/best offer.  
ImageWriter II; only used 6  
months; \$395/best offer. 281-2019  
(Oakton, Va)

### FOR SALE

Appleworks Travel Template - 5-1/  
4" floppy: Files for fancy-free  
marketing junkets, \$25.00 check/  
money order to "Performance  
Assignments", Suite 160, Branch  
Office, 842 Folsom Street, San  
Francisco, CA 94107.

### FOR SALE

Apple IIc, with mono-monitor,  
software, ImageWriter I. \$875/best  
offer. Elizabeth Hillman 301/469-  
8454.

### FOR SALE

Apple /// (128k) with monitor,  
two disk drives, thermal printer,  
much software (some child educa-  
tional) \$350. With letter quality  
printer \$550. Call John 922-9716.

### FOR SALE

Platinum Mac Plus with 2.5 megs  
of RAM, 40 MB, GCC HyperDrive,  
and ImageWriter II printer. \$1,750.  
Ambrose 301/972-2574

### FOR SALE

19" SuperMac B/W monitor + card  
& cables; \$700 or offer. (Was  
attached to a Mac II). Call Ann at  
393-1333 (9-5).

### FOR SALE

IIGS\* RGB, SCSI, IWII, 768K  
PCTrans., SW, 1.25 mem., multiple  
drives, 703/503-8895

### FOR SALE

Mac II. 800K internal disk drive.  
Call David (301) 972-4263

### FOR SALE

Apple II. Hayes 300 baud modem.  
Call David (301) 972-4263

### FOR SALE

Mac SE20 with 2.5 M of RAM and  
Radius 68020 accelerator card. Call  
David (301) 972-4263

### HELP WANTED

MARKETING ASSOCIATE needed  
for Macintosh software company in  
Annapolis. Looking for DTP  
experience, strong writing/design  
skills; good with PR, presentations,  
public speaking; versatile; imagina-  
tive. Ability to walk on water  
desirable but not necessary. An  
excellent opportunity for a Macin-  
tosh believer seeking professional  
growth with quality-oriented  
company. Send resume/letter to  
Michael Dobson, Discovery  
Software, 163 Conduit St., Annapo-  
lis, MD 21401. (301) 268-9877.  
EOE M/F.

### HELP WANTED

1 year Mac experience PT/evening  
and weekend work. Send resume  
or call. 1559 Rockville Pike, Suite  
238, Rockville, MD 20852. 301/  
424-2647.

### HELP WANTED

Secretarial position in fast moving  
progressive association will open  
January 1990. Seeking applicant  
with Mac experience and good  
secretarial skills. Call for appoint-  
ment with resume/work history.  
833-3420. Dupont Circle area.

### POSITION WANTED

Programmer with over five years  
system design and implementation  
seeks work for Software develop-  
ment in a Macintosh environment.  
Tools/Languages used include C,  
C++, Hypertalk, XCMDs, MacApp,  
4th Dimension, MPW and other  
Mac programming utilities. Call  
Walter Parmer (Day) 703/578-5964  
(Evenings) 703/670-8650.

### WANTED

GS Standard keyboard - will buy or  
trade for SE keyboard. Call Bruce  
301/656-6810

### EQUIPMENT NEEDED

Citizens Against Spousal Assault of  
Howard County, is a non-profit  
organization providing services to  
families experiencing violence in  
the home. We are currently in need  
of a hard drive with at least 40 Mg  
of memory and a printer. Ideally  
we would like a postscript Laser-  
printer so that we can produce our  
own brochures and flyers. This  
would be a tax-exempt donation.  
Contact Lisa at 997-0304.

<b>Anti-Virus Utilities</b> 3 disk set 1.01A - AV 1 1.02A - AV 2 1.03 - AV 3	<b>INITs &amp; cdevs</b> 1 disk set 9.01 - IC/ 1	<b>Telecommunications</b> 9 disk set 13.01 - T 1 13.02 - T 2 13.03 - T 3 13.04 - T 4 13.05 - T 5 13.06 - T 6 13.07 - T 7 13.08 - T 8 13.09 - T 9	<b>Adobe Screen Fonts</b> 16 disk set; \$48.00 18.01A - AF 1 18.02A - AF 2 18.03A - AF 3 18.04A - AF 4 18.05A - AF 5 18.06A - AF 6 18.07A - AF 7 18.08A - AF 8 18.09A - AF 9 18.10A - AF 10 18.11A - AF 11 18.12A - AF 12 18.13A - AF 13 18.14A - AF 14 18.15A - AF 15 18.16A - AF 16	<b>HyperCard StackWare</b> 14 disk set 20.01 - M II 1 20.02 - M II 2 20.03 - M II 3 20.04 - M II 4 20.05 A - M II 5A 20.05B - M II 5B 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	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 134 • Disk 143 • Disk 147 • Disk 150 • Disk 151 • Disk 153
<b>Desk Accessories</b> 10 disk set 2.01B - DAs 1 2.02B - DAs 2 2.03B - DAs 3 2.04B - DAs 4 2.05B - DAs 5 2.06B - DAs 6 2.07B - DAs 7 2.08B - DAs 8 2.09B - DAs 9 2.10B - DAs 10	<b>Miscellaneous</b> 1 disk set 10.01 - M 1	<b>Programmer/Hacker</b> 1 disk set 14.01 - PH 1	<b>HyperCard StackWare</b> 29 disk set 19.01A - SW 1 19.02A - SW 2 19.03 - SW 3 19.04 - SW 4 19.05 - SW 5 19.06 - SW 6 19.07 - SW 7 19.08 - SW 8 19.09 - SW 9 19.10 - SW 10 19.11 - SW 11 19.12 - SW 12 19.13 - SW 13 19.14 - SW 14 19.15 - SW 15 19.16 - SW 16 19.17 - SW 17 19.18 - SW 18 19.19 - SW 19 19.20 - SW 20 19.21 - SW 21 19.22 - SW 22 19.23 - SW 23 19.24 - SW 24 19.25 - SW 25 19.26 - SW 26 19.27 - SW 27 19.28 - SW 28 19.29 - SW 29	<b>HyperCard External</b> 4 disk set 21.01 - HE 1 21.02 - HE 2 21.03 - HE 3 21.04 - HE 4	
<b>FKKeys (Function Keys)</b> 2 disk set 4.01A - FKs 1 4.02A - FKs 2	<b>Paintings (MacPnt)</b> 5 disk set 11.01 - P 1 11.02 - P 2 11.03 - P 3 11.04 - P 4 11.05 - P 5	<b>Miscellaneous Utilis</b> 13 disk set 15.01 - MU 1 15.02 - MU 2 15.03 - MU 3 15.04 - MU 4 15.05 - MU 5 15.06 - MU 6 15.07 - MU 7 15.08 - MU 8 15.09 - MU 9 15.10 - MU 10 15.11 - MU 11 15.12 - MU 12 15.13 - MU 13		<b>System Software 6.0.3</b> SS.ST SS.PT SS.U1 SS.U2 SS.LW 6.0 SS.32 Bit QDraw	
<b>ImageWriter Fonts</b> 15 disk set 5.01 - IW 1 5.02 - IW 2 5.03 - IW 3 5.04 - IW 4 5.05 - IW 5 5.06 - IW 6 5.07 - IW 7 5.08 - IW 8 5.09 - IW 9 5.10 - IW 10 5.11 - IW 11 5.12 - IW 12 5.13 - IW 13 5.14 - IW 14 5.15 - IW 15	<b>Digitized Sounds</b> 31 disk set 12.01 - S 1 12.02 - S 2 12.03 - S 3 12.04 - S 4 12.05 - S 5 12.06 - S 6 12.07 - S 7 12.08 - S 8 12.09 - S 9 12.10 - S 10 12.11 - S 11 12.12 - S 12 12.13 - S 13 12.14 - S 14 12.15 - S 15 12.16 - S 16 12.17 - S 17 12.18 - S 18 12.19 - S 19 12.20 - S 20 12.21 - S 21 12.22 - S 22 12.23 - S 23 12.24 - S 24 12.25 - S 25 12.26 - S 26 12.27 - S 27 12.28 - S 28 12.29 - S 29 12.30 - S 30 12.31 - S 31	<b>System Utilis</b> 8 disk set 16.01 - SU 1 16.02 - SU 2 16.03 - SU 3 16.04 - SU 4 16.05 - SU 5 16.06 - SU 6 16.07 - SU 7 16.08 - SU 8		<b>Serially Numbered</b> 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 •	
<b>LaserWriter Fonts</b> 5 disk set 6.01 - LW 1 6.02 - LW 2 6.03 - LW 3 6.04 - LW 4 6.05 - LW 5		<b>System Utilis</b> 3 disk set 17.01 - WP 1 17.02 - WP 2 17.03 - WP 3			

**Special Prices in effect for the month of December only.**

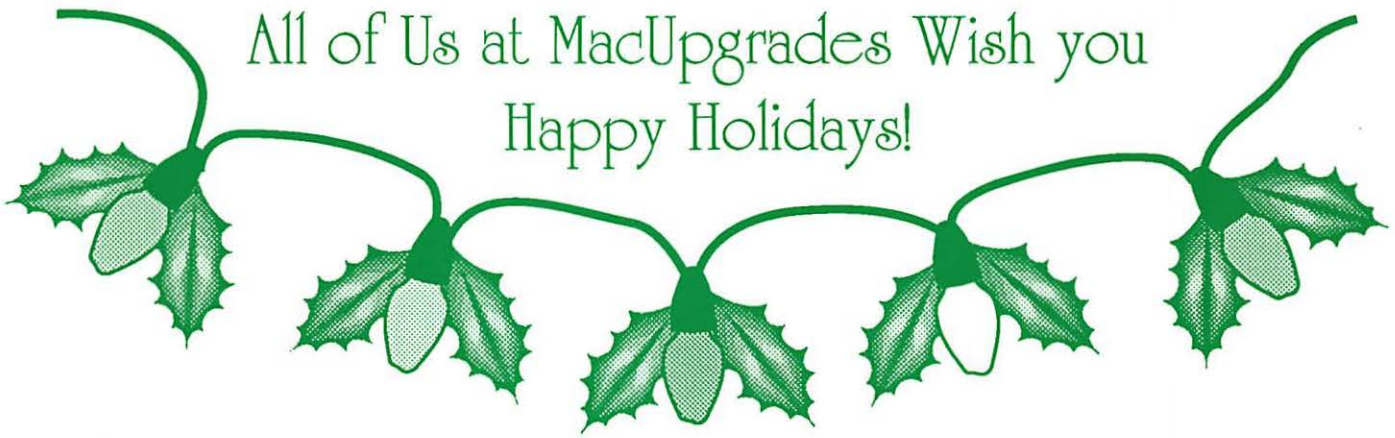
HyperCard Upgrade requires you to show HyperCard proof of purchase; any of original disk, first page of manual, receipt or previous HyperCard Upgrade disk  
Disks marked with are in 400K single side disk format; all others are 800K double side disk format.

<b>Mail this form with your check to:</b> <b>Disketeria</b> Washington Apple Pi, Ltd. 7910 Woodmont Ave., Ste. 910 Bethesda, MD 20814			Are you a member of Washington Apple Pi, Ltd? Yes/No _____. If Yes, Member Number _____ All payments must be in U.S. funds drawn against U.S. banking institutions.		
<b>Number of Disks</b>	<b>Price each</b>	<b>Extended</b>	<b>Name</b>		
_____	_____	_____	Box Number, Apartment, Suite, etc.		
_____	_____	_____	Street Address		
_____	_____	_____	City	State	ZIP Code
_____	_____	_____	Daytime telephone		Evening telephone
_____	_____	_____	<b>TOTAL AMOUNT</b>		





All of Us at MacUpgrades Wish you  
Happy Holidays!



## Memory



There is no easier way to increase the productivity of your Mac than to expand its memory. 2 Meg is required for System 7 compatibility.

Purchase a gift certificate for memory, and receive a free mouse pad for under the tree.

High Speed, Low Profile, Great Warranty, & Free Installation.

<b>Mac Plus &amp; SE</b>	
1 to 2.5 Meg .....	\$258
1 to 4 Meg .....	\$516
<b>Mac II, IIfx, IIfx, &amp; SE/30</b>	
1 to 2 Meg .....	\$129
1 to 5 Meg .....	\$516
1 to 8 Meg .....	\$950
<b>Mac 512KE</b>	
512K to 1 Meg .....	\$425
512K to 2 Meg .....	\$625

## Hard Disks



The most cost effective source in the area for the fastest and most reliable drives available for the Mac.

Internal drives for the SE, SE/30 II, IIfx & IIfx, and External drives for all Macs. Drives from 20 Meg to 1.2 Gigabytes.

Optical Drives, Removable Drives, Transportable Drives, and more.

<b>Internal</b>	
40 Meg Quantum 12ms .....	\$525
80 Meg Quantum 12ms .....	\$825
100 Meg Quantum 12ms .....	\$900
<b>UniMac Externals</b>	
40 Meg Quantum 12ms .....	\$675
172 Meg CDC 16ms .....	\$1,590
<b>La Cie Externals</b>	
40 Meg Quantum 12ms .....	\$695
100 Meg Quantum 12ms .....	\$1,195
Cutting Edge 30 Meg .....	\$475



Get a Free Mouse Pad with every 2 Meg memory upgrade purchased on a gift certificate.

## Bundles

<b>Hi Speed Drive .....</b>	<b>\$1,488</b>
4 Megabyte memory upgrade, and a UniMac (Quantum 12ms) 105 Meg External Hard Disk Drive, all with a 2 year warranty!	
<b>Super SE Extender .....</b>	<b>\$995</b>
2 Megabyte memory upgrade, a Seagate 49 Meg Internal Drive & AOX Doubletime Accelerator, with a 1 year warranty!	
<b>Dream Video .....</b>	<b>\$1,550</b>
RasterOps 264 24 bit Color Video System (640x480), with the sharpest Sony Made the CPD-1304.	
<b>SuperScanner .....</b>	<b>\$1,490</b>
Xerox Imaging Systems 730GS (top rated by MacUser), with the revolutionary AccuText ICR system. A \$2990 retail value.	

## Printers

<b>HP DeskWriter Printer .....</b>	<b>\$895</b>
Affordable, and Quiet, 300 dpi Ink Jet printer designed for Macintosh by HP. Includes 4 scalable outline fonts (Times, Helvetica, Courier & Symbol).	
<b>Ricoh 6000/PS Laser .....</b>	<b>\$3,199</b>
Compact 300 dpi printer, with Adobe PostScript™, Super Fine Grain Toner that produces truly superior blacks, and HPLaserJet II Emulation.	
<b>GCC PLP Plus .....</b>	<b>\$1,690</b>
QuickDraw Based printer with a high-speed SCSI interface, true outline font technology (with Times, Helvetica, Courier, Avant Garde, Bookman, Symbol, New Century Schoolbook, and More), & Inexpensive toner cartridges.	

Mac Memory • Mac Drives • Mac Accelerators • Mac Video • Mac Everything

# MacUpgrades

INCORPORATED

Now Open Saturday (11 to 4)

4336 Montgomery Ave.  
Bethesda, Maryland 20814 **907-0300**