

Washington Apple Pi



Volume 11

June 1989

Number 6

Club News

President's Corner	Bob Platt	5
Meeting Reports	various	13

Special

Innocence Ends	Bob Platt	45
CD-ROMs, Where are You?	L. Jay Aceto	47
MacWorld Expo - Washington	Martin Milrod	62
WAP's New Booth	Cynthia Yockey	63
Toro! Macintosh Art	Autumn Little	96

Comment

Bits and Bytes	Lynn Trusal	70
Macinations: MacWorld	Robb Wolov	72

Games

The PlayRoom	Steven Payne	41
The Usurper	Charles Don Hall	42
King's Quest IV	David Wood	42
The Magic Candle	Charles Don Hall	43

Tutorials

IIGS Stuff	Meyer & Knutsen	28
A Modest Patch for Large Drives	Michael Burton	29
Best of the Apple II	Lou Pastura	32
On the Trail of the Apple III	David Ottalini	38
Apple Q & A	Bob Platt	40
Desktop Puzzling	Ron Moore	50
Imagewriter Alternatives	Jay M. Thal	52
Connect with MacNET	Jeff Alpher	54
Mac Q & A	Milrod & Morganstein	58
Excelling on Your Mac: Part 24	David Morganstein	60
Random Walk Macro in Excel	Fred Seelig	74
WAP Tutorials Registration	Lynn Trusal	95

Reviews

The Musical Apple: Finale	Raymond Hobbs	46
Life & Death	Gail West	57
Mac Number Crunching: L/S FORTRAN	Lou Pecora	64
Mac Business: Accounting Software	Cindy Carter	77

Disk Library

Apple III Disketeria	David Ottalini	80
Mac Disketeria	David Weikert	80
Mac Disketeria Order Form		93

WAP Databank

Officers & Volunteers		3
Hot Line		8
Calendar/SIG Notices	Peter Cook	10
Classifieds		92
WAP Membership Form		94
Membership Drive Readout		96

IIGs system upgrade a big hit

.....page 28

The King's Quest — rich in detail

.....pages 42

What's happening with CD-ROMs?

.....page 47

Money saving tips for desktop publishers

.....page 50

MacWorld recapitulated (photos)

.....page 62

**Mac
Corner**
The Macintosh Only Store

Macintosh is a TM of Apple C.C.

SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE

MacCORNER'S GREAT ANNUAL

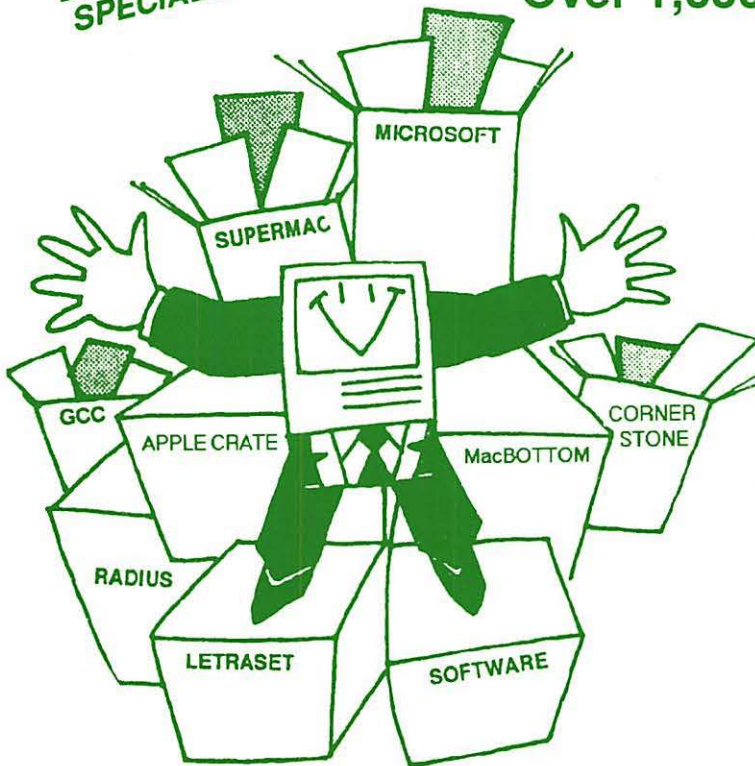
WAREHOUSE BLOW-OUT SALE!

We are clearing out our ENTIRE WAREHOUSE inventory!
ALL software and peripherals will be reduced 30 -99% off!
Most at or below dealer cost! Do not miss it!

**DEMO
SPECIALS!**

Over 1,000 new & demo products!

Here are some HOT examples:



Software/Accessories

	List	Super-SALE
Compuserve book	\$ 12	\$ 1
Disk Cleaning Kits	30	3
MouseMats	12	4
Desk Organizer (+)	79	5
DeskScene	40	5
HFS Locator	79	7
Hard disk Utils	99	8
GAMES starting at..	.. below->	9
MindWrite	195	10
SmartScrap & Clipper	80	10
SONY DSD (10)	60	15
MacDraw (d)	100	29
Omnis 3	495	59
Mac3D	295	67
PixelPaint	399	79
Photon (Scoop upgrade)	495	89
ReadIt OCR	395	99
LaserPaint Color II	595	109
Quark Xpress	795	299

HardWare

	List	Super-SALE
LaserWriter Trays	70	5
Quiet Cool SE (quiets fan)	59	10
A+ Optical Mouse (+)	99	19
Felix (+) (mouse)	150	39
Mac II/IIx/IIcx/SE30 2 meg Upgrade	599	149
20 Meg Tape Backup (as is)	995	199
Kroycolor	995	298
Dayna file FT100 (360k)	795	299
Brother 6 TwinWriter Dot/DaisyWheel	1399	599
NEC 15" MS+ Color Mntr 1024x840 (as is)	1200	599
Everex EMAC 90 DLX	1795	699
CMS 80 (quantum)	1795	779
EMAC T-60 Tape backup	1399	793
Full Page Display CS (mac II)	2195	799
HP LaserJet PostScript Upgrade (as is)	2995	979
Sigma Laserview 19" Two Page SE	2400	998
PLI 45meg Removable Cart Drive	1795	999
21" Hitachi COLOR Monitor (as is)	3500	1299
Techtronix 4693D (w/8 megs upgrade)	11300	8495

ONE DAY ONLY!

**FREE
DRINKS!**

June 3, 1989

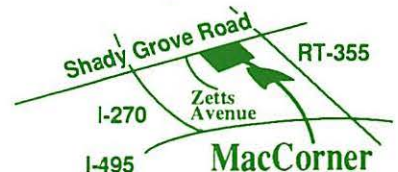
**GIVEAWAYS
ALL DAY!**

FIRST COME, FIRST SERVE!

SORRY ...

- All sales are final
- No rainchecks
- We can't hold items
- No back orders

MacCorner
8653 Zetts Avenue
Gaithersburg, Maryland 20877
(301)948-1538



Some items are demo/missing packages or literature.

Full I.D. required for all checks • Sale limited to IN STOCK ITEMS only • No P.O.'s • All advertised clearance prices good only on 6/3/89

Additional Parking In Rear

SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE • SALE

ATTENTION! Special Sale Hours: Saturday 9.AM - 9PM

Clinton Computer Joins ComputerLand Network.....

We're ComputerLand Mid-Atlantic!

A Message from Our President....



Art Lundquist, President
Co-Owner/Founder
ComputerLand Mid-Atlantic, Clinton Computer

Why does the bottom of this ad have two logos -- Clinton Computer and ComputerLand Mid-Atlantic?

The answer is simple! To provide even better support, service and value for you -- our valued customer -- Clinton Computer has joined the ComputerLand network and has begun to operate some Metro area ComputerLand stores. During the next several months, we will purchase other locations and our existing Clinton Computer stores will change their names to ComputerLand Mid-Atlantic.

Over the next several years, Clinton Computer will expand to open and operate ComputerLand stores throughout the Mid-Atlantic area.

Some of you have heard about our purchase of some ComputerLand locations or have seen ComputerLand banners in our stores and have asked us what is going on.

Has Clinton Computer's ownership changed?

No. Clinton Computer joined the ComputerLand network, but is still owned and operated by its founders, Chuck Perilli and myself. We will continue to provide the best value, service and support to you.

Will we carry more products?

Yes. Our stores will offer Apple, IBM, COMPAQ and Hewlett-Packard, along with 87 other brands available through the ComputerLand network. Not all of our stores are authorized for all products yet, so please call.

Will our prices be lower?

Yes. ComputerLand's large purchasing power will give us the opportunity to be the most competitive chain in the Mid-Atlantic region.

Will our service still be the best?

Yes. Even better! As part of Computer-

Land, we will be offering a more comprehensive and economical service plan -- with world-wide service capability.

What about training?

We will be offering even more courses and opening more training locations.

What about Government Sales?

ComputerLand intends to be one of the largest suppliers of all the major microcomputer products to the Federal Government.

Are all ComputerLand stores in the Washington area owned and operated by Clinton Computer?

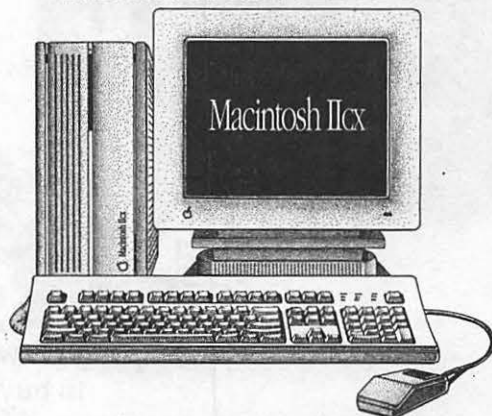
No. Be sure to shop at those listed in this ad for the value, service and support that you have come to expect from Clinton Computer.

If you have any other questions, please write to me:

Office of the President
Clinton Computer
7469 Old Alex. Ferry Road
Clinton, MD 20735

I look forward to hearing from you.

Macintosh IICX



Come see the new, versatile and extraordinary Macintosh® IICX. With the Motorola 68030 microprocessor, it's every bit as powerful and fast as our top-of-the-line Macintosh IIX -- in a smaller size!

OUR 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 upgrades, the 25% discount applies to the parts only, not to the labor cost. 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®

Mid-Atlantic

Laurel, MD 9636 Ft. Meade Rd. (301)953-1110
Annapolis, MD Rt. 2 and West St. (301)261-8181
Washington, DC 1905 K Street, NW (202)223-0900
Rockville, MD 12204 Rockville Pike (301)881-2810
Alexandria, VA 277 S. Washington St. (703)838-9700
Clinton, MD 6443 Old Alex. Ferry Rd. (301)856-2500
Tysons Corner, VA 8032 Leesburg Pike (703)442-3800
K-12 and Higher Education Sales (301)868-0002
Corporate and Government Sales (301)599-9555
Service Contract Sales (301)599-1596
Training Services (301)953-1110



Owned and Operated by

Clinton
Computer

Apple, the Apple logo, Macintosh, AppleShare and LaserWriter 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.

Beautiful Technology.

Macworld (May 1989) has just rated MegaScreen the Number One Choice in large screen displays for the Macintosh SE; quality, features and price/performance are the reasons why. User Group pricing and our toll-free purchase assistance line mean there's no reason to wait!

Gorgeous Deals.

Save up to 41% when you join with other members of your user group to buy selected MegaGraphics Display Systems.

Call MegaGraphics at (800) 423-0183 for details. (Inside California, call (805) 484-3799) Ask for User Group Sales.

User Group Special (Expires July 31)				
MegaGraphics Product	Macintosh Compatibility	Suggested Retail Price	User Group Price*	Savings
MegaScreen SE Black & White 19" Monitor & Controller	Macintosh® SE	\$1,895	\$1,259**	SAVE \$636
MegaScreen 2001 Black & White 19" Monitor & Controller	Macintosh II, IIX, IICX	\$1,995	\$1,299	SAVE \$766
MegaScreen 2008 Greyscale 19" Monitor & Controller	Macintosh II, IIX, IICX	\$3,290	\$1,999	SAVE \$1,291
MegaScreen 2008 256 Color 19" Trinitron® Monitor & Controller	Macintosh II, IIX, IICX	\$6,090	\$3,999	SAVE \$2,091
MegaGraphics 2008 Controller card only, no monitor	Macintosh II, IIX, IICX	\$1,695	\$999	SAVE \$696

MegaGraphics offers the only full line of true WYSIWYG/75 d.p.i. displays available for Macintosh.

MegaScreen 2008 Color System for the Macintosh II uses a special Trinitron-technology monitor tuned to our uniquely high refresh rate and 1024 x 826 resolution.

MegaScreen 2008 Greyscale System offers 256 simultaneous grey tones for photographic-quality images.

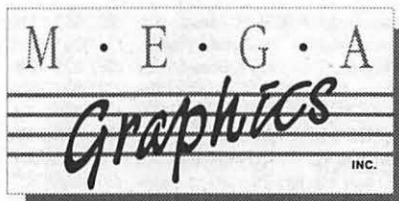
MegaScreen Black & White Systems all provide rock steady, flicker-free displays for

all current Macintosh models.

Each MegaScreen System offers the best performance in its category, with a specially-tuned high performance monitor to work with the high refresh rate of our MegaScreen Controllers.

The result of all this technology is a stable, flicker-free display that's comfortable to use all day long.

MegaScreen Display Systems by MegaGraphics. We make technology beautiful.



MegaGraphics, 439 Calle San Pablo, Camarillo, CA 93010 (800) 423-0183. Inside California: (805) 484-3799. Ask for User Group Sales.

*Applicable sales tax and shipping are extra. Restrictions apply: Discounts are available to current user group members when their group buys at least 3 systems.

**MegaScreen SE price includes a \$20 coupon for installation by the Apple servicing dealer of your choice.

These are not discontinued items, nor do they differ from our regular retail products. Trinitron is a Registered Trademark of Sony Corporation. Macintosh is a Registered Trademark of Apple Computer, Inc.

Officers and Board of Directors

President	-Bob Platt	(703) 486-1466
Vice President-Apple Mtg	-Ray Hakim	(301) 649-1891
Vice President-Mac Mtg.	-Eric Rall	(301) 596-0004
Treasurer	-Edward Myerson	(703) 759-5479
Secretary	-Peter Combes	(301) 251-6369
Directors	-Harvey Kaye	(301) 493-6875
	-Priscilla Myerson	(703) 759-5479
	-Leon Raesly	(301) 439-1799
	-Nancy Seferian	(202) 333-0126
	-Bob Shaffer	(301) 552-9214
	-Lynn R. Trusal	(301) 845-2651
	-Cynthia Yockey	(301) 565-3951
Past President	-Tom Warrick	(301) 365-7226
Head Disk Librarian	-Jim Little	(301) 762-3215
Journal Managing Editor	-Tom Piowar	(202) 223-6813

Office Staff

Office Manager	-Nancy Pochepek
Asst. Office Manager	-Kym Knutson
Office Assistant	-Ambrose Liao

Volunteers

	<i>*Call only evenings 7:00-9:30, M-F</i>	
Group Purchases	*Rich Wasserstrom	(202) 544-8327
Head Reading Lib.	-Walt Francis	(202) 966-5742
Apple Tea Coord.	-Amy Billingsley	(301) 622-2203
Dealer Rel. Comm.	-John Alden	(202) 686-1656
	-Harvey Kaye	(301) 493-6875
	-Bob Platt	(703) 486-1466
	*Rich Wasserstrom	(202) 544-8327
Legal Counsel	-Charles Calkins	
	-Dan Dwyer	(301) 445-2895
Membership	-Dana Schwartz	(301) 654-8060
Public Relations	-Cynthia Yockey	(301) 565-3951
SIGs & Slices Coord.	-Bob Shaffer	(301) 552-9214
Hotline Coordinator	-Larry Feldman	(202) 546-9556
Telecom SYSOP	-Leon Raesly	(301) 431-0853
Journal Store Distribution	-Andy Wallo	(703) 430-1553
Tutorials Coordinator	-Lynn R. Trusal	(301) 845-2651
Community Affairs	-Rick Gilmore	(301) 587-6928

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

©1989, Washington Apple Pi, Ltd.

User groups may reprint without prior permission any portion of the contents herein, provided proper author, title, and publication credits are given. Please send a copy to the editor.

Disketeria Volunteers

DOS 3.3 Librarian	-Jim Little	(301)762-3215
Macintosh Librarian	-David Weikert	(301)963-0063
	-Martin Milrod	(301) 464-5981
Pascal Librarian	-Mike Hartman	(301) 445-1583
ProDOS-CP/M Libr.	-John T. Bell	(301) 441-9069
Iigs Librarian	-Sam Knutson	(301) 498-8411
	-Richard Sanders	(703) 450-4371
Apple II Disks	-Jim & Nancy Little	(301) 762-3215
John Bell	Bob Johnson	
Bob Platt	John Ruffatto	Dave Harvey
Bob Houts		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 Vandegrift	

SIG Chairs

Annapolis Slice	-Charles Schindler	(301) 437-4624
AppleWorks	-Ken DeVito	(703) 960-0787
Apple Iigs	-Ted Meyer	(703) 893-6845
Apple III	-David Ottalini	(301) 681-5792
	-Tom Bartkiewicz	(703) 435-3295
	-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
CP/M	-Charles Franklin	(301) 997-9138
Database SIG	-Eric Gutsche	(703) 379-1265
DisabledSIG	-Jay Thal	(202) 244-3649
Desktop Publishing SIG	-Tom Piowar	(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
Emeritus Chair	-Ron Wartow	...he'll call you
HyperCard	-Bob Platt	(703) 486-1466
LawSIG	-open	
Mac Programmers	-Bob Shaffer	(301) 552-9214
	-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
Pascal (PIG)	-Vincent Zenger	(301) 593-3985
PI-SIG	-Bob Golden	(301) 593-6165
StockSIG	-Peter Kasper	(703) 620-4071
Telecomm. SIG	-Allan Levy	(301) 340-7839
Works	-Chris Bastian	(301) 530-1935

Regular Columns

Best of the Apple II TCS	Lou Pastura	32
Bits & Bytes	Lynn Trusal	70
Desktop Puzzling	Ron Moore	50
IICS Stuff	Ted Meyer & Sam Knutson.....	28
Macinations	Robb Wolov	72
Mac Q & A.....	Milrod & Morganstein	58
On the Trail of the Apple III	David Ottalini	38
Presidents' Corner	Bob Platt	5
Excelling	David Morganstein	60

Advertisers

Ameritel	12
Award Publications	59
Carver Publishing Services	6
Clinton Computer	1
Computer Age	48, 49
Computer Desktop Publ. Center	19
Darby Graphics	67
Data Conversion	76
Desktop Publishing Center	98
Disk Doctor	78
Gestalt	65
Laser's Resource	37
MacCorner	0
MacHeaven	59
MacInOffice	68, 69
MacSlides	78
MacSource	58
MacTemps	97
MacUpgrades	45
MacWorld Expo.	61
Mega Graphics	2
MidAtlantic Telesis	79
Multisoft Resources	39
Operant Systems	35
PLS Inc.	41
PC Resources	45
Rent-A-Computer	37
Satellite Scientific	97
Software Ventures	55
Summit Research Corp.	53
Sunrise	52
Technical Sales and Service	76
VF Associates	53

Advertisers are listed as a service to our readers; the WAP Journal is not responsible for any errors or omissions.

Authors

Aceto, L. Jay	47
Alpher, Jeff	54
Burton, Michael	29
Carter, Cindy	77
Childers, Tom	16
Feldman, Larry	17
Golden, Robert	21
Grosbier, Dick	16
Hall, Charles Don	42, 43
Hobbs, Raymond	46
Knutson, Sam	28
Meyer, Ted	28
Milrod, Martin	58
Moore, Ron	50
Morganstein, David	58, 60
North, Bill	18
Ottalini, David	38, 80
Pastura, Lou	32
Payne, Steven	22, 41
Pecora, Lou	64
Piwowar, Tom	7, 20
Platt, Bob	5, 13, 17, 40
Pochepko, Nancy	21
Seelig, Fred	74
Thal, Jay M	52
Trusal, Lynn	70, 95
Weikert, David	80
West, Gail	57
Wolov, Robb	72
Wood, David	42
Yockey, Cynthia	63

The WAP Journal is created using Apple Macintosh II and SE computers and printed camera-ready on a 300-dpi Apple LaserWriter Plus. Software includes word processing with: Word (Microsoft), WriteNow (T/Maker), and MacWrite (Claris); illustration with: MacPaint (Claris), MacDraw (Claris), Canvas (Deneba), and FreeHand (Aldus); page layout with: MacDraw (Claris) and PageMaker (Aldus); communications with RedRyder (CE Software), TOPS (Sun Microsystems), and Mail (Microsoft); utility programs include: Font/DA Juggler (ALSoft), DiskTop (CE Software), LaserStatus (CE Software), McSink (Preferred Software), ArtGrabber (Hayden), and SmartScrap (Solutions); Fonts are: Palatino, Helvetica, Helvetica Narrow, Helvetica Condensed, and Helvetica Condensed Black (Adobe).

Journal Deadlines

Writers' submissions
July.....June 5
August.....July 3

Editors' submissions
July.....June 12
August.....July 10

Ad space reservations
July.....June 7
August.....July 10

Camera-ready ad copy
July.....June 14
August....July 12

Distribution Dates
JulyJune 24
August....July 22



by Bob Platt

I have much exciting news about the Pi and its progress to share with you as we recover from AppleFest and MacWorld on back-to-back weeks.

Drop-in Night

Years ago, WAP had a "NewSIG" for orienting new members to their computer and to WAP's services. Other organizations, such as the Boston Computer Society have had success with a "drop-in night," an evening session where new members are encouraged to drop by the office for a tour and to have their questions answered. We are going to hold drop in nights on the first Tuesday evening of each month from 7:30 to 9:00 p.m. If you have never visited WAP's Office before or if you are starting with your computer, please join us.

Office Volunteers

As summer approaches, the number of visitors to our office will increase. As an extension of the "Drop-in Night" concept, we are looking for volunteers who can spend one afternoon or evening a month in the Office to assist with answering members questions. The Capital PC User Group Office is staffed entirely by volunteers, and it is worth exploring whether volunteers are available to assist our members with questions.

AppleFest

The April AppleFest in Boston was the first to cater to both Apple and Mac users. However, the show retained its predominantly Apple II theme.

Many thanks (and 5 points in our membership contest) to the volunteers who staffed our booth: Gary Hayman, Harvey Kaye, Sam and Kym Knutsen, York Menzel, Carrol Norrish, Bob Lammachia, Ben Miller, Charlie and Jay Sorrels, Bob Platt and Ray Settle. Ben won the door prize—an Apple IIc Plus. We were particularly proud of Ray who taught the AppleWorks seminars at the show. All told, the booth took in \$1,780, including 20 new memberships.

Special thanks to Apple's Sue Espanoza for including her remarks about WAP in her speech at the User Group Breakfast. (I also appreciate her assistance in obtaining invitations for the WAP contingent to Apple's party.) Thanks to other Apple technical staff for sharing their technical insights and giving us so much of their time: Jim Merritt (who has a patch to allow Apple Pascal 1.3 to run 5.25" drives on the IIGs), Gary Little, and Ron Lichty.

The most impressive announcement at AppleFest was IIGs System Software 4.0. The speed improvements make the IIGs a viable competitor against the Amiga and color-equipped MS-DOS machines. The speed improvements were achieved by adding some RAM-resident special case code to the ROM toolbox. This code is loaded automatically on any machine with more than 512K of RAM. The driver for the Apple SCSI card was rewritten to bypass the ultra-slow ROMs. This results in a speed improvement when using Apple's hard disks, but it is not available for Siders or other drives which use their own drivers. Similarly, the driver for the Apple 3.5 disk was speeded up.

Program loading has been greatly accelerated with a "Quickload" feature. When a program developer converts his finished application to this special format, it can be loaded directly into memory from the disk without the loader processing a great deal of header information. This allows large programs such as AppleWorks GS to load in only 25 seconds.

The most impressive almost-shipping product was Roger Wagner's HyperStudio. Roger was selling packages at a special show price, with the

understanding that an upgrade would be available shortly to bring the product up to its full features. A related product was the new version of TutorTech which is one of the first products to support Apple's Video overlay card.

AppleFest also marked the debut of II at Work, which is devoted to business applications on the Apple II. To recruit members, WAP had a swap ad in the inaugural issue.

Senior Net

Senior Net was one exhibitor at AppleFest which caught our attention. Senior Net is a nation-wide effort to promote computer literacy among the elderly. Senior Net is centered on local sites which offer training from a centrally-developed curriculum. Classes cover word processing and desktop publishing, financial management, "electronic citizenship" using databases, and telecommunications. Senior Net members also participate through a forum on the Delphi commercial on-line service.

WAP participation in Senior Net offers the potential of providing a public service, increasing utilization of our offices during the daytime, and obtaining equipment which would be available for all of our membership. Accordingly, I have appointed a task force with Paul Koskos and Rick Gilmore to investigate the benefits of WAP's hosting a Senior Net site.

Macintosh Information Service

The Macintosh Information Service (MIS) is a HyperCard index of leading Macintosh-related publications. MIS is updated six times per year. Until now, MIS has been marketed to business users, but the organization wants to test the user group market. Accordingly, a copy of MIS has been placed in the WAP Office for members to try. (It is a convenient way to access our magazine collection.) If there is sufficient interest, we can offer a group purchase of MIS for as low as \$35 per user. MIS has also offered to include the WAP Journal in its index. Please call the office if you

➔ 27

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.

This Unusual Issue...

WAP Journal Editorial Board

Managing Editor

Tom Plowar
1500 Massachusetts Ave NW, #34
Washington DC 20005
(202) 223-6813

Club News and Calendar Editor

Peter Cook
8403-1 Greenwood Ave
Takoma Park MD 20912
(301) 585-7651

Columnists Editor

Kathleen Dunten
Thompson Publishing
1725 K St, NW, Suite 200
Washington DC 20006
(202) 872-1766

Apple Editor

Hardware, Programming, TCS, Q&A
Lee Raesly
MHA Inc
7411 Riggs Rd, Suite 103
Adelphi MD 20783
(301) 439-1799

Apple Reprints Editor

Chris Bastian

Mac Editor

Hardware, Programming, TCS, Q&A
Martin Milrod
2616 Kingsley Lane
Bowie MD 20715
(301) 464-5981

Reviews Editor

Ray Hobbs
8405 Snowden Loop
Laurel MD 20708
(301) 490-7484

Games Editor

Steven Payne
Discalced Carmelite Friars
2131 Lincoln Rd NE
Washington DC 20002
(202) 832-6622

Graphic Arts and DTP Editor

Jane Altshuer
5407 Grove Ridge Way
Rockville MD 20852
(301) 564-1123

Proofreaders

Darla Fera
David Harris
Cindi Kaiser

The blank spaces in the June issue represent material that the Board of Directors found to be objectionable because the Editor of the Journal had ignored the guidelines and rules established by the Board to govern Journal content prior to the election, or included material written by WAP members for other purposes and included without their knowledge or permission. This is an extraordinarily unpleasant (and expensive) step to have to take, and its necessity is regretted. Under the circumstances, however, the Board felt it had no alternative.

Our objective here is not censorship. We cannot state this concern strongly enough. If any member of Washington Apple Pi wishes to obtain a copy of the material excised from this issue, he or she should feel free to call the Office of the Pi [(301) 654-8060] and request it. The material will be sent to you.

The Board of Directors has asked Nancy Seferian to take charge of publishing the June and July issues of the Journal. She, in turn, has asked Tim McGraw and Frank Potter to help in the editing and production process. Members of the Pi who have material that they would like to see published in the Journal should contact Nancy [(202) 333-0126] or the Pi offices to arrange for its review and eventual publication.

Members who wish to acquire on-the-spot training and techniques for desktop publishing may seize upon this as a wonderful opportunity for self-education. All assistance will be appreciated and no one will be turned away at the door.

*L Dale Smith
Secretary, WAP
in accordance with the
direction of the BOD*

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

Guidelines for Hotline Use

- Hotline is for club members only.
- Remember these are volunteers: be courteous; ask for help, not for a job to be done for you.
- Respect all telephone restrictions where listed—no calls after 10:00 PM except where indicated.
- Calls regarding commercial software packages should be limited to those you have purchased. Do not call about software for which you have no documentation.
- All telephone numbers are home numbers unless otherwise specified.
- When requests are made to return calls, long distance calls will be collect.

Hotline Coordinator

Larry Feldman (202) 546-9556

Apple II

General

Dave Harvey (703) 578-4621
John Wiegley^{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) 652-2899

Home Accountant

Leon Raesly (301) 431-0853

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

AppleWorks Data Base

Morgan Jopling (301) 261-3886

Communications Packages

ASCII Express

Dave Harvey (703) 578-4621

ProTerm

Allan Levy (703) 578-4621

Talk is Cheap/Pt.toPt.

Barry Fox (717) 652-2899

Data Bases

dBase II

John Staples (703) 255-6955

dBase II&III, Data Perfect

Leon Raesly (301) 431-0853

Profiler 3.0

Barry Fox (717) 652-2899

Dvorak Keyboard

Ginny Spevak (202) 362-3887

Hard Disk

CMC (not CMS)

Barry Fox (717) 652-2899

Corvus Omninet

Tom Vier (BBS) (301) 986-8085

Corvus

Leon Raesly (301) 431-0853

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) 431-0853

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

John Love (703) 569-2294

Integer Basic

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

John Love (703) 569-2294

Machine

Ray Hobbs (BBS) (301) 490-7484

John Love (703) 569-2294

Pascal

Michael Hartman (301) 445-1583

C and TML Pascal

Harry Ewin (703) 391-0295

Operating Systems

Apple DOS

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

CP/M

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) 652-2899

RWTS, Disk structure

John Wiegley (703) 437-1808

Print Shop

Thomas O'Hagan (301) 593-9683

Spreadsheets

General

Walt Francis (202) 966-5742

MagicCalc*SuperCalc2.0

Leon Raesly (301) 431-0853

Terry Prudden (301) 933-3065

Telecommunications

Allan Levy (301) 340-7839

TimeOut Series

Morgan Jopling (301) 261-3886

Utilities:ProSel

Barry Fox (717) 652-2899

Word Processors

General

Walt Francis (202) 966-5742

Apple Writer II

Dianne Lorenz (301) 530-7881

Leon Raesly (301) 431-0853

Letter & Simply Perfect

Leon Raesly (301) 431-0853

Mouse Write

Barry Fox (717) 652-2899

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

Apple IIgs

General

Barry Fox (717) 652-2899

General/PaintWorks+

Paul Tarantino (703) 455-7670

//e Upgrade

Morgan Jopling (301) 261-3886

APW

Andy Gavin (703) 734-3049

Jim Frison (703) 525-9395

Deluxe Paint II

Rich Sanders (703) 450-4371

GS BASIC

Barry Fox (717) 652-2899

Multiscribe GS

Ray Settle (301) 647-9192

Telecommunications

Dale Smith (301) 762-5158

Allan Levy (301) 340-7839

TimeOut Series & Utilities: ProSel

Chuck Ward ^{before 9pm} (703) 830-3720

Barry Fox (717) 652-2899

VIP-Pro/Multiscribe

Jim Frison (703) 525-9395

816 Paint/Wrttr's Ch.El

Andy Gavin (703) 734-3049

**Become a
WAP Hotline
volunteer**

call the Pi Office...654-8060

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

Data Bases

Fourth Dimension

Bob Pulgino (202) 474-0634

FileMaker+

Tom Parrish (301) 654-8784

Hellix

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

MS-File

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

Omnis 3 & 3+

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

OverVue

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

Pro-Cite

Elizabeth Mangan (703) 750-2710

Desktop Publishing

General

Jay Rohr (301) 655-0875

PageMaker

Eleanor Sontag (301) 251-0695

ReadySetGo

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

Graphics

General

Bill 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

John Love (703) 569-2294
 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 (202) 797-0879

Excel

David Morganstein (301) 972-4263
 Mark Pankin (703) 524-0937
 Jim Graham (703) 370-5737
 Dick & Nancy Byrd (703) 978-3440

Multiplan

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

Sidekick

Ray Hobbs (301) 490-7484

Telecommunications

General

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

MacTerminal

David Gursky (703) 522-8345

Versaterm

David Gursky (703) 522-8345

Thinktank-More

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

Word Processors

Word

Marty Milrod (301) 464-5981
 Harris Silverstone (301) 435-3582

WriteNow

Bill 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 Raesley (301) 431-0853

Math-OR Applns

Mark Pankin (703) 524-0937

Modems-General

Allan Levy (301) 340-7839

Hayes Smartmodem

Bernie Benson (301) 951-5294

Practical Peripherals

Allan Levy (301) 340-7839

Music Systems

Ray Hobbs (301) 490-7484

Printers-General

Walt Francis (202) 966-5742
 Leon Raesley (301) 431-0853

MX-80

Jeff Dillon (301) 662-2070

Stat Packages

David Morganstein (301) 972-4263

Stock Market

Robert Wood (703) 893-9591

**You too can be
 a volunteer!**
**Call the WAP
 Volunteer Bank**

at the Pi Office...654-8060

Frederick Apple Core Help Line

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

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

June

- 1 Thursday**
7:30 PM GameSIGoffice
- 5 Monday**
→ Writers Deadline—July Issue
7:30 PM PI-SIG (Program Interface)office
- 6 Tuesday**
7:15 PM Tutorial: Introduction to Apple IIgsoffice
- 7 Wednesday**
☐ Ad Space Reservations Deadline—July Issue
7:30 PM dPub SIGPEPCO
7:30 PM Mac Programmersoffice
- 8 Thursday**
7:00 PM Columbia SliceColumbia
7:30 PM Database SIG/4DComputer Factory
8:00 PM StockSIGoffice
- 9 Friday**
7:15 PM Tutorial: Introduction to the MacintoshAlexandria
- 10 Saturday**
9:30 AM Annapolis SliceAnne Arundel Co.
9:30 AM Frederick SliceCall
2:00 PM Music SIGCall
- 12 Monday**
→ Editorial Deadline—July Issue
7:15 PM Tutorial: Introduction to the Macintoshoffice
- 13 Tuesday**
7:15 PM Tutorial: How to Use Your Apple IIgs Software ...office
- 14 Wednesday**
☐ Ad Copy Deadline—July Issue
6:30 PM Board of Directors Meetingoffice
- 15 Thursday**
8:00 PM PIG (Pascal Interest Group)office
- 16 Friday**
7:15 PM Tutorial: Intermediate MacintoshAlexandria
- 19 Monday**
7:15 PM Tutorial: Intermediate Macintoshoffice
- 20 Tuesday**
7:15 PM Tutorial: Popular Apple IIgs Applicationsoffice
- 21 Wednesday**
7:00 PM WorksSIGoffice
7:30 PM AVSIGBCCHS
7:30 PM Excel SIGoffice
7:30 PM Fed SIGCall
7:30 PM HyperTalk SubSIGArlington
- 23 Friday**
7:15 PM Tutorial: Advanced MacintoshAlexandria
- 24 Saturday**
9:00 AM WAP General MeetingRockville
noon HyperCard SIGBethesda
noon Telecomm SIGBethesda
- 26 Monday**
7:00 PM Apple IIgs SIGMcLean
7:15 PM Tutorial: Advanced Macintoshoffice
- 28 Wednesday**
7:30 PM Apple III SIGoffice

Have a Date?

Call Peter Cook (301) 585-7651
with Club News and Calendar Dates

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 Navy Medical Center in Bethesda. Come as early as 8:30 a.m. to join, buy public domain disks, pick up your monthly WAP Journal. Attend the Q&A sessions to get your questions answered and hear the latest rumors. Listen to the main meeting topic at 9:30. We also have a special session to welcome new computer users and get them started. Group purchase items can be bought at the office after the meeting, beginning at noon.

May 27 at USUHS Apple II: Barney Stone of Stone Edge Techn. demonstrates his dbase program. Mac: Springboard Software's John Paulson. Claris demonstration of MaWrite II. Election ballots to be distributed.

June 24 Wootton High School Garage sale and a demo of Workbench for the Apple II. A Mac program and Q&A sessions. 2100 West Ritchie Parkway, Rockville, MD. Directions from office: Take 270N to Rte 28 Exit (West) sign should say Darnestowne (do not take Business District) go to traffic light and turn left onto Hurley Ave. Go all the way to the 1st stop sign and turn left onto West Ritchie Pkwy. Go past small shopping center on left, then school will be on the right.

Meeting Notices

- Annapolis Slice** 2nd Saturday; Anne Arundel Community College - Careers Bldg. lecture hall, Arnold, MD, 9:30 AM.
- Apple IIgs SIG** the Monday after the regular WAP meeting; alternates between Dolly Madison Library in McLean and Thomas Pyle Intermediate School in Bethesda, 7:00 PM.
- Apple III SIG** 4th Wednesday; WAP office, 7:30 PM.
- AVSIG** (arts and video) 3rd Wednesday; Bethesda-Chevy Chase HS 7:30 PM.
- Columbia Slice** - 1st Thursday; at the Howard County Board of Education bldg., Route 108, Columbia, MD, 7:00 PM. (Meets second Thursday in June.)

June						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Meeting Notices (continued)

- 7:00 PM. (Meets second Thursday in June.)
- Database SIG/4D 2nd Thursday; Computer Factory, Bethesda, 7:30 PM.
- dPub SIG (desktop publishing) 1st Wednesday; PEPCO auditorium at 1900 Pennsylvania Ave., N.W., 7:30 PM.
- Excel SIG 3d Wednesday; WAP office, 7:30 PM.
- Fed SIG (Federal) 3rd Wednesday; alternates between Falcon Training Center, 1745 Jefferson Davis Hwy Suite 502, Crystal City, and Apple Fed. Sys. Office, 1892 Preston White Dr., Reston, 7:30 PM.
- Frederick Slice 2nd Saturday; at the library at 110 East 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 2d Saturday; call Bill Bittle, 236-9898 for location and times.
- NeXT SIG meets monthly. Call Hugh O'Neill, (202) 328-9510.
- PIG (Pascal Interest Group) 3rd Thursday; WAP office, 8:00 PM.
- PI-SIG (Programmer's Interface) 1st Monday; WAP office, 7:30 PM.
- StockSIG 2d Thursday; WAP office, 8:00 PM.
- Telecomm SIG after the WAP general meeting; Uniformed Services University of the Health Sciences, Bethesda, 12:00 noon.
- Tutorials are held in the WAP office and at the Fairlington United Methodist Church, Rte. 7 and 395, Alexandria. Call the office for the location of any you wish to attend.
- WorksSIG 3rd Wednesday; WAP office, 7:00 PM.

For information on SIGs not listed on the calendar, please call the appropriate SIG chair.

July

S	M	T	W	T	F	S
						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					

JULY

- 28 Wednesday**
7:30 PMApple III SIGoffice
- 3 Monday**
7:30 PMPI-SIG (Program Interface)office
→ Writers Deadline—August Issue
- 4 Tuesday**
.....Holiday: office closed
- 5 Wednesday**
☒ Ad Space Reservations deadline—June Issue
- 7:30 AMdPub SIGPEPCO
- 7:30 PMMac Programmersoffice
- 6 Thursday**
7:00 PMColumbia SliceColumbia
- 7:30 PMGameSIGoffice
- 8 Saturday**
9:30 AMAnnapolis SliceAnne Arundel Co.
- 9:30 AMFrederick SliceFrederick
- 2:00 PMMusic SIGCall
- 10 Monday**
→ Editorial Deadline—June Issue
- 11 Tuesday**
7:15 PMTutorial: Welcome to World of Apple (Ile & Iic) ..office
- 12 Wednesday**
☒ Ad Copy Deadline—June Issue
- 13 Thursday**
7:30 PMNEXT SIGNIH
- 7:30 PMDatabase SIG/4DComputer Factory
- 8:00 PMStockSIGoffice
- 18 Tuesday**
7:15 PMTut: How to Use Your Apple Software (Ile & Iic) office
- 19 Wednesday**
7:00 PMWorksSIGoffice
- 7:30 PMAVSIGBCCHS
- 7:30 PMExcel SIGoffice
- 7:30 PMFed SIGCall
- 7:30 PMHyperTalk SubSIGArlington
- 20 Thursday**
8:00 PMPIG (Pascal Interest Group)office
- 22 Saturday**
8:00 AMAppleWorks SIG (also at noon)USUHS
- 9:00 AMWAP General MeetingUSUHS
- noonHyperCard SIGUSUHS
- noonTelecomm SIGUSUHS
- 24 Monday**
7:00 PMApple IIgs SIGBethesda
- 25 Tuesday**
7:15 PMPopular Applications Ile & Iic SIGoffice
- 26 Wednesday**
7:30 PMApple III SIGoffice
- 27 Thursday**
7:30 PMBusiness SIGoffice

Tutorial details are on page 95.

The Board of Directors of Washington Apple Pi

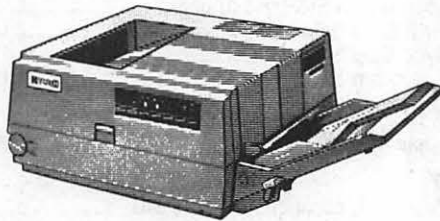
invite and encourage your

Vote

Our annual elections are now in progress. Ballots are due back by June 17. If you have not yet received a ballot, or to report any other election irregularities, please contact a member of the Election Commission: Jonathan Hardis ((301) 330-1422 or 975-2373), Linda Van Zee ((703) 866-9574), or Chuck Sicard ((301) 963-2879).

Hot Apple Postscript!

Introducing the
Ricoh PS-6000 Laser Printer



List Price: \$4495.
Apple Pi Members: \$3495.

Standard Features Include:

- ★ Adobe Postscript® Ver.50
- ★ 2 Megabyte RAM Memory
- ★ Apple *and* IBM interface
- ★ Legal / Letter and Envelope Print
- ★ Easy to use External Controls

***For More Information or a
Demonstration Call Us Today!***

★ AMERITEL

Communications Corporation
Authorized Ricoh Dealer

Washington (202)342-5329

Maryland (301)251-0222

Virginia (703)329-0222

General Meeting Report: April 22, 1989

Music, Computers and Glitz

by Bob Platt

WAP's April 22 meeting set an endurance record for its marathon length. The meeting started at 9 a.m. and continued until about 6 p.m., with the sudden wealth of overtime pay for the USUHS guard staff being the only beneficiaries of its incredible length.

Before the main meeting, WAP's new booth display was set up in the USUHS lobby as a dry run for the forthcoming MacWorld.

Music Concert

The MusicSIG again offered an excellent concert of computer-generated music. Chris Adler, Benjamin Behardt, Carl Coon, Todd Dampier, Ray Hobbs, Heri Lemmers, John Robets and Lee Specter performed both well known works as well as their own original compositions. In addition to music composed on both Apple and Mac driven synthesizers, Henri Lemmers sang and John Roberts played the guitar.

The MusicSIG also sponsored demonstrations of Finale for the Macintosh by Coda and of the new Op Code synthesizer.

Although there were a few mechanical glitches which resulted in short intermissions (which were filled by enthusiastic sales pitches for raffle tickets), the program held our attention until 12:30 p.m.

Bruce Webster on NeXT

Bruce Webster is a freelance writer who formerly wrote the Mac-related "According to Webster" column for Byte Magazine. Bruce had been working with the NeXT project for about nine months prior to its release. The result is *The NeXT Book*, to be published by Addison Wesley. (WAP is offering a group purchase of the book for \$17.) Webster discussed the differences between the Mac and the NeXT and whether NeXT would successfully expand beyond the academic market.

Bruce brought his NeXT computer and gave an impressive demonstration of the power of the system by running animations on the screen and playing synthesized music at the same time.

Bruce noted that NeXT did not have a choice but to use a UNIX derivative for its operating system. It chose Mock, which was developed at Carnegie-Mellon University. Webster is not unhappy with the choice. Webster is concerned that using a Floptical disk instead of a floppy disk will hurt small developers. However, he notes that a \$17,000 price for a system with a laser printer prevents the NeXT from becoming a mass market machine. (Yet, neither the Lisa nor the Mac were mass market machines when first introduced.)

Regarding Display PostScript, Bruce noted that using this descriptor language to control the screen costs execution time, but it saves 1) the developer the burden of generating both Display PostScript and Quick-Draw output and 2) guarantees "what you see is what you get." Webster does not observe any graphic sluggishness. He predicts that the NeXT will serve a niche market for high-end desktop publishing, graphic arts and VARs.

The choice quotes from his talk were, "The Mac II quickly became the power user's system of choice. A lot of people have gone to NeXT developer camp because they wanted a NeXT machine." and "I would be happy and content just focusing on NeXT development and writing." (Sounds like a budding NeXT evangelist.)

Bruce also demonstrated NeXT Step which is an application generator which produces source code for an object-oriented Cc compiler. Webster noted that NeXT has signed an agreement with IBM to market NeXT Step under OS/2 Presentation Manager.

At 2 p.m., Bruce adjourned to a

separate room to conduct a joint meeting of the HyperCard and NeXT SIGs. (See separate stories by Gary Letourneau.)

This month's WAP News

<i>Apple IIGS</i>	18
<i>Board Minutes</i>	25
<i>Business SIG</i>	22
<i>Columbia Slice</i>	16
<i>Desktop Publishing SIG</i> ...	20
<i>Excel SIG</i>	17
<i>Fed SIG</i>	22
<i>Frederick Slice</i>	16
<i>GameSIG</i>	22
<i>General Meeting</i>	13
<i>HyperCard SIG</i>	17
<i>NeXT SIG</i>	20
<i>PI SIG</i>	21
<i>Office News</i>	21
<i>Works SIG</i>	21

April 27 -

Jean Louis Gassée

WAP held a special meeting at noon Thursday, April 27 with Jean Louis Gassée in conjunction with his visit to the MacWorld Expo. Gassée's topic was "Programming, Networks and Other Dangerous Drugs."

Gassée emphasized the need for standards in telecommunication networks. Such networks are the super-

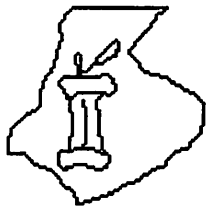
highways of the future. Gassée also emphasized the important role which user groups play in formulating Apple's product development strategy.

Gassée devoted over a half-hour for questions. He indicated that a HDFD 1.44 Meg drive would probably not be available for the Apple II family. He indicated that Apple Computer used a number of engineering work stations manufactured by other companies and that Apple was not going after that market. However, he views the Mac II family

as being well positioned to serve the word processing and graphics needs of the engineering market, and that engineers at Apple who have access to other workstations still prefer Macs for those tasks.

Although Apple supports standards for telecommunications and the exchange of information across machines, he opposes standardization of the user interface between machines as needlessly hindering innovation. User interfaces and "front ends" should be readily customizable to allow each user to tailor them to fit individual needs and preferences. 🍏

Frederick Apple Core



By Dick Grosbier

Unfortunately, due to a little miscommunication we only had one computer available at this month's meeting and a Disk of the Month (DOM) for the Apple II series computer. Scott came through with his Apple IIgs, but the Mac and its respective DOM was vaporware for April meeting. We wish to express our apologies for the mixup. The DOM for the Apple II series computer consisted of an AppleWorks template which prints out commands on 3" x 5" cards for the Beagle Brothers Time-Out series. For the IIgs there is a program named JUMPSTART, which is a new launching utility to replace the Finder. This particular program is shareware, and the author is requesting a \$25 fee if you should decide to use it. Also included is a graphics demo of GS/OS capabilities, and a sound program which allows you to play and edit sound files (some sound files are included).

Of some interest to FAC-WAP members: a special meeting will be held to investigate the future of the WAP. A petition was filed within the WAP to segment the organization into multi-computer groups under one umbrella, similar to the Boston User's Group. Although there is a minority supporting this petition it could be passed with as few as 51 votes under the current bylaws. There also has been another BIG improvement in the WAP journal; the March issue had the minutes from the last Board of Directors meeting for the first time. Lets hope this continues. [Editor's note: The meeting was held in April. Notes on its outcome are in the May Journal.]

Scott warned the unwary to beware of April issues of magazines. Seems the journalists have their own sense of humor and usually have at least one believable story which, if true, would have a major impact upon

the computer industry. This usually follows with an "April Fool" in the May issue, so don't pay too much heed to the more controversial articles. Apple corporation has tightened up their waist bands and have gotten hardnosed with those that leak any type of unauthorized information to the public. Anyone found leaking information faces immediate termination, and developers face lawsuits. On the up side for Apple II users is that Apple hired some "cream of the crop" programers for their Apple II line of computers which would tend to have one believe that they are NOT abandoning the II. But on the down side it seems that some of the major software publishers will not be going to the Boston Applefest. These include, but are not limited to, Activision, Electronic Arts, and Borderbund. This tends to support Al Freund's comment as to the disparity between Apple and software developers about what is important in computer design.

At the March meeting of the FAC, a member had a somewhat frightening experience when the message, "Ernie Pan was here," appeared on her AppleWorks GS clipboard. Of course the first thing that comes to mind is "virus infected," but she purchased this product new. Upon calling Claris she was informed that during the testing of the program this message was placed on the clipboard, and Claris forgot to remove it on some of the disks and not to worry. That's one April Fool that's not funny!

Our lucky winner of the April raffle was Lorraine Stoltz, who chose "Pirates" for the IIgs. Of the programs donated to the club by Microprose the following are still available: 2 - Pirates for the Mac, 1 - Pirates for the IIgs, and 1 - Silent Service for the Apple IIe, IIc computers.

Carl Myers had some interesting news concerning the status of the FAC since January 89. We now have 46 registered members, of which 20 use the Apple II series computer principally and the remainder use Mac's primarily.

Update Information

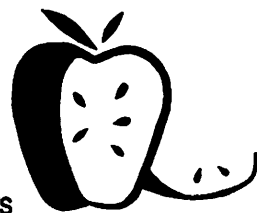
I have been informed by Claris that a major update to AppleWorks

GS is due in late April. Since I am writing this on the 29th of April I guess it will be very late in April (like maybe May). Please be advised that the update is only being sent to those customers who took the time to properly register their program. If you did not return the registration card that came with your package you will not get the upgrade; supposedly this is the case even if your AppleWorks GS came from Claris and not from a retail dealer. The upgrade is supposed to greatly improve printing speed and accuracy, and hopefully correct problems with draft mode. It will also hopefully correct some other deficiencies.

Also just this week I received notice from Microsoft that Word 4.0 (Macintosh) is due to ship soon (of course they said it would ship soon six months ago also, but this time I actually got update forms instead of just a reservation sheet). I have been using Word 3.02 for about a year and a half now, and although I have read many things about it being a very poor program, I really find it very satisfactory.

I anxiously await both of these products. 🍏

Columbia Apple Slice



by Tim Childers

The May meeting had a very small turnout; is this the start of the vacation season or was everyone burned out from MacWorld? Those of us who did make it had a nice evening, though. Tom Cook and Tom Cowley gave a demo of AppleWorks for the first half of the meeting. Since the crowd was small everyone got to get up close and

ask lots of questions. From the intensity of the crowd and the number of questions it appeared that people were getting lots of really valuable information out of the session. If that was any indication the demo of AppleWorks GS next time should be a hit also. Thanks Tom and Tom.

The Macintosh half of the meeting was supposed to be on Music but both of the planned guest speakers were unable to make it so it turned into a recap of MacWorld Expo. I had a ton of product literature and many others had been there as well so we compared notes on what we thought was interesting. One of the products everyone agreed was hot is the Tektronix Color Printer for under \$2500. I was very impressed with the quality of the 11" by 17" sample print-out I got. It works in QuickDraw like the ImageWriter LQ but the resolution seemed much sharper to me. That would mean needing large size printer fonts in your System, but it sure is nice to have that beautiful color capability. I was personally pleased with the BMUG catalog of public domain HyperCard stacks. The pictures and descriptions can help you decide whether you want to buy or download that stack. Ditto for the Boston Computer Society Catalog of PD Mac software but I ALSO got a HyperCard stack of the BCS catalog. I can either use it to look up software or just use it as a template for my own extensive collection. Said library is starting to get out of hand so the Exponent line of diskette cases looked very nice. It seemed to me that the hottest 'software' was 'soft' things like T-shirts, cute Macintosh covers from Computer Clothes, and the "Smack-a-Mac" stuffed toy Mac. I know someone who bought several of these little frustration venters to keep the secretaries from abusing the Macs at work!

The topics for the June 8 meeting will be AppleWorks GS and videotapes from Apple showing the new Mac IIcx introduction and the Apple II Video Board introduction. The July 6 meeting will be a demonstration of various printers for your Apple II and Mac. There are a lot more options now than just an ImageWriter and a LaserWriter! 🍎

HyperCard

by Bob Platt

Even during the heat of summer, the HyperCard SIG continues to meet after the main meeting. Our next meeting will be held in conjunction with WAP's June 24 general meeting at Charles Woodward HS. We hope to have SuperCard available for a demonstration by that date.

Disk Library

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

HyperTalk SubSig

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

New Products

As HyperCard stacks grow more intricate, someone came up with a automated way to document the logical flow through the cards of a stack. PathFinder by Silk City Software is such a tool. PathFinder modifies the openCard script of your Home Stack to capture data on the sequence in which the user travels through the cards of a stack. Because cards with their own openCard script may block that message from reaching the Home Stack, this software package thought-

fully includes a button for adding a "pass openCard" to any user-written openCard scripts. After using a stack, you can select "Draw Map" from the PathFinder menu and get a diagram worthy of any Los Angeles Freeway Designer. Although this appears to be an interesting product, I could not get it to work successfully on my Mac. (Silk City Software 203-228-0091.)

Format Software is now shipping a stack development system called "Plus 1.0." This product adds color, large-screen support, irregularly shaped buttons (including word buttons) and text styling to HyperCard. Unfortunately, the product is available only in Germany at this time.

"Chart Illustrator" is a new commercial HyperCard stack from Maximum Use Software for generating graphs and charts in Adobe Illustrator or Aldus Freehand. A user can paste or enter a series of labels and values into the stack. The stack then generates an Adobe Illustrator file with the appropriate graph or chart for later output on a Postscript printer.

Tutorials

Our introductory HyperCard tutorial is back by popular demand. It will be offered on Tuesday night, May 30 at the WAP Office. A written account of the tutorial has been running as a series in the Journal. We also hope to offer subsequent advanced tutorials on HyperTalk scripting. Call the office for details.

Excel SIG

by Larry Feldman

WINGZ will be demonstrated and explored in some considerable working detail at the June meeting of the Excel SIG. I frame it this way to emphasize the difference between the planned demo and the sort of marketing dog and pony show that frequently parades around under the same name. This all happens at the Pi office on Wednesday, June 21 at 7:30 PM. Anyone who is interested is cordially invited.

WINGZ contests Excel's four year, heretofore substantially unchallenged claim to represent the "standard" of excellence for combined spreadsheet/database/graphing software on the Mac. By many competent (albeit preliminary) accounts, WINGZ presents an authentic challenge.

The demo will be given by Bob Shaffer who, in addition to being a Pi stalwart and current Board member, is a long time Excel user and was a WINGZ beta tester. This, combined with the fact that he has actually made the leap and is now a confirmed WINGZ user, leaves him particularly well equipped to show the rest of us what it is that WINGZ brings to the party that's so special. Given what it took for me to "master" Excel, I'm not sure I want to know.

In July: It's Excel 2.2

Strictly speaking, as of early May there is no Excel upgrade (although thousands of us saw it demonstrated at D.C. MacWorld Expo). Planned (i.e. promised) release dates range from May 1 to end of the 2nd quarter.

Whatever. Or rather whenever. Microsoft clearly has a major upgrade of Excel somewhere in the final stages of the pipeline (in honor of which it has been designated not 2.0 but 2.2.) It does all sorts of stuff for which Excel users have long yearned. More about all that in the months to come.

For the moment, SIG member Tom Cavanaugh (Excel developer and trainer—long standing Microsoft confidant or at least beta tester) will explicate v 2.2 on July 19th. (An explanation ranges somewhere between a demonstration and a tutorial. 🍏)

Apple IIGS

by Bill North

The April IIGS SIG meeting started out looking like a non-event. The six people on hand at 7:00 PM began to speculate that everyone else was at the Bethesda meeting site as listed in the Pi Journal rather than the actual site in McLean. The hoped-for Apple representative missed commu-

nications and wasn't to show. The usual meeting report writer wasn't in evidence. And there was close to a full moon.

But as those present gossiped, more people straggled in from the nice weather until a peak of just over 20 was achieved. Some interesting gossip: Hyperstudio and Graphic Writer III will be out "Real soon now." Graphic Writer has been bought by Seven Hills Software (Tallahassee, FL), and rumors have it that this is not an upgrade but a major from-scratch rewrite. Opinions were expressed that memory prices were truly on the way down, 1 Meg SIMMS faster than 256K, and might even be affordable soon. Apple's video card should be available by Applefest.

Free handouts were available from Seven Hills (comparing desktop publishing packages), and several from Roger Wagner Publishing (RWP). Coincidentally, and without the connivance of RWP, two of their packages were demonstrated. They were the new version of Soft Switch, and The Graphics Exchange.

Soft Switch now a true CDA

Soft Switch (SS) is a program switcher in Classic Desk Accessory (CDA) clothing that allows multiple programs to be in memory at once. The original version created some controversy by using battery RAM for copy protection. This has been removed, and the program is no longer copy protected. SS is also now a true CDA and can be installed as a normal CDA. SS creates multiple IIC machines up to available memory or nine, whichever is less. SS can handle any 8-bit program, copy protected or not, of any version or modification of DOS 3.3 or ProDOS 8 (except ProDOS 1.1.1), as long as the control panel is accessible. Oh, yes, and as long as the program doesn't trample on memory not normally available to a IIC. AppleWorks does trample memory, so there can be only one copy in SS at a time and must be the last program loaded.

The enhancements over previous versions of SS are: no longer uses battery RAM; expansion from three

to maximum of nine work spaces; ability to save super hi-res screens, ability to save text screens as text files in addition to double hi-res images; and the option to go directly to SS rather than the control panel. Possible uses are: review a program in one work space and write the review in another; saving games in progress or reverting to just before you did that despicable act; have utilities such as disk formatters always available; or capture screens for fun and profit.

While a substantial upgrade, it remains to be seen if there really are enough 8-bit programs out there willing and able to be switched to support this concept. An informal poll of the audience revealed feelings that it was a nice idea, but no one has seriously used it much or is sure if they will.

During the intermission between demonstrations, Bob Platt gave a pitch for the MacWorld Expo and raffle tickets for Mac stuff. The raffle is a joint effort of WAP and the Pentagon Mac Users Group (is that PMUG?) to benefit the Smithsonian Air and Space Museum's Office of Education. Ad hoc gossip and Q&A flew wildly, and it gave me a good feeling to see that the club president seemed up-to-date on II/IIGS/Mac information, resisting the temptation to become machine-polarized.

The Graphics Exchange converts graphics

The second demonstration was of The Graphics Exchange (TGE), also by RWP. TGE allows conversion between any official graphic format to another, from low-res (anyone remember that?) to super hi-res, with variations in many formats. TGE will also handle Printshop, Printshop GS, Newsroom, and MacPaint formats. In all, 21 format options are available, and 15 different graphic formats can be in memory at once.

When converting between these formats you can translate pixel-to-pixel (possibly affecting aspect ratio), full screen (possibly affecting resolution), or scaled (almost certain to affect something). You can also transfer parts of pictures, and merge several into one. Several other useful func-



COMPUTER DESKTOP PUBLISHING CENTER

(301) 770-9470



**FULL SERVICE
"GET HELP" SERVICE
OR
DO-IT-YOURSELF**

Examples of our LOW prices:	
Computer w/ software	\$ 8.00 /hour
Laser printing	\$.50 /page
Scanning	\$20.00 /hour
Binding	\$ 1.50 /copy
Resumés	\$25.00 /page

Our assistance for an additional charge

WE HAVE IT ALL !

- PC & MAC Workstations
- Lots of DTP/Graphic Software
- Laser printing
- File conversion
- Photocopying
- Binding
- Laminating
- Tele-communicating
- Training

Here's what we can do for you:

- Resumes • Charts
- Newsletters • Reports
- Invitations • Books
- Sales Literature • Proposals
- Advertisements • Letterheads
- Menus • Business cards
- Dissertations • Flyers
- Manuals • Term papers
- Brochures • Custom forms

Bring this ad with you and receive \$5.00 off a membership

5541 Nicholson Lane • Rockville • MD 20852 • 1/2 Block From White Flint Metro

W
A
P
N
E
S

tions are undo, set background color, restore standard palette, clear graphic, and exchange black and white. There is also a full set of disk commands, including the ability to make Printshop, Newsroom, and slideshow disks.

With the proliferation of graphic formats and the refusal of program A to read graphics created by program B, this is a very useful program. The graphics were faithfully transferred retaining a reasonable color match. There are some items that would even be nicer. While both mouse and keyboard work, you cannot always get between options in an obvious manner. When working with long disk catalogs, you can't go horizontally across columns, you must go vertically through the list. By mouse it's annoying, by arrows painful.

The only real shortfalls can be addressed by a future upgrade. TGE cannot handle graphics larger than one screen (200 lines). TGE will read them in, but will not allow you to go beyond line 200. As MacPaint graph-

ics are 720 vertical lines and only 200 are usable, it has to be a very small MacPaint drawing to be worth the effort. TGE does provide a scroll bar for MacPaint format so you can choose which 200 lines to deal with, but this is of limited advantage. A nicer solution would be to convert as many lines as desired, with an option to discard every other line, thus preserving screen aspect ratios. In spite of these wish items, anyone who deals with multiple graphic formats will find life a little easier with TGE.

New members disk demonstrated

As the clock ticked toward closing, Ted Meyer conducted Q&A. By popular demand the IIGS new members disk was demonstrated, and it was pointed out that at least three ways of printing out the "About this disk" file were included on the disk. Icons, their use, abuse, creation, and editing were discussed, with the hope that more software would follow icon guidelines now that Apple has finally

seemed to define them.

Fonts continue to be an item of confusion. Remember that font files are only data files containing bit patterns which define the font. They cannot be used by themselves. Only software which recognizes them, such as native IIGS "Mac like" and Beagle Bros Superfont, will use them. And, yes, they take forever to print. Furthermore, print buffers don't help because graphic fonts fill the buffer quickly on the rare occasions the computer gets ahead of the printer. Graphic fonts are pretty. If you want speed, set the printer on draft and choose draft mode from the print box.

Ted invited anyone interested in programming on the IIGS to come to the PI SIG meetings in the club office. Finally, Applefest travel plans were discussed, this topic continuing in the parking lot after the long-suffering librarians gently ejected us. See you at the next meeting, Monday, 22 May, 7:00 PM at the Thomas Pyle Intermediate School in Bethesda (in spite of what the April Journal says). ☺

WAP SIG Desktop Publishing

by Tom Piwowar

The big event of the evening was the dual presentations of Display PostScript and the NeXT computer. These are described in detail in the following report by the NeXT SIG.

The next meeting will also be a joint one, this time with the DTP SIG of the Capital PC User Group. The topic will be New Desktop Publishing Frontiers, presented by Peggy Thompson, Aldus' manager for New Product Opportunities. Especially of interest will be Aldus' color extensions to PageMaker. I plan to allow considerable time for the discussion of what is important to us monochrome types too.

We set a record at this month's meeting—no less than three desktop publishing firms came to offer several positions. Wes from Adobe chimed in that he was accepting resumes too. 🍎

NeXT SIG

by Gary Letourneau and Steve Johnson-Leva

This month should prove to be an eventful one for NeXT enthusiasts. The new system 0.9 has been released, and Businessland should begin selling NeXT machines. Closer to home, WAP members have had two opportunities to see a NeXT cube, as it is affectionately called by its users.

First, at the April WAP Saturday meeting we had the delight of hearing from Bruce Webster, author of an upcoming book detailing the NeXT cube, appropriately entitled "The NeXT Book". This was a most enjoyable and informative discussion. For more information about this presentation see the accompanying article elsewhere in this issue. Also, for WAP members interested in purchasing a copy of the

this book, arrangements have been made for a WAP group purchase. Call the WAP office manager, Ms. Nancy Pochevko, at 654-8060 to place your order. While the projected list price is over \$24.00, our discounted price is only \$17.00.

Our second big event occurred on May 3 when the NeXT SIG conducted a joint meeting with the Desktop Publishing SIG at the PEPSCO Auditorium. We were also joined by members of the Capital PC desktop publishing SIG. After numerous announcements from members of each group, a formal presentation was given by Wes Lem of Adobe Systems on the history of Adobe and its newest product, Display PostScript. Afterwards, the NeXT computer was demonstrated along with the latest revision of system software.

Some of the highlights of the Adobe presentation were:

- Display PostScript rounds out the product line. In addition to laser printers and typesetting devices, PostScript output can also drive graphic displays, color printers, and photographic slides. Because of its versatility, Adobe claims to be able to drive new output devices as they are invented. Color Postscript, for instance, consists of PostScript with Color Extensions. Display Postscript is simply PostScript with a few interactive extensions and speed enhancements. They even are working on 3D extensions to PostScript (imagine Display PostScript holograms).

- Wes indicated that PostScript was not the culprit in slow LaserWriter output. He laid the blame on slow transmission via AppleTalk and the use of inefficient PostScript commands within certain word processors.

- Encapsulated PostScript was mentioned as an interim solution to displaying PostScript drawings within a program which does not support Display PostScript (such as PageMaker) on hardware which does not use Display PostScript (such as a Macintosh).

- Finally, Wes showed slides containing "C" code for utilizing Display PostScript on the NeXT machine. The slides were impressive in their brev-

ity - the commands seemed much easier than the occasionally cumbersome QuickDraw.

The NeXT presentation immediately followed Adobe. Joel Mclung (formally of Sun Microsystems) began by demonstrating the machine running under version 0.9 of the MACH operating system. Very little was new, especially for those who have read reviews of the machine previously. Of course, the two most impressive features were:

- Integration of reference materials with other documents
- Sixteen bit digital sound.

An equally impressive demonstration of the speed of Display PostScript was also a part of the NeXT presentation. TIFF and PostScript images literally flashed across the screen. Joel also showed a heretofore unknown use for the NeXT cube, when he stored some press releases on top of the cube. Unfortunately, the meeting was already running into overtime, so the NeXT demonstration had to be wrapped up before all the new programs could be demonstrated.

June 21 Meeting

The next NeXT meeting will be at the Washington DC BusinessLand on Wednesday, 7:30 P.M. at 19th and M Streets, NW. As you know, BusinessLand has exclusive distribution rights to the NeXT machine for all corporate customers. (Being a student has its advantages).

July 15th Meeting

The NeXT SIG will meet jointly with the Seminar on Education and Training of the Capital PC Users Group at NIH on Saturday at 9 A.M. at NIH in Bethesda.

August Meeting

The NeXT SIG will meet regularly at NIH at 7:30 P.M. on the second Thursday of each month until further notice as of August. Further details as to the exact location will be forthcoming.

If you have questions about our activities, contact Gary Letourneau at 946-1791 or the NeXT SIG chairman Hugh O'Neill at 328-9510. 🍎

PISIG News

By Robert Golden

Our first meeting in the new classroom coincided with the start of spring, and several new members braved the threat of thunderstorms to start an ambitious new program. We elected Ted Meyer as chairman, Walter Urban as meeting coordinator, and Bob Golden as recording secretary. Walter also volunteered to be the group contact for the PISIG TCS board (conf. 2, #19).

With new leadership, we re-examined the purpose and constituency of PISIG, including where we expect to go, and what we want to accomplish. Ted Meyer proposed that we change the SIG's name from "Programmer Interface SIG" to "Programmer's Interface SIG," and the change was immediately adopted. This more accurately describes the purpose of the SIG for the majority of its members.

Bob Golden gave a brief history of the SIG, tracing the interest and direction of our efforts with the Apple IIgs. At first, the programming language was limited to TML Pascal. Now, we find a diversity of languages, including C, Orca Pascal, assembly, and others.

Specific interests among PISIG members include interfacing to the TCS, accepting analog data as a means of becoming better acquainted with the IIgs toolbox, bringing in code fragments as problems for the group to help solve, and in getting help from others with a variety of specific problems.

Ted Meyer expressed his goals for the SIG, including bringing the group together to solve problems, and to benefit the WAP as well as ourselves. We can also plan for guest speakers and presentations, and discuss new software and development systems.

Ted suggested that we plan projects for the next three months which would be serious and informative but fun. Bill North proposed a list of eleven projects for the SIG, ranging from game projects to efforts which would benefit WAP as a whole.



Office News

by Nancy Pochecko

We have reorganized the library in the WAP office and incorporated our recently acquired books. All newsletters and magazines are now being shelved promptly and the collection is indexed in a HyperCard stack.

We would like to hire an additional staff member to work part-time in the Office answering phone calls and performing clerical tasks. Hours are flexible, please call me at 654-8060 if you are interested.

A number of new items are available for sale, including:

- Mmouse pads with the WAP logo for \$7
- Mac disk catalogs for \$3
- Apple II disk catalogs for \$2.50
- Bruce Webster's *The NeXT Book* for \$17

If there are other items you would like to see offered, please call us and we will get in touch with the Group Purchase Coordinator.

We are looking for demo programs to run on our Lisa, Apple II, and Apple III computers. We also welcome donations of plants and framed art to decorate the office. Thanks. 🍏

The June meeting will be on the subject of fonts. Members are asked to bring information on fonts, font programs, and font displays, and a font editor. We are hoping that June's program will help us make better use of the Apple IIgs font toolbox.

Members are encouraged to join Apple Programmer's Development Association (APDA).

Meetings are held on the first Monday of each month, at 7 PM in the WAP office.

WorkSIG

by Chris Bastian

You wouldn't think that moving a meeting up one week in the calendar would cause reverberations, but WORKSIG's change from the fourth Tuesday to the third Wednesday certainly had its impact. Half the SIG didn't get the message, and showed up at the old meeting time (for which I offer humble apologies), and the shift meant that meetings now occur the week before publication of the Journal, requiring that future topics be announced two months in advance to get publicity. Now that the transi-

tion is over however, we will hopefully be able to get back to ordinary business.

At our last meeting, on April 19, the topic was Investment tracking. Two SIG members presented spreadsheets they had designed to monitor their mutual funds, money market accounts, and stocks. Each template stored information on transaction dates, disposition of capital gains and dividends, and average net-asset value. Such files can prove immensely valuable in determining the strength of a particular investment over the years, and in summarizing necessary information for the IRS at tax time.

The discussion section of the meeting focused to a great degree on the new DRAW capabilities in Works v2.0, which many users are just becoming familiar with. DRAW lets the user create object-oriented graphics which can be combined with the text and data in Works files. A drawback that was identified, is that the DRAW utility can only be used in documents where space has already been defined, i.e. where text or numbers have already been entered. One cannot, for example, draw something on page two of a one page document. No way

around this difficulty has been found so far.

The next SIG meeting (May 17) will feature use of Works' new features to do desktop publishing. The following month, WORKSIG will kick off summer on June 21, with a review of add-on utility programs such as WORKS+SPELL. Down the road? Perhaps a joint meeting with Excel SIG to look at the range of commercial templates displayed at MacWorld by Heizer Software. Watch this space.

Note: A SIG meeting announcement is mailed to interested members a week in advance. If you'd like to be added to the list, please call me at (301) 530-1935..

GameSIG

By Steven Payne

On May 4, 1989, Ollie North was convicted on three felony counts, the space shuttle Atlantis lifted off carrying the Magellan probe to Venus, and (most important of all) the GameSIG met in the new WAP offices for our regular monthly meeting. After quieting the rowdy troops, Chairman Charles Don Hall provided the usual update on new gaming software. Infocom's *Journey* and *Shogun* are now out, as is Electronic Arts's *The Hunt for Red October* (which unfortunately still bombs as you approach the American coastline). Sierra now has *Gold Rush* available for the IIGS, but not yet *Leisure Suit Larry II*. Origin's *Tangled Tales* should be out "any day now," and *Strategic Conquest II* (PBI) is coming soon; PBI has also acquired the rights to *Net Trek*, a network "Star Trek" game which has been getting a lot of publicity lately and was quickly pulled off the larger bulletin boards once it was commercially acquired. Chris Bastian mentioned that the folks staffing the Discovery Software booth at the MacWorld Expo were promising an *Arkanoid Construction Set* shortly.

In the demo department, Richard Clark showed a new role-playing game he has developed for his own BBS (255-6043); it has 350 rooms so far, with some 700 more in the works,

along with randomly placed monsters, friendly non-player characters, and so on. David Porter showed us the *Universal Military Simulator* (Rainbird, Mac) and *Fire Brigade: The Battle of Kiev* (Panther, Mac). As you can guess from the titles, the former allows you to re-enact a wide variety of historical conflicts ("from Waterloo to Gettysburg"), while the latter focuses on only one crucial battle of the Second World War. Still, Dave Porter said that so far he favors the second game (not being a war-gamer myself, I feel unqualified to comment).

The meeting also included *three* Robot Tanks tournaments. Dave Porter won the first match, against Davy Hakim and Jamie Kowalsi. Jeff Stetekluh defeated Dave Romerstein and Richard Clark in the second match. Finally, the two victors slugged it out with each other, and Jeff emerged the supreme victor (we think it's because he wrote the program and had the chance to look at everyone else's program code).

The only software received for review was *Global Trespass*, a spy/strategy game from Mysterium Tremendum (remember the woman in black and the fellow in the trenchcoat at the MacWorld Expo?). We should have more games by the next meeting, which will be held at 7:30 P.M. at the WAP offices on June 1st. See you then! 🍏

Fed SIG

At the May 19 meeting, Craig Hirai was elected Chairman of the FedSIG. Hirai and WAP president Bob Platt outlined various initiatives which WAP could take to work more closely with federal users.

The members in attendance shared their problems in bringing Macs into the Federal government. The Peace Corps is the first agency to standardize on the Mac and prohibit the acquisition of any additional MS-DOS microcomputers.

FedSIG participation at FOSE and FedMicro '89 were discussed as well as Future FedSIG programs. An alternative meeting site at the US Dept. of Agriculture is being explored. 🍏

Business SIG Formed

A SIG for everyone earning a living by using computers, especially freelancers and consultants.

Regular meetings will be held on the 4th Thursday of every month in the WAP office. The next meeting is June 22.

Contact Jess Porter

240-2017 (voice mail)

Praise for RSG 4.5

Praise for RSG 4.5

Dear Tom,

I was suprised to see in your DTP column in the May WAP Journal that Blair McQuillen, new DC rep for Le-traset, told some tormented soul that Ready, Set, Go! would not condense type. I have been doing it for some time on RSG! This is how:

Select the text block with the pointer (arrow) and copy it to the Clipboard. It's now in PICT format. Create a picture block, activate with the cropping tool, and then Paste. Now you can do anything you want—

stretch, condense, distort, etc.—that you can do with a graphic.

I also have PageMaker and have worked with Xpress, but I use RSG! every day. When anyone says they can do something with other page layout programs, I can always find a way to do it either easier, faster, or just as easy on RSG! 4.5. One day I hope to read the manual, too.

Hope you'll let all the tormented souls know, and keep up the good work. As an editor of over 10 newsletters, I know it's a tough job, especially for a volunteer organization.

—Ernie Gibson, Falls Church VA

↳ 5 President's Corner

have questions on this resource.

Book Library Grows

The results of Walt Francis' latest shopping spree have been added to our shelves. The new books include coverage of everything from Hyper-Card to Computer-coached running. Many thanks to Meg Gabriel for donating a set of Time-Life Books' Computer Series.

By the way, there are still a number of overdue books which have been borrowed from our library. Please return them so that other members can also benefit from them.

Business SIG

I am pleased to announce that the WAP Board has recognized yet another new Special Interest Group—the Business SIG. The Business SIG, chaired by Jess Porter will address working for temporary services, being an independent contractor/consultant, being a computer entrepreneur as well as business software.

Architecture and Engineering SIG

David Bernhard, 301-234-8800 has submitted a petition to start a special interest group for architects and engineers. Although there is a national user group for A/E users, the A/E Mac Users Group, David be-

lieves that area architects and engineers could benefit from a local group as a part of Washington Apple Pi. Please call him if you are interested.

AI SIG

With Apple's acquisition of Coral LISP and the introduction of several other commercial artificial intelligence (AI) systems for the Macintosh, AI has become a reality on the Mac. If anyone is interested in joining an AI SIG please call Steve Broughall at 202-546-6044.

Membership Contest

I want to acknowledge the current leaders in our membership contest. On just the difficult process of signing up new members here are the point totals of the leaders: Dave Ottalini (7), Ronnie Day (5 +5 for MacWorld), Cynthia Yockey (5), Lavonne Pherson (3), Ed Billheimer (2), Dave Morganstein (2), Nancy Nickel (2) and Bob Platt (2+15 for shows (too bad I can't get a prize.))

Video Card Contest

Apple Computer and BCS are co-sponsoring a contest to distribute Apple Video Overlay cards to worthwhile individual and user group projects. Entries consist of short descriptions of a proposed project using the card. Call the Office for details. ☘

MacWorld Raffle

Dear Robert:

Claris Corporation would like to thank the Washington Apple Pi and The Pentagon Mac Users Group for allowing us to participate in the MacWorld raffle. Drew Steis of Language Systems, Corp. was the winner of the Claris software.

Please let us know how Claris can help the Washington Apple Pi in the future. Claris believes and supports Apple user groups.

Sincerely
Woody Hume, Gov't Account Mgr
Bob Fidrych, Account Manager

AppleFest Boston '89

by Ted Meyer and Sam Knutsen

Sam and I are co-writing this article to give you a broader perspective of the activities at AppleFest without having to read several articles. A lot happened, and hopefully the two of us can hit most of the highlights.

IIGS System Software Version 5.0

The most important announcement for IIGS owners was, by far, the introduction of new system software for the IIGS. When I first got to AppleFest and heard that System Software 5.0 and the Video Overlay Card were Apple's big announcements, I responded with a yawn. "Great, they've cut another two seconds off the boot time for GS/OS and come out with a card that I might use to spiff up home movies if it weren't so expensive," I thought.

I was busy helping set up the booth and didn't have time to investigate closely. Walking by Apple's booth, my eye was caught by the screen of a IIGS. The Apple representative was demoing the new Control Panel NDA. It looked kind of neat and seemed to respond quickly. That was when I found out that it used "CDEVs." This word means something to Mac people and will mean something to you before to long. Wow, I thought, CDEVs will make configuring the system a lot easier.

I asked the Apple guy about the speed of the windowing in the Finder. He said that windowing for ALL applications was improved and proceeded to start up AppleWorks GS. I almost tried to stop him since I didn't have all afternoon to watch his demo, and we all know how long it takes to load AppleWorks GS. I did a double-take when it was running 25 seconds later. "Did you load that from a RAM disk?" I asked. No. "Do you have a TransWarp GS?" No. Suddenly I was

very interested in the new system software. No more yawns.

After a special session and demonstration I was convinced. This upgrade will make a major difference in your IIGS's speed and responsiveness. Due to a new system loader called "ExpressLoad," loading of software is accomplished in a small fraction of the

“The System Software 5.0 upgrade will make a major difference in your IIGS's speed and responsiveness”

System Software Version 4 time. The Quickdraw II and windowing toolboxes have been totally rewritten and optimized, improving graphics speeds by as much as 5 times. Moving from ProDOS 8 to GS/OS is accomplished in 6 seconds rather than 25. Floppy and hard disk access was improved by two.

Apple has invested an enormous amount of resources in improving the Apple IIGS's system software, and after extensive discussions with a variety of members of the Apple II systems and utility software development teams, I believe that we can expect to see a variety of interesting projects coming down the line before too long. The young men and women who have been working on this system are very happy and proud of it, and they have every right to be. They are also brimming with excitement about projects that are still in the hush-hush stage. I think that Apple is committed to the Apple IIGS. I don't expect to see a lot of advancement in ProDOS 8, but I think that the Apple II software engineers see a lot potential in the GS.

Expect an article on System Software Version 5.0 sometime in the near future.

Video Overlay Card

Apple's Video Overlay Card may seem like an expensive toy at first, but once you see it working with GS/OS you can start to imagine some interesting uses for it. When it is linked to a video disk with the right kind of software, you can display on your computer's screen a video within a window, with other textual or graphic in-

formation in a Super-Hi-Res mode in another window. Imagine a video disk with photographs of major art pieces. This video data could be windowed on the screen with information about the artist, the historic period, or the art's subject in an adjoining window. This card brings hypermedia to the IIGS in a very big way. The limits

are only your (or a developer's) imagination. With the expansiveness of CD ROM and GS/OS's capability to deal with multiple types of file systems, you can suddenly start seeing the GS as a relatively inexpensive hypermedia educational and entertainment system. Maybe Apple is starting to make sense.

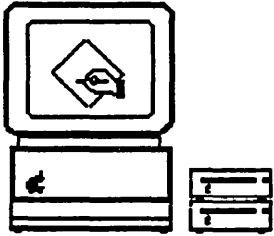
Several software packages were introduced at AppleFest which might interface well with the new video card. HyperStudio was being distributed by Roger Wagner, and by all accounts it was an impressive package. I will be interested in seeing a video disk being controlled relationally by HyperStudio. And on the IIe and IIc line by TutorTech. Apple announced a contest for user group members to win the Video Overlay Cards. Just come up with an original and exciting project for the Video Card, describe the project in fewer than 500 words, and submit it through your user group. The best 50 ideas win the Video Card to do your project.

Laser

Laser's booth was impressive. Large and placed near the Apple booth itself, it suggested that they wanted to tackle Apple head to head. Would you believe two stories with a spiral staircase leading to the upper level? Laser had many Apple-compatible computers they were using for hands-on demonstrations to the public, but Laser's booth had some surprises inside that were even more impressive.

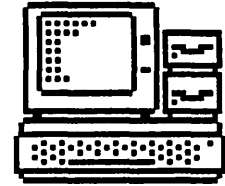
We got to peek at a hand-tooled

➔ 30



APPLE WRITER LIVES!

Edited by Ed Smith



A Modest Patch to Improve Support for Large Capacity Disk Drives by Michael Burton

In light of the phenomenal success of AppleWorks, old reliable APPLE WRITER seems to be getting the cold shoulder from most users these days—so cold that Apple has dropped the program from its product line. Claris, the new software company created by Apple has shunned APPLE WRITER. Despite a coterie of avid users, APPLE WRITER seems destined to become an orphan program.

APPLE WRITER is an old program and it lacks some of the flashy features of more recent word processors. But I think it deserves a better fate. In my opinion, the ProDOS version of APPLE WRITER remains one of the best word processors available for the Apple II family of computers.

The program is very easy to use. Anyone who knows how to type, knows how to write with APPLE WRITER. It only takes about 10 minutes to learn the program's major commands. It takes longer to learn the program's more advanced features, of course.

Text entry is fast. I'm a relatively fast typist and I've lost characters during word wrap using other word processors such as WORD PERFECT. I've never had this problem with the ProDOS version of Apple Writer.

If you use more than 80 characters wide, ProDOS Apple Writer will scroll your text horizontally.

The built-in "glossary" feature allows you to define keyboard macros without the need for add-on programs. Glossary files can be used to automate command sequences, insert printer control codes, or type frequently used words or phrases. This is especially useful in technical papers with lots of terms with arcane spellings.

Apple Writer documents are normal text files. This means you can easily use the word processor to create text to be used by other programs—or examine text files created by other programs. No control codes are hidden in your text. I've written BASIC programs and typed in hex dumps from magazines using Apple Writer. I save the file, exit to BASIC, and simply EXEC the file to convert the text to a BASIC or machine language (ML)

program. The APPLEWORKS word processor can read and write normal text files but it requires some fairly convoluted commands to do so.

WPL (Word Processing Language) may be Apple Writer's most valuable feature. WPL is an actual programming language which allows the user to automate complex tasks. Apple Writer's "Help" screens are all created by a series of WPL programs. I use WPL programs to help me archive messages from many of the computer Bulletin Board Systems (BBSs) I call. Apple Guru Don Lancaster, another Apple Writer devotee, has used WPL to help create some spectacular results using Apple Writer with the Apple LaserWriter.

Despite the general rush to AppleWorks, I believe Apple Writer is too good a program to be abandoned and forgotten. Like the Apple II itself, this old war-horse is likely to outlast a battalion of flashier newcomers.

DISK FORMATTER PATCH

The disk formatter program shipped with ProDOS Apple Writer allows users to format 5.25" disks from within Apple Writer. Unfortunately, it won't format 3.5" disks. The following patch to the FORMATTER program will correct this oversight. The patched formatter will also be able to format many hard drives—use it with caution!

To modify your copy of the Apple Writer disk formatter, enter Apple Writer and type the commands listed below. Change the references to "FORMATTER" to reflect the full pathname of the copy of the formatter program which you wish to modify. Save the file with the filename PATCH, then exit to BASIC.SYSTEM. At the BASIC prompt [)], type "EXEC PATCH". Transcribed from The Apple Peel, May 1988 and edited by A-D member ED SMITH.

It is always wise, when making modifications to any program, to make a back-up copy first and modify ONLY the back-up.

```
CALL -151
UNLOCK FORMATTER
BLOAD FORMATTER, A$1800
18AC: 20 00 0B 20 09 20
1B00: AE 31 BF BD 32 BF 29 F0
1B08: CD 9D 09 F0 07 CA 10 F3
1B10: A9 28 38 60 BD 32 BF 29
```

1B18: 0F C9 00 D0 06 AD 9D 09
1B20: 4C 00 13 AD 9D 09 4A 4A
1B28: 4A 20 6E 0D 8D 7B 0D 8C
1B30: 7C 0D A9 03 85 42 AD 9D
1B38: 09 85 43 8D FF CF 20 6A
1B40: 0D 60
BSAVE FORMATTER, A\$1800, L\$1000
LOCK FORMATTER
3DOG

APPLEWRITER V2.0 ON THE IIGS by Ed Smith

I recently became interested in Apple Writer when a friend asked me about using it on a hard disk. We published an article on using Apple Writer on 3.5" and hard drives last issue. This time my friend upgraded his //e to a IIGs. Now he wanted to know if he could use Apple Writer on his IIGs. I found the following patch in the Applepickers User Group newsletter. As usual, use a BACKUP copy of your program to attempt this patch.

BLOAD ASD.SYS, A\$2000, TSYS

Verify that 4000 is A0, then 4000:60
Verify that 4F67 is 01, then 4f67:10
Verify that 4F6E is 31, then 4F6E:13

BSAVE, AWD.SYS, A\$2000, TSYS

Anyone have any other useful patches for Apple Writer or any other program? Just send them to ED SMITH on the SOUTH (#68) or NORTH (Ed Smith) BBS and we'll publish them in future issues of the A-D Journal.

...by Ed Smith...

Reprinted from the Apple Dayton Journal, Volume 10, Number 3, March 1989

↳ 28 IIGs Stuff

generic portable computer while the Laser representative discussed our interest in a potential product. He inquired, "What would we think of an Apple-compatible portable?". We all agreed we wanted one yesterday, but how about you folks and how much would you pay? Would you place any value on a second 3.5" disk drive or a SCSI port? We preferred the idea of a stripped down model similar to the IIC Plus, but with battery power and a nice flat screen. Would any of you be interested in a laptop or portable PRO-DOS computer for around \$700 to \$900? Call Ted Meyer or Sam Knutson, and we will try to pass back a consensus to Laser. Whoever markets the first Apple II laptop will fill a big void for those of us who have steadfastly refused to purchase an IBM laptop. Remember this is just an idea right now, but with a little enthusiasm maybe we can get Laser to make it a reality for us. Are you listening Apple?

Software Development Systems

A lot was going on in the programming arena. Aside from HyperStudio and TutorTech, mentioned above, a variety of companies made interesting and exciting announcements. Roger Wagner, the ByteWorks, Micol Systems, and DataPak all had interesting software for sale. Roger Wagner had Merlin 16+, an extensive improvement to his already powerful Merlin 8/16 package. The ByteWorks was distributing their new Orca/C at a show price of \$75. (If you're interested in this price give them a call. It should still be available for Pi members! Also, Orca/Pascal for \$75, Orca/M for \$35, and Orca/Desktop for \$30.)

Micol Systems had BASIC compilers for both the Apple IIe and IIGS and gave the Pi a copy of the IIe compiler for review.

Regardless of what language or system you're using, DataPak's Genysys software will probably be a

boon. With this system you can use the mouse and desktop to design windows and displays and then automatically generate source code for these objects for inclusion in your programs. It works with Micol, APW, Orca, Merlin, TML and anything else you can think of.

Addison Wesley was selling the IIGS Toolbox reference Desk Accessory, which allows you to look up the specifics of any toolbox call via a handy CDA.

SoftDisk

The SoftDisk folks had a booth and continue to produce an excellent magazine on disk every month. SoftDisk is a potential market for beginning commercial programmers, as they do purchase original works. They have even published programs by local WAP member Gary Hayman. If you are a local programmer interested in selling your work, remember to stop by Pi SIG and exchange ideas with your peers.

Beagle Brothers

Since the demise of Pin Point Publishing, all works that they held reverted to the authors, and Gary Little's Point to Point telecommunications program is available from Beagle in an upgraded version. Timeout Telecom and Timeout Report Writer were also announced. Look for detailed reports on these from our own Beagle Buddies. Program Writer originally sold by Software Touch is now being sold by Beagle Brothers and you can upgrade to the Beagle version for \$10. Program Writer is a word processor for BASIC programs giving you a full-screen editor that stays in memory. This lets you make changes to a BASIC program, exit the editor and run your program, and go back into the editor very quickly. Program Writer supports DOS 3.3 and ProDOS and includes all the standard word processor features such as cut and paste, search and replace, find, insert, delete, etc. Program Writer runs on any Apple II, and I highly recommend it if you ever write or modify BASIC programs.

Games

Discovery Software had Sword of Sodan, which will be an arcade sword fighting game with full-screen action and superb sound. You can stop by the Pi Office to see a demo version if you like. The action is big as life and very violent. I was impressed, but as usual the product is not quite ready and will be shipping Real Soon Now.

Britannica software had: a good historical "guns and butter" game called Revolution '76, an arcade game called Laserforce that reminded me a lot of Crystal Castles, and a product in development tentatively called Wackoputt that will thrill anyone already enjoying Zany Golf. Zany Golf is from Electronic Arts and, like Wackoputt, has to be seen to be understood.

Accolade was demoing Test Drive II: The Duel at both their own booth and Apple's. It is almost ready and should be shipping in a couple weeks. I loved it because as many know, "I just can't drive 55!" (Montgomery County Police be aware that this is

Sam's comment, not Ted's!)

Other User Groups

We did a public domain software exchange with N.E.A.T. (New England Apple Tree), so look for new titles in the Apple II Disk Library soon, including a CAD program for the Apple II. We would like to again thank the Boston Computer Society, who was the host club for this event. We were right across from the Big Red Computer Club, and John Wrenholt and company have some new color printshop graphics in their catalog, as well as hints of a new IIGS font product soon.

Parties

While AppleFest is open daily from about 10 am to 6 p.m., the fun is only getting started when the show closes. Cambridge Marketing hosted wine and cheese gatherings several evenings for exhibitors. Tom Weishaar of Genie and A2-Central hosted an informal reception, where many exchanged greetings with on-line friends. We really want to thank the Boston Computer Society, who year after year proves they know how to party!

BCS and Quantum have for the last two years rented a bar on Canal Street and played host to a motley crew of exhibitors and AppleLink Personal Edition notables. The party featured the usual: loud music, drinks, good food and the unusual: several IIGS's signed onto AppleLink PE to participate in a live forum discussing the new announcements from AppleFest. Most of the WAP members who traveled to Boston got together Saturday night after the show at the No Name restaurant. We all enjoyed some of the best seafood chowder that can be had and some good times.

We would like to thank MBSA Execufold, who was demonstrating a really nice desktop folding machine. They helped us trifold several hundred membership brochures when our fingers just couldn't go on.

I want to thank all of the hard-working volunteers who helped out at WAP's booth: setting up, taking down, and presenting a good face to the public. I really appreciate all the

help you provided and hope that you had as much fun as I did. The volunteers included: York Menzel, Sam and Kym Knutsen, Carrol Norrish, Gary Hayman, Harvey Kaye, Charlie and Jay Sorrels, Bob Platt, Bob Lammachia, Ray Settle, and Ben Miller. We couldn't have done it without you. Hope to see you all there again next year.

The 22nd of May is my last meeting as the Chairman of the IIGS SIG. I want to thank all of you who have made the SIG a fun place to show up on a Monday evening. Gary Hayman will be taking over starting in June, and I'm sure he'll add a lot to the SIG and its direction. I'm not giving up this column though. I'll still be here as long as the editor is willing to publish my usually late articles. I've also just been elected as the chairman of PI SIG (Programmer's Interface SIG), so if you're interested in programming on the IIGS, stop by at one of our meetings on the first Monday of each month in the Pi's offices. Till next month... 🍏

Apple Tutorials Offered

Three tutorials are offered by WAP to Apple II owners on the first three Tuesday evenings of the month. These tutorials are designed for "beginners" and not experienced users.

Tutorials run from 7:15 to 10:15 PM and are held at the office. (Please arrive by 7:00 to allow time to set up your computer.)

We are currently alternating months between the Apple IIe,c and the the IIGs. April sessions will be for the IIGs; May for IIe & IIc.

The fee for each session is \$20 for WAP members.

Bring your Apple, monitor and disk drive. WAP does not have equipment for you to use. If you do not bring your own, you will have to look over someone's shoulder.

**Welcome to the World of Apple
How to Use Your Apple Software
Popular Applications**

See page 95 for full details.

Best of the Apple II

By: Lou Pastura

You Don't Mess Around With Glen!

FROM BILL HARK ON 4/18

I own a copy of ProSel v 3.8, bought directly from Glen Bredon. I figured that downloading some of the ProSel updates from the TCS would be good practice and proceeded with some of the text files and, of course, Cryptor. No problem. I later downloaded "PROSEL.DOC.BNY" and extracted it, but couldn't read the text files. (I could read some words and phrases with lots of garbage between.) The "contents" files were readable but not formatted. I assumed this was encryption and, of course, ran Cryptor. No help. It was worse. The program did NOT identify the files as encrypted nor did it show the file in question as a \$00 file as I understand it should. I downloaded PROSEL.DOC.BNY three times (18 minutes each) using both the "file" and the "bny" setting of Proterm. Neither worked. The only differences I noted were that using "bny" extracted the component files as it came while using "file" required extraction with BLU after I got it. Also, though PROSEL.DOC.BNY is noted as a BNY file, when I get it, before or after using BLU, it shows as a TXT file. This happens both with the "file" download and with the "bny" download. I just haven't been able to get it to work. Any suggestions? Many thanks.

FROM DALE SMITH ON 04/19

I have downloaded the PROSEL.DOC.BNY file and unpacked it. The file is good as it is. BUT, you should note that the file contains its own printing program, PRINT.DOC. Just run that and you'll see all the files in all their formatted glory - it doesn't pay to try to jump the gun on Glen Bredon like trying to use a normal edi-

tor to read the files <Grin>. If you don't want to actually print the files, you can send the file to your screen, just use Slot 3 for the destination of the output.

Help Wanted

FROM KEN DE VITO ON 04/30

We need a volunteer to run the AppleWorks 12:00N meetings which are held after the Main Meetings on (usually) the 4th Saturday of each month. I find that I just don't have time to run these anymore. Actually, the chair of the meeting is a little more than a moderator who knows a little (very little, in my case) about AppleWorks. I can honestly say that I have learned a tremendous amount of useful AppleWorks (and other related) information while chairing the meetings over the past 3 years. I'll also take tentatives and hold for your decision, etc.

Things are Really (Com)Piling Up!

FROM THOMAS INSKIP ON 04/11

I know somebody who has just started up with an Apple //. He is mostly interested in programming. What compilers are there on the market for the //? He is especially interested in Pascal.

FROM SAM KNUTSON ON 04/12

There are a number of Pascal implementations for the][including:

Instant Pascal - Interpreted, Windowing, Mouse Support, subset of Macintosh Pascal, standard PRODOS disk format, not copy-protected. This is a fun learning language. I bought it! Remember, since this is interpreted (You have to have IP to run the program) this is not for writing software to give to others but instead for learning and teaching the language.

Apple Pascal - Compiled, some group called Washington Apple Pi published a good book about it call "Perfect Pascal", uses Pascal disk format, Apple Computer Inc. uses it to write training disks like the ones with Appleworks and the classic "Apple Presents". We have a Pascal SIG that is still around if in smaller numbers. Not copy-protected

Turbo Pascal - CP/M based so you need a Z-80 card. Probably the best Pascal on a micro or at least the most popular. Share programs with the IBM world. Fast, Compiler, not copy-protected, made by Borland.

Kyan Pascal - Prodos based, Compiler, can compile to SYS files, lots of add-on's for graphics, optimization, more utilities, or UNIX-like shell. All add-on's cost \$\$\$\$. I know some people who really loved it. I say loved because I am not sure if they are still in business but you can always find it at a garage sale.

I know there are others, but he might also want to look at one of the new enhanced BASIC's like ZBASIC or something like the Beagle Compiler which makes Applesloth program tolerable. Lots of neat little development products out there, one of the best being Merlin Pro if you are willing to learn assembler.

A Banner Solution

FROM LADD MORSE ON 04/24

This is a question for my wife who is an elementary school teacher. She wishes to know of there are any programs available on the TCS that will allow the production of banners (such as Happy Secretaries Week, etc.) She particularly liked a banner she saw that the letters of the banner were created from embedded text; i.e., one could specify that the large banner letters were to be created by continuously repeating the phrase "We'll do anything for chocolate chip cookies!". This banner was produced with an Epson QX-10 CP/M computer using the banner program GOTHIC.

FROM DALE SMITH ON 04/25

I believe there's a program in the AppleII Utils area (#4) called Banner.BNY (or similar) that will

print a banner for you. But I don't think it will use a phrase to do it with.

Fore! (er,) Four!

FROM SAM KNUTSON ON 04/09

Does anyone have a program that will print 4 across address labels on a wide carriage Imagewriter I? I have been told that PFS File and Report will do this but I don't have access to them. I could do it in Applesoth but hopefully someone out there can keep me from reinventing the wheel.

FROM LOU PASTURA ON 04/10

Sam, how about a macro in AppleWorks? Seems to me you'd need to print the DB fields to disk as a DIF file and then import the DIF to the SS and use the SS to format your columns. Sounds complicated, I guess, but it would be a snap with a macro, I think.

Two's a Crowd!

FROM WALLACE RIDLEY ON 04/16

Last night I backed-up my hard disk and started the Prosel program Beachcomber running on the hard disk to clean up the volume. I was very surprised when it stopped and gave me an error — "TWO OWNERS ERROR". Anyone have any idea just what this means and how to fix it? I have run this program every couple of months for the last two years without a hitch. Anybody got an answer?

FROM DALE SMITH ON 04/16

The "TWO OWNERS ERROR" means that two different files are claiming the SAME block as theirs. Beachcomber doesn't recognize the error until the SECOND file comes up in the cleanup process. The solution is to determine which files are claiming the same block, copy both of them off, and delete both of them, then copy each back and, finally, if possible, determine which file was "on top", i.e., really had its data in the block in dispute. If you can do the last step, you then only have to replace one file; if not, then you'll have to replace both to be sure they're right.

Now, that's the "program of action". I have done this a number of times and find that InfoDesk does a nice job of telling me what blocks are

being used by a file; Mr. Fixit will identify the block in dispute; and Block Warden will let you read the block in question, possibly letting you determine which file it really belongs to and therefore which file to consider "on top". This last step is much easier if the file in question is a text/word processor file that you can read or the text part of a program file; binary code is much worse to confidently identify.

So, I would use Mr. Fixit to locate the block in question. It, too, will only find it with the second file appearing, but at least you get one file name and the block number. Write those down.

Now, run InfoDesk and use the Block Usage by Files or the reverse File Usage by Blocks to locate the files that are claiming the block in question. This is somewhat of a "brute force" step; you have to go through everything to be sure you've got the filenames in question.

Now, copy the offending files off the HD, and you can use Block Warden to read the block in question to see if you can recognize its contents. If you can and can associate it with one of the files, then you have identified the known good file. The other file is then BAD because one block actually belongs to the GOOD file; the BAD file will have to be replaced. However, if you could not identify the block with a file, then it's better to assume both file to be BAD and replace both.

FROM DAN HUGHES ON 04/17

Sometimes there's an easier way around the two-owners. Try this: Run Mr. Fixit and find the name one of the bad files. OK, simply delete (back it up first) and then run Beachcomber again. I had the two-owners error on my last attempt to run Beachcomber and the problem turned out to be nothing more than a pathname that was too long for 8-bit Prodos, but OK for Prodos 15 (GS/OS). If you are running the 8-bit Beachcomber, you'll get an error for a perfectly legal P16 filename, and it won't optimize. A safer way to delete bad files is to use the delete function in Cat Doctor, making sure the file you are deleting is sorted so that is the last file on the list.

A 911 Emergency!

FROM BILLY THOMAS ON 04/20

I hope someone out there has seen or heard of this problem...I dread taking my GS to Apple. First I started getting Fatal Error 0911 every once in awhile. Now it's happening about every 3rd reboot. I ran the built in test and when it fails I get System Bad 09010001. I ran an external test and everything passed except system speed. The program gives me the error as System Speed/Interrupts Test Failed. I opened up the computer, removed all the cards and checked everything visually, but I couldn't spot any obvious problems. BTW, the external tests fails in the same test every time. Anyone have any suggestions?

FROM JAY CARROLL ON 04/25

This month's A2-Central (formerly Open-Apple) discusses the Fatal System Error 0911 problem. It appears to be related to overheating the power supply. One person reported curing the problem by using an IBM power supply (sounds clumsy). Another reported fix is adding a cooling fan. You might try using the GS with the case open and see if that brings any relief. If you have more than two cards, you may need a fan.

FROM FRED TILLMAN ON 04/26

I was getting 0911 rather frequently until I got a Kensington system saver. I have not had one since.

TransWarp TransActions

FROM SCOTT WALLACK

Well, I just got my TransWarp GS tonight (already installed). Those who get theirs from this current batch will be surprised to see that is being shipped with a 6.25MHz microprocessor instead of the 7MHz one. There is a letter in the box that says there is a shortage of the 7MHz chip right now so they used the other so they could ship. They offer to upgrade for free when more 7MHz chips are available (said they would notify registered owners) or send you a \$40 certificate toward your next AE purchase. Quite

an unusual situation! Oh well, it is really a nice change from the standard GS speed. You also gain the ability to configure the card to display at startup a graphics sequence complete with warp type noises if you want. Unfortunately, I had my speaker turned up and my Bose speakers plugged in when I booted the system the first time after installing the card, quite loud! Needless to say, I disabled the startup sound for the card, but let it display the startup graphic sequence.

Onward and Upward

LEE CABANA ON 04/24

Apple has announced System Software Version 5.0 for the Apple IIgs. It has the following performance increases over System 4.0

- + Drawing: 2 to 3 times faster
 - + Window Manipulation: 3 to 8 times faster
 - + Switching from GS/OS to ProDOS 8 Applications: 7 to 15 times faster
 - + SCSI throughput: 4 times faster.
- The new version of the software also has support for AppleShare directly from the Finder. Also included is a control panel NDA.

The new system software requires a minimum of 512K (768K for AppleShare). The software will be available after AppleFest.

FROM RICHARD ZEMAN ON 04/24

Pinch me. I must be hallucinating. I was only expecting a bug fix, not a major upgrade. I guess I'll take back, oh, 50% of all the nasty things that I've said about Apple that past half hour!

From GENie's Bottle

FROM PAUL SCHLOSSER ON 04/05

From GENie:

I recently had a problem with my IIgs. It would periodically crash into the bouncing apple with an "Unclaimed Sound Interrupt 08FF" error. This happened more and more frequently, until it eventually happened so often the machine was completely unusable — about every 10 seconds. It would even do this WHILE the bouncing apple was going (beep again

and start the apple over). This happened under GS/OS and ProDOS 8, in any software whatsoever. Luckily, I'm unafraid of the insides of my machine. I figured one of the sound chips, probably the Ensoniq chip, had gone bad. Also luckily, the Ensoniq was socketed, at UL14 right next to the memory expansion card. So, what the heck, I yanked the chip out completely. The machine worked fine without that chip in, though the control panel couldn't be accessed (Unclaimed Sound Interrupt flickered on the screen several times per second), and GS/OS would not run, but all my P8 software worked fine, so I was able to limp along.

I called my dealer. I called several dealers. Every one of them said that Apple would NOT supply a replacement chip. The ONLY way they could fix the problem was a new motherboard! \$250 for parts and labor!

So I got the number for Shreve Systems in Louisiana and ordered a new Ensoniq chip. For about \$55.00 total they Federal Expressed me the chip. I put it in this morning, and the machine works just fine now.

This goes beyond just DUMB. It's highway robbery on Apple's part. I still can't believe it.

FROM PAUL SCHLOSSER ON 04/11

From GENie:

Saw an interesting note from Andy Nicholas (author of ShrinkIt) on GENie. Seems his IIgs battery died. A replacement battery was DOA too, so he went to Radio Shack and purchased a battery holder for two AA batteries, unsoldered the Apple battery, soldered in the wires from the Radio Shack battery holder, inserted the batteries, and was back in business again. [Obviously not for the faint of heart!]

He noted he was keeping the old battery. It's apparently considered toxic waste. And if there is ever a CPU upgrade you would have to remove the AA batteries and reinstall the original battery.

FROM PAUL SCHLOSSER ON 04/30

From GENie:

IIgs Replacement Batteries — "Slide-on" for easy installation.

Mission, Kansas — Nite Owl Productions is now shipping TADIRAN - Lithium replacement batteries for the IIgs computer. These batteries are identical to the original equipment battery except that they contain special "slide-on" terminal connectors which do not require soldering.

Battery replacement is simple. The original battery is removed by cutting its wire leads leaving a length of wire (about 1/2 inch) sticking out and still soldered to the computer board. The new battery can be slid onto the old battery leads.

These new batteries are available for immediate shipment at the following prices which include shipping and handling. Overseas orders should include an additional \$2 for shipping.

Quantity	Price
1-9	\$9.35
10-100	\$7.85
100+	\$7.15

The original equipment batteries supplied in the IIgs tend to run out of juice after a little more than 2 years. This new product should help reduce horror stories of computer dealers charging customers for a complete new motherboard for their computer when all it needs is an inexpensive battery.

FROM TOM VIER ON 04/04

From GENie:

For Immediate Release: APPLE II CARD ADDS VIDEO OVERLAY CAPABILITY

CUPERTINO, California—April 3, 1989—Apple Computer, Inc. announced today a product that allows teachers, students and home video enthusiasts to bring personal computer and video technologies together easily and inexpensively. The Apple II Video Overlay Card for the Apple IIe and Apple IIgs enables users to superimpose computer graphics (text, pictures and animation) over video images from an external source (VCR, videodisc, video camera or television signal) and view the result on a single screen. The final result, a blend of computer graphics and video, is richer in content and communication value—and more compelling—than either component alone.

"The personal computer industry

Operant Systems

...since 1982

)(-series Hardware

DOT-MATRIX & LASER PRINTERS

Panasonic 1180 (192 cps, 9-pin, Epson-compatible)	209
1191 (240 cps, 9-pin)	269
1124 (192 cps, 24-pin)	369
Okidata 320/321 (300 cps, 9-pin, NLQ mode, std/wide carriage)	375/525
390/391 (270 cps, 24-pin, std/wide carriage)	525/749
NEC 2200 (170 cps, 24-pin quality at a bargain price)	369
5200/5300 (265 cps, 24-pin, std/wide carriage)	539/725
Toshiba 321SL (216 cps, 24-pin)	615
Olympia NP-30 (150 cps, Imagewriter-compatible)	285
HP LaserJet II (8 ppm, 512k)	1725
DeskJet (240 cps inkjet, 300 dpi, LaserJet-compatible)	739
Panasonic 4450 (11 ppm, 512k, dual input bins, LaserJet-compatible)	1695

MODEMS

Applied Engineering DataLink 1200/2400 (1200/2400 card w/soft)	149/185
Anchor 1200E/2400E (1200/2400 external, Hayes-compatible)	109/169
Prometheus Promodem 1200A/2400A (1200/2400 card w/software)	129/159
Promodem 1200G/2400G (1200/2400 external)	119/179

MEMORY EXPANSION & VIDEO BOARDS & CPU'S

Applied Engineering RamWorks III (256k, for][e)	189
RamFactor (256k, for][+ or][gs)	239
gsRam (256k, for][gs)	185
Transwarp (3.6 mhz 6502c accelerator)	159
Transwarp GS	309
PC Transporter (IBM-on-a-card, 768k)	525
Laser 128/128EX (][e compatible computer)	409/475
AMR 80-column card (64k, for][e)	59

HARD & FLOPPY DISKS

Sidor II (20/40-meg for][+,][e,][gs or Mac)	489/639
CMS 60-meg (for][e or][gs)	859
AMR A.5 / A.5c (143k half-hi floppy for][+/][e,][c)	119
A.5d (143k, daisychain port, for][gs)	149

INTERFACES & BUFFERS & CLOCKS

ProGrappler (parallel printer interface w/graphics)	89
Grappler c/mac/gs (use most parallel printers from your serial port)	79
Practical Peripherals Graphicard (parallel interface w/graphics)	59
SeriAll (serial interface for modems or printers)	89
Quadram MicroFazer (8k-128k parallel buffer)	139
SMT No-Slot-Clock (for][+ or][e)	39

)(-series Software

WORD & PAGE PROCESSING

Appleworks 2.1	185
Appleworks GS	209
Word Perfect (for][e,][c,][gs)	85
pfc:Write (w/apper)	75
Bank Street Writer (64k and 128k Plus versions)	49/55
Newsroom	25
Publish It! 2.0	89
Sensible Grammar	65

SPREADSHEETS

SuperCalc 3a	139
--------------	-----

DATABASE

pfc:File w/Report	75
-------------------	----

HOME & BUSINESS ACCOUNTING

Managing Your Money 3.0	99
Quicken (easy home accounting)	35
BusinessWorks (best][-series business accounting)	309
DAC-Easy Accounting	75
Peachtree Back-To-Basics Professional	139

COMMUNICATIONS

Ascii Express Professional (DOS & PRODOS versions)	79
MouseTalk	75
ProTERM 2.1	85
Hayes Smartcom I	79
Compuserve Starter Kit (password & \$25 usage credit)	29

MISCELLANEOUS SOFTWARE

Beagle Timeout SideSpread/FileMaster/DeskTools/Thesaurus	32
UltraMacros	39
QuickSpell/SuperFonts	42
Graph	55
pfc:Workmates (includes Write, File, Report, Plan)	125
Print Shop/Print Shop Companion	35/29
Typing Tutor IV	29
Copy][+	25
Avery List & Mail	39
PaintWorks Gold (for][gs)	62
Flight Simulator II / Jet	39 / 32
Where in the World is Carmen Sandiego?	32

Mac Hardware

LASER & INKJET PRINTERS

General Computer Personal LaserPrinter (QuickDraw-compatible, six fonts)	1525
Personal LaserPrinter Plus (as above, w/seven additional fonts)	1649
Business LaserPrinter (8 ppm, Postscript, 2-meg)	3049
WriteMove (QuickDraw-compatible inkjet printer)	519
NEC LC-890 (8 ppm, Postscript/HP emulation, 3-meg, dual-bins)	3295
QMS 810 (8 ppm, Postscript/HP emulation, 2-meg)	3995

HARD & FLOPPY DRIVES

Peripheral Land PL 20/30/50VL (3:1 interleave SCSI for Plus, SE)	575/675/799
PL 20/30/50 Turbo (1:1 interleave SCSI for Plus, SE)	599/749/895
PL 20/30/50i VL (3:1 interleave, internal for SE only)	489/595/725
PL 20/30/50i/70i Turbo (1:1 interleave, internal for SE only)	525/649/775/925
PL 100i II Turbo (100 meg, 1:1 interleave, internal for Mac II only)	1149
Infinity (10/40-meg removable disk, reads IBM floppy disks)	849/1149
TurboFloppy 1.4 (1.44-meg floppy, read/write Mac & IBM disks, SCSI)	829
CMS 20-meg SCSI	539
60-meg SCSI	789
30-meg internal (SE only)	459
45-meg internal (SE only)	695
Rodime 100-meg (internal, Mac II only)	1049
Video Technology 800k floppy	199
DaynaFile (360k floppy, reads and writes IBM disks)	489

68020 / 030 ACCELERATORS

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

MISCELLANEOUS HARDWARE

Cornerstone 15" Single Page Display (for SE & Mac II)	739
Sigma Pageview 15 (full-page display for SE)	759
NEC MacSync (14" analog color monitor for Mac II)	589
Anchor MacPac 2400E (2400/1200 bps w/software & cable)	179
DataDesk 101 keyboard	159
Dove MacSnap & SIMM memory upgrades	(call)
Kensington System Saver Mac (for 512, Plus)	69
System Saver SE	69
Turbo Mouse ADB (trackball for mouse-haters)	129

Mac Software

WORD & PAGE PROCESSING

Microsoft Word 4.0	259
Write	89
MacWrite II	179
Word Perfect Mac	209
FullWrite Professional	259
Write Now 2.0	125
PageMaker 3.0	369
ReadySetGo 4.5	295
Springboard Publisher	119

SPREADSHEET

WingZ (super spreadsheet--look out, Excel I)	279
Excel 1.5	259

DATABASE

Filemaker II	209
FileBase+Mac 1.1	225
dBASE Mac	309
4th Dimension	409
Double Helix II	349

GRAPHICS

MacDraw II	275
Claris CAD	539
Adobe Illustrator 88	285
Crickit Draw	179
Graph	119
Paint	125
SuperPaint 2.0	139
MacDraft	159

HOME & BUSINESS ACCOUNTING

Quicken	35
Managing Your Money 2.0	139
DAC-Easy Light	49
Peachtree Back-To-Basics Professional	169
Bedford Simply Accounting	205

MISCELLANEOUS SOFTWARE

Microsoft Works 2.0 (word proc, calc, database, commun, speller)	199
TOPS for MAC 2.1	169
Symantec Utilities for Mac	75
Suitcase II	65
MacProject II 2.0	339
SoftPC	259

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

is in a wave of development aimed at seamlessly merging computer technology with sound and video technology—the most powerful communication medium that has emerged in recent time,” said Bernard Gifford, Apple vice president, Education. “The Apple II Video Overlay Card is a significant step in this direction. It provides a low-cost capability that greatly adds to the utility of the Apple II for communication and learning. Moreover, it extends the value of video and computer equipment and software that customers already own.”

Markets And Uses: The Apple II Video Overlay Card is expected to be used primarily in elementary and high schools, and in homes, the two markets with the largest installed base of both Apple II computers and video equipment. The installed base of Apple II computers is more than 4.5 million in homes and schools. According to industry research firm Market Data Retrieval, Inc., 60% of computers in U.S. primary and secondary schools are Apple II computers.

According to Talmis, a Link Resources, Inc. subsidiary, 89% of U.S. public schools owned VCRs, and 9 percent owned videodisc players in 1988. Nielsen Media Research found 62% of U.S. households owned VCRs in November 1988, and 15.2 percent of those already owned video cameras.

Video overlay is commonly seen on television where it is used to display a news reporter's name underneath the video of the reporter's image, and in sports, to sketch over video replays, highlighting the action.

To enhance learning, video overlay could be used, for example, in physical motion analysis, video annotation and language and literacy training. Consecutive stick figure representations, superimposed on video images, can be used to analyze the gait of a horse or the swing of a golfer. Video footage of billiards shots can be traced to mark the path of the balls and demonstrate angles and geometric principles. In language training, video overlay can display a word while the student is hearing its pronunciation and seeing its image. The same visual material with different

overlays can be used to teach different languages.

Individuals can add special effects to home movies or easily make video greeting cards, explore landscaping plans by placing computer representations over video footage of property, or annotate videos created for insurance records.

Product Description: Computer video signals and video signals from television, a VCR, video camera or videodisc are commonly timed differently. The Apple II Video Overlay Card employs genlock circuitry to synchronize Apple II timing so both images can appear simultaneously on a single screen. The card produces high quality video output and improves the display on both the Apple IIe and IIgs. When the card receives input that meets the National Television Systems Committee (NTSC) RS-170A specifications, it produces RS-170A output which can be broadcast for NTSC television.

The Apple II Video Overlay Card produces a variety of input and output options. It accepts video input from a VCR, videodisc, video camera or television, and sends both a red, green, blue (RGB) and composite video output signal. This means video and overlay can be viewed on either an RGB or composite monitor, and/or recorded on a VCR or broadcast for NTSC television.

The Apple II Video Overlay Card is compatible with all software that works on the Apple IIGS, which includes over 95% of software for the Apple IIe. This means it extends the value of applications customers already own. Paint, animation, presentation, titling and authoring programs are most appropriate for use with the video overlay card. In addition to numerous applications programs already available, several developers are revising programs or producing new ones with overlay-specific features.

System Requirements: The Apple II Video Overlay Card and VideoMix software works on the Apple IIe with 128K RAM and enhanced main logic board revision B or higher, and on the Apple IIGS with 512K RAM and ROM version 01 or higher.

Price And Availability: The Apple II Video Overlay Package includes the Video Overlay Card, VideoMix software in both 3.5-inch and 5.25-inch disk formats, an RGB cable, a video in/out cable, and Owner's Guide. Suggested retail price is \$549. The package can be ordered at authorized Apple dealerships in the U.S. on April 3 and will be available in quantity at dealerships later in the month.

FROM PAUL SCHLOSSER ON 04/04

I read a note on GENIE from Applied Engineering. They are developing a hard drive for the AppleII line. No release date yet. It will be called 'Vulcan'.

...AND ON 04/11...I've read that the Applied Engineering hard drive (Vulcan) will be ready in time for AppleFest. Some details: 20, 40, and 60 meg models. Only the internal model will be ready for AppleFest. External model will be ready later.

AE also promises that the Vulcan will have features that current drives don't. And now the bad news — Vulcan requires its own interface card.

There have also been many messages from Zip Chip owners reporting failures. One fellow just had his fourth Zip Chip fail.

FROM PAUL SCHLOSSER ON 04/11

From Genie:

You know, I was flipping through a computer magazine, when I saw an ad for AE's new line of HD's, the Vulcan. This got me to thinking, are the boys at AE Star Trek fans or what? Just take a look at some of the names for their past products:

- TransWarp/TransWarp GS: As you remember, a form of warp drive (ST III).

- Sonic Blaster: OK, I'm stretching this one a bit, but I've always know "sonic blaster" to be a term synonymous with "sonic disruptor", a weapon popularly used in the Star Trek TV series.

- Vulcan: If you don't see how this relates right to Star Trek, then obviously you've never watched it.

- Phasor: Of course, the weapon of choice for any Starfleet officer.

What's next? A reply: Maybe they should have named their datalink

modems as communicators.

Another reply: That's quite correct. The founder of the company is an avid Star Trek fan.

FROM PAUL SCHLOSSER ON 04/28

From GENie, some info about the AE FastMath card. AppleSoft Enhancer programs provided. Speeds up *,/,SQR,LOG,EXP,SIN,COS and ATN functions. Speeds up all LET, implied LET, and IF statements that use these functions. Corrects a bug in multiplication and provides more accurate SQR, LOG, EXP, SIN, COS, ATN functions. FastMath also includes an improved RND (more numbers before repeat, no "holes," and a new mode supplies effective INT(RND(1)*X)).

Provided with the card are many assembly language routines to access the math chip, transfer data between memory and the chip's registers, and higher functions (square root, log, exp, sin, cos, atn, reciprocal, integral, fractional and random). Source is provided for accessing the firmware and the math chip in APW, Merlin, and SC Macro Asm formats.

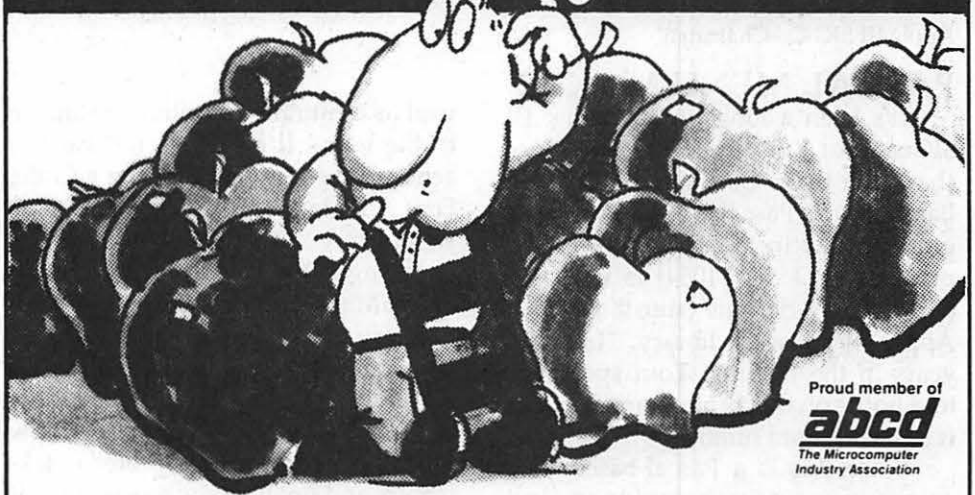
FastMath works in slot 3 or 4 of a IIGs without setting the slot to "Your Card." The same holds true for slot 3 in a IIE, you can access the card without losing the 80-col display. The NS32081 FPU supports the IEEE 32-bit and 64-bit floating point formats. The min/max numbers it can handle are:
32-bit: +/- 3.40282346E+38
64-bit:
+/- 1.7976931348623157E+308

Percent faster than AppleSoft without the FastMath

comp	*	/	sqr	log	exp	sin	cos	atn
IIE			IIGs					
78%			64%					
99%			79%					
1235%			1065%					
360%			260%					
570%			425%					
370%			270%					
370%			270%					
770%			570%					

The Creative Computing benchmark (Feb 84 issue, pg. 8) ran at 42 secs in a IIGs without our card and 13 secs in a IIGs with our card. 🍏

APPLE HEADQUARTERS



- 🍏 Guaranteed 6 Hour Delivery
- 🍏 4 Hour Service
- 🍏 Free Software
- 🍏 Network Service and Installation
- 🍏 Competitive Rates

Equipment on Hand

- 🍏 Mac Plus • Mac SE • Mac II • Mac II CX
- 🍏 Imagewriter II Printers
- 🍏 Apple Laser II NTs NT's NTS
- 🍏 19" Color/Mono Mac II Monitors

For Prompt Service Call: Bethesda, Md. (301) 951-0811 Baltimore, Md. (301) 576-8868 Arlington, Va. (703) 525-0455

Rent-A-Computer, Inc.



Toner Cartridges Remanufactured

- Highest Quality Available
We Guarantee It!
- Black, Long Lasting Toners With:
up to 25% more prints on our std. line,
up to 100% more on our jumbo 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!

Find out why Major Law Firms, Accounting Firms, and Universities in the DC area now source all their cartridges from us!



THE LASER'S RE-SOURCE

Silver Spring, Maryland

681-4516

(We also buy used cartridges)

ON THE TRAIL OF THE APPLE III

By David Ottalini

Apple III SIG Co-Chairman

PASCAL MENU.MAKER

It's been a long time coming, III SIGers, but I'm pleased to announce that III SIG Co-Chairman Tom Bartkiewitz's Pascal Menu.Maker program is now in our PD library! The program (PD disk 1054) is truly superb and is a definite "must" for your Apple III software library. Literally years in the making, Tom spent untold hours on this project (and his wife is still talking to him!).

Since this is a Pascal-based program, you must first boot side one and then flip over the disk to side two and hit <RETURN>. From there, you can create a menu from any disk you might have. It can read any Pascal text, ASCII, or 3EZ Pieces/Appleworks text file (that's right....3 EZPs!). It will also run any Pascal-based program you might have. Since this is not an assembly-language program like Selector or Catalyst, however, it will NOT run a Basic or other language program (nor can it "launch" a differnt SOS.INTERP file). The program is unprotected and source code is included and fully documented.

Just like our Basic version of Menu.Maker, when booted, you will get our standard hello message (written by Jim Salerno). From there, you are taken immediately into Menu.Maker and your menu of the disk in .D1 (that is, the PD Menu.Maker disk). The menu includes the following:

SYSTEM.LIBRARY	Code
HELLO.TEXT	Text
FONTS	Catalog
PRINT.TEXT	Text
SYSTEM.STARTUP	Code
MENU.MAKER.CODE	Code
PROGRAMS	Catlog
PRINT.CODE	Code

At the bottom of the screen you are told to press the Open Apple key and "?" for help and the <ESCAPE> key to exit the program (and return to the Pascal command line). The Help file is a window laid over the first screen and gives the date and time, as

well as a number of options available to the user. It describes the various actions taken by highlighting a Code, Font, Catalog, ASCII, Text or 3 EZP word processing file. In addition, by pressing Open Apple and "S", Menu.Maker will display the system memory map. Here, you'll find out how much RAM is available in your Apple III; how much is in use; how much memory SOS is taking up; how much memory the Interpreter is taking up; and finally, how much is available to the user.

Open Apple and "V" displays and allows the user to select the available "block" devices (like .D1; .D2; .Profile, etc.). By moving the cursor and highlighting the desired device and pressing <RETURN>, you can change the prefix and Pascal Menu.Maker will give you the menu on that device (based, of course, on what drivers you loaded at bootup)! You can then read files or run the programs from that new prefix!

The Pascal Menu.Maker can load and display any Apple III font you desire quickly and easily (it really "glides" from one to another). The disk includes some fonts for you to test out. The print program was added by III SIG member Jim Salerno, so you can print out any file on the disk. The Programs catalog includes a Pascal program to set the date and time. By the way, when these programs end, you will be returned to the Pascal command line. To rerun Menu.Maker, type "X" and then ".D2/Menu.Maker.Code" and <RETURN>.

On side one of this disk, along with the boot files, you will find two Sources catalogs. These contain a number of text, ASCII and a 3EZP word processing file with information pertaining to the disk, and other useful material. You will want to read the Sources.Text file, which explains everything on the disk in much greater detail that I can do here. Everything is

explained fully, and anyone who enjoys Pascal programming will have no trouble following what Tom has done.

By the way, Pascal Menu.Maker is easily installed on a hard disk using Selector or Catalyst. Simply follow the instructions included with your particular selector utility to install a Pascal-based program. Because of the power of this program, we now plan to offer future Pascal-based PD disks as non-booting disks. Pascal Menu.Maker makes the waste of space for self-booting unnecessary now. (A full side one and part of side two must be used to make a Pascal-based application self-booting).

Since the Apple III version of Pascal is very similar (though more powerful) to the Apple II version, it should not be difficult for you Apple II folks to convert this for your use (take note, PIG SIG). It should prove a great boon to the PI, and make it much easier to access and run Pascal programs. This is version 1.0 by the way, and Tom says anyone who cares to add improvements is welcome. On my wish list are two things: 1) the ability to print from within the program and 2) the ability to display foto files. Any takers?

OTHER PD DISKS

As long as we're on the subject, I'll mention two other PD disks being introduced this month. The first, PD disk 1055 is another of our "Best of" disks, this time made up of articles from the newsletter of the Apple Three Users of Northern California. This disk has been floating about for quite a while, and I was finally able to get it together. I've also ordered later editions (from what we used), in the hopes of making up more "Best of ATUNC Newsletter" disks in the future (much like the TAU disks already in house). I plan to order the entire Apple User's group International newsletter disk set too, for our "Best of" series. I need some help on these, so anyone interested, please give me a call.

Our last disk this month is another set of utilities to enhance Business Basic. Thanks to the kind folks at CE Software, Programmers Powers Tools are now in our PD. Please see

additional information about these programs in our Disketeria article.

As for future disks, look for two more editions of the "Best of Ottalini" articles, another Best of III's Company disk, our first template disk for III EZ Pieces (and AppleWorks) and our first graphics disk. If you have any graphics to contribute for future disks please send them over, we'd love to include them in our PD library.

By the way, our III SIG Librarian, John Ruffatto told me the other day that he had to make up 200 new disks to replace those sold from our SIG library. That represents at least a \$600 investment by our members just in the past few months or so. THANK YOU! Your support of our PD library is tremendous and we appreciate it very much. Your suggestions and comments on ways to improve it are always welcome, so please make your voice heard. One thing we do plan to do in the near future is have PD disks available for sale at our SIG meetings.

Desktop Publishing On the Apple III

One of our members called me recently to ask if the Apple III could run PageMaker, a desktop publishing (DTP) program. I had to explain that it couldn't but that there were some options if you wanted to do some DTP on our machine (unfortunately, none of them are very good). Frankly, our III was never designed (or had the special software) to do desktop publishing, because it hadn't been invented yet! In fact, it wasn't really until the Macintosh (a graphics-based machine) came along, that DTP even came on the scene.

That said, there are some forms of DTP you can do depending on the software and hardware you might have. If you have the Titan III+Ile cards, you can run Apple II DTP programs and do your publishing in emulation mode. Every Apple II DTP program (like "The Newsroom" or "Publish It!") should run in III+Ile EM mode with no problems. But remember no IIGS-specific program will operate, even with the Titan cards.

There have been a number of recent articles about DTP in native (Apple III) mode over the past couple

June 1989

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

SF 171 SF 171 SF 171 SF 171 SF 171

of years. They are listed on the chart below.

You will find many of these articles in our library at the WAP office. Some of our members (including yours truly) also have back issues if you are interested in doing some additional research. The "On Three" issue of November/December 1988 is a "best bet" if you want to trace down just one article on DTP. In it, author Edward Ash describes in detail what tools you'll need to publish a newsletter on an Apple III and how to use them effectively (he even includes an example).

NAUG

The Apple III was the subject recently of another nice letter to the National AppleWorks Users Group (which still lists 3 EZ Pieces on its front page). Cliff Egel, of La Grange Park, Illinois wrote about how great the Apple III is and invited readers to join in the "adventure." Here's what he said in the May, 1989 "NAUG Journal":

These computers are fast, powerful and easy to use. The keyboards match the finest available. The Apple IIIs are built to operate in a hard disk environ-

ment with an operating system that is your invisible servant (unlike MS-DOS which is your visible master or ProDOS which is just a pain).

I believe that other computers have not yet reached the level of development of the Apple III way back in 1984. It is one of the great travesties of all time that this great computer died a-borning. I am proud and honored to be the custodian of two of these wonderful machines.

The III community certainly appreciates Mr. Egel's comments! In addition, WAP and your III SIG got a nice plug from NAUG's Editor, Cathleen Merritt. Now all we need to do is get Mr. Egel to join WAP!

NAUG, by the way, recently upgraded its BBS, which contains a wealth of information about AppleWorks (and 3 EZ Pieces). Telephone number is 313-482-8090. NAUG Membership is \$27.00/year. Their address is Box 87453, Canton, MI. 48187.

Recent articles about DTP in native (Apple III) mode

Desktop Publishing	ATUNC v4#6 June 87
One, Two, III Forum	On Three v4#3 March 87
Apple.Slices	On Three v4#10 October 87
Desktop Publishing III	On Thre v5#2 February 88
Desktop Publishing with the Apple III	On Three v5#11/12 Nov/Dec 88
Desktop Publishing on the Apple III	ATUNC v5#3 March 88
Desktop Publishing	ATUNC v5#5 May 88

MORE NICE COMMENTS

Your III SIG also got a nice mention recently in The Big Red Apple Computer Club's "Scarlett" newsletter. Publisher John Wrenholt writing that the WAP Journal was a good source of Apple III information and that our Apple III PD library was always being updated. Big Red is a for-profit computer club that has its own large PD library. They also sell add-ons to Print Shop that make it a much more usable program (all of which run in Emulation mode). "Scarlett" published a few articles on the Apple III in the early days of the III:

SUBJ	TITLE	ISSUE
Apple III	III+ Intro	v2#7 1/83 p.6
Disk Drives	Problems?	v3#1 1/83 p.16
Review	Gameport III	v2#7 8/83 p.6
SIG News	New A3 SIG	v2#7 8/83 p.6
SIG News	A3 SIG	v3#1 1/84 p.16
Software	A3 Software	v2#7 1/83 p.7
Visicalc	/P Function	v2#8 9/83 p.5

Back issues are available in the WAP office. Big Red's address is 423 Norfolk Ave., Norfolk NE. 68701. Their phone number is (402)-379-4680.

THE LISA SHOP

Frank Freeman, who heads up the Lisa Shop out in California had some kind comments about WAP recently, telling me our comments in this column have been bringing him some business. We like to know folks are reading this column and responding. Now if we could just get Frank to take out an ad...

GARAGE SALE

It's once again time to remind III SIGers about the June 24th Garage Sale. You'll always find some Apple III goodies, including hardware and software. As in the past, the Garage Sale will be held at Charles Woodward High School in North Bethesda. There's plenty of space and always great bargains.

See you there! 🍏

Apple Answers

Q&A

by Robert C. Platt

GSBASIC

As a long-time Applesoft BASIC programmer, I am struggling to use GSBASIC, and can not figure out how to get it to print. Its Manual does not even mention a "printer." There must be some one that can show me how a printer can be accessed as it is in Applesoft using PR#1 and RUN or LIST commands. The program has printer drivers in it but they can not be "opened." How do you print from GSBASIC?

Applesoft supports only one active output file at a time. However, GSBASIC supports multiple files being open at the same time and uses a "file reference number" to tell which particular file is being addressed. The OPEN command is used to associate a file with its "file reference number." Hence, you would start out your program with OPEN .PRINTER, FOR OUTPUT AS#1. Later when you are ready to direct your output to the printer, instead of the PR#1 command from Applesoft, use OUTPUT #1. All LISTings and PRINT statements will be directed to the printer. To terminate the printed output, use OUTPUT#0, instead of PR#0.

Note that you can also intermix screen and printed output by using the PRINT# command instead of the OUTPUT# command. For example,

```
OPEN .PRINTER, FOR OUTPUT AS#1
FOR J=1 TO 10
PRINT "THIS MESSAGE APPEARS ON
THE SCREEN 10 TIMES"
PRINT#1 J
NEXT J
CLOSE#1
END
```

The printer will type the numbers from 1 to 10, while the message will appear on the screen. To achieve the same result in Applesoft, you would have to insert PR#1 before, and PR#0 after the PRINT J statement. Note that if the above does not work, you should check your printer driver and interface cards.

Apple IIc plus

Can I use the Apple's IIc Memory Expansion Card in my IIc plus?

No. Apple does not manufacture a card to extend the IIc plus beyond the memory on its motherboard. However, Applied Engineering has a RAM Express card for the IIc plus, and other manufacturers may also offer a similar product.

How can I connect my AppleColor 100 RGB monitor to a IIc plus? (I have an Apple RGB card for my IIc.)

Telex (P.O. Box 339, Warrington, PA 18976, 215-343-3000) makes an interface called the "Peacock RGB Module" which can connect the IIc plus to either digital or analog RGB monitors for \$199.

What disk drives will work with the IIc plus?

The Apple 3.5, the UniDisk 3.5 and the Apple 5.25 drives.

How should I connect disk drives to the IIc plus?

The IIc plus uses a "smartport" so the rules for the IIgs apply to the IIc plus as well. Any Apple 3.5" drive must be attached first, followed by any UniDisk 3.5". The Apple 5.25" drives must go at the end. Note that the internal 3.5" drive is assigned Slot 5 Drive 1. The first external 3.5" drive is assigned to Slot 5 Drive 2. The next two 3.5" drives will be assigned Slot 2 Drives 1 and 2. Finally, the first two 5.25" drives will be assigned to Slot 6 Drives 1 and 2.

In this manner, you will be able to boot from either a 5.25" disk (Slot 6 Drive 1) or from the internal 3.5" disk (Slot 5 Drive 1). Unlike prior Apple II's, if you turn on the power and there is no disk in the internal drive, the IIc plus will boot from the first external 3.5" drive.

Can the Zip Chip work with the IIc plus?

No. The IIc plus is already accelerated.

Apple IIc System Utilities

What are the differences between the System Utilities for the IIc and the IIc? Can I use the IIc utilities on my "hand-me-down" IIc?

You can use the program safely. The big difference is that the IIc version asks you to identify disk drives

by slot and drive number while the IIc refers to the drives as "internal" and "external." Note that the IIc System Utilities has certain extra functions not found on the IIe version, including the ability to configure your built-in IIc serial port.

Apple to Mac

I have been trying to convert AppleWorks files to Macintosh disks. I can get ASCII text files to convert using Apple File Exchange, but AppleWorks word processing documents break-down. What is wrong?

You need an additional translator to use in conjunction with Apple File Exchange called "Works-Works Transporter" which is designed to convert AppleWorks files into MS-Works. The program is available from many user groups and on-line services. To use it, just place it in the same folder as the Apple File Exchange application on your Macintosh.

ProDOS 8

What is the minimum I need to create a ProDOS 8 startup disk?

Assuming that you will be running Applesoft programs and you are not using a IIgs, you should format a disk and copy the following two files from the USER.DISK or SYSTEM.DISK: PRODOS and BASIC.SYSTEM

You can also copy any file which you would like RUN automatically onto the disk with the name STARTUP. If the file is a text file (containing other ProDOS commands) it will be EXECuted. If it is a program, it will RUN as a part of the startup sequence. 🍏

Games

The Play Room

By Steven Payne

This faithful reporter skulked around the recent MacWorld Expo looking for some great gaming scoops, but came up virtually empty handed! The Addison-Wesley folks were present with their familiar line of educational games, and a fellow at the Accolade booth said that a Macintosh version of *The Duel: Test Drive II* is coming. There were demos of *Crystal Quest* (Casady & Greene) and *Arkanoid* (Discovery Software), along with the promise of an *Arkanoid Construction Set*. But the only new game I actually saw was *Global Trespass*, from a previously unknown (at least to me) outfit called "Mysterium Tremendum" (3804 N. Washington Street, Oak Brook, IL 60521). The program lists for \$19.95 and works on a 512K Mac or better. It seems to be a spy/strategy game along the lines of *Where in the World is Carmen Sandiego?* and *The Spy's Adventures* series. The game's author, who may be "Mysterium Tremendum" and prowled the booth in a trenchcoat, told me that the game was a great success at the last San Francisco MacWorld Expo. Look for a review in a future issue of the WAP Journal.

Game developer Chris Crawford (of *Balance of Power* and *Patton vs. Rommel* fame) also led a Mac micro-

clinic entitled "Games on your Mac!" After lamenting the nervousness of the Mac industry at the mention of Macintosh games (lest the machine not be taken seriously), he noted proudly that this was the first time a MacWorld Expo had ever included a session on gaming (failing to point out that we were relegated to the last place on the program!). In any case, after extolling the virtues of computers in general, and the Macintosh in particular, for playing games (and noting that most computer interface advances occurred in games first), Crawford presented his vision of the future. Basically, he says, there will be more and more true character development in programs. Games will look and feel increasingly like movies, where the characters have real personalities you care about, with desires and motivations of their own (as I said, these are *his* predictions). His own current project is a new macro-economics simulation to be called *Guns and Butter*, though he admitted that his all-time favorite game was not *Balance of Power* but *Strategic Conquest* (and he is looking forward eagerly to *Strategic Conquest II*).

In other news, Capstone has a new "oceanographic adventure simulation" for the IIe and IIgs called *Search for the Titanic* (\$34.95 list), and Data East has an arcade-style motorcycle racing program for the Mac entitled *Super Hang-On*. Discovery Software of Annapolis has a new action-adventure, *Sword of Sodan* (IIgs, \$49.95), which was favorably reviewed in the last issue of *Computer Gaming World*. Also, LucasFilms is timing the release of their *Indiana Jones* and the *Last Crusade* game to coincide with the film's premiere in June, so the program may be on the market by the time you read this. (But will there be any snakes? And how will they fit *both* Sean Connery and Harrison Ford onto the same disk?)

If you have any hot tips or hot topics you'd like discussed in this column, let me know. In the meantime, you might want to begin preparing yourselves for the upcoming Gaming Extravaganza at the mainWAP meeting this August. We're hoping for the usual fun and frivolity. 🍏


INVENTORY CLEARANCE SALE!

Apple II+, e - gs

40 MEG D4A Sider	\$650	45 Ms Access Time
40 MEG D4T Turbo Sider	\$795	24 Ms Access Time
90 MEG D9 Super Turbo*	\$1399	18 Ms Access Time
(Above ALL ProDOS Operating System)		
Zip Chips	\$140	
20 MEG D2 Sider	\$495	85 Ms Access Time
(ProDOS-Pascal-CPM-DOS 3.3 Operating Systems)		

(301) 431-0853
Ask for Lee Raesly
HARD DRIVES "12"ME

SIDERS! SIDERS! SIDERS!



PLS

*Also available for Macintoshes

Apple II Games

The Usurper

by Charles Don Hall

The full title of this text adventure game is *The Usurper, Book III: The Mines of Qyntarr* (Sir-Tech, Apple II series). Books I and II have never been published, and no one I talked to at Sir-Tech was sure they actually exist. It runs on Apple II family computers with 128K, and comes with MS-DOS 3.5" and 5.25" disks so you can play it at work or at school.

The Usurper of the title is King Aken of Tor, who is in the process of conquering the surrounding lands. One of these lands is Qyntarr, a dwarvish nation consisting of a vast underground network of mines and tunnels. A magical orb was made by a dwarven wizard; it had the power to defeat Aken, but was useless against the invading armies. The wizard who created the orb hid it before he was captured and killed. Meanwhile, most of the rest of the citizens of Qyntarr hid in secret chambers of the mine. Unable to find either the dwarves or the orb, Aken withdrew the armies, leaving traps and monsters in the outer passages. The dwarves are now attempting to recover the orb. As the game opens, you have discovered one of them; who has not found the orb but instead has stumbled across the path to the surface. Dying, he asks you to finish his quest, that is, to find the orb and use it to destroy Aken.

The best feature of this game is its size; it has hundreds of different locations to explore. This gives it a less "claustrophobic" feeling than most adventure games — a definite advantage if you were irritated by the map in *Leather Goddesses of Phobos*, where whole *planets* were condensed into half a dozen rooms. Of course, this has some disadvantages. The program is on a single disk, so the individual room descriptions aren't very detailed, and the vast majority of the rooms are not important.

The game's biggest defect is the style in which it is written. It is certainly a fine product by pre-Infocom standards, but it doesn't draw the

player into the game the way an Infocom adventure does. The descriptions are too sparse, and the game doesn't succeed in creating a believable, internally consistent world. For example, one of the early rooms is half-painted, and cans of yellow paint are stacked in it. However, there is no indication of who is doing the painting, why the room is being painted, or why the nearby rooms are unpainted. A nearby room is inexplicably lined with a blue foamy material, and another is a rotating horizontal cylinder with pieces of broken glass sliding around, where it is nonetheless impossible to hurt yourself. Perhaps they're part of a funhouse someone is building, but none of the other nearby rooms seem related to the funhouse concept. All three of these rooms are just scenery; there are no puzzles and no moveable items in them. Infocom would not do this.

The parser is powerful, although the program won't let you do very many things. If you type in something unexpected, it will just say "You can't do that" instead of telling you why you can't do it, or giving a hint as to what you should do instead. One caveat: the parser isn't quite as powerful as the package leads you to believe. On the back of the box, the command "Steal the tinderbox, whack the ogre on the head with the tasty frankfurter, then run through the east door and hide" is shown. While you can certainly type this in, the program won't understand it. It recognizes everything but the word "hide," but that word causes it to throw out the whole sentence. If you leave out the last two words, then the parser works fine.

I haven't finished the game yet, but the puzzles at the beginning are all fairly easy, and liberal hints are given for the one puzzle without an obvious solution. I'm stuck somewhere in the middle of the game, but feel like I'm overlooking something obvious. This game is probably suitable for novices.

Bottom Line: *The Usurper* is above average when compared to non-Infocom all-text adventures, but suffers badly when compared with Infocom's products. It was therefore released at a very good time, because

Infocom is starting to get away from adventure games, and hasn't published any in the past several months. I would therefore recommend this game for people suffering from severe Infocom withdrawal.

GS Games

King's Quest IV: The Perils of Rosella

or "This is no business for a lady!"

by David Wood

Perhaps the tagline is a bit misleading. The fact of the matter is, not only is Rosella (the title character) a lady, but so is Roberta Williams, the first lady of Sierra games and the author of this adventure. Still, the game holds a few challenges for gentlemen, too.

The version being reviewed here is for the 512K Apple IIGS with optional joystick, second 3.5" drive and hard disk. (That's right ... hard disk!) The back of the *King's Quest IV* box proudly proclaims that this adventure takes up more than 3.0 megabytes of disk space (3 x 3.5" disks), and I believe it. If you have one drive, you'll be switching disks between many major scene changes and your "save-game" disk. If you have two drives, and you put in the second and third disks so you don't have to swap between them, you'll still have to swap in the game disk somehow. Fortunately, those of us with *AppleWorks* GS have gotten so used to disk swapping, we can see a call to the Standard File Operations toolset coming 40 or 50 opcodes in advance. Or you can put the game files in a folder on your hard disk and run them from there. The program has no hardware copy-protection, but if you lose your instruction book, you're still sunk just the same.

Anyway, on with the story... You'll remember from *King's Quest III: To Heir Is Human* that Prince Alexander and Princess Rosella had returned to Daventry, and King Graham was about to pass along the "adventurer's cap" when he was seized with pain and fell to the ground, dying. Everyone gathered by his bedside, justly worried about him, when Rosella was seized with grief and ran back to the throne room to worry. She voiced her wishes to help him, and the Magic Mirror showed her an image of Genesta, the good fairy of Tamir, who told her of a magic fruit on Tamir that would restore him to health and give him many years to come.

But there was a catch (isn't there always?). The witch queen Lolieth had recently taken Genesta's magic amulet, and Genesta's powers were fading rapidly; she had only one day to live unless she got it back....

And so it goes. From my time playing, it seemed that everyone wants something that everyone else has, and you have to get everyone else what they want before you get yours. Remember the classic line from the cartoon?: "Gosh, I wonder what the cheese will want!" It's not too hard to believe.

The scenery is fairly rich and detailed, and *most* things you need to know you can get either by talking to people or by looking at scenery (there is one hat trick having to do with the unicorn's bridle). There's also a whole bunch of characters in the game to talk to, although not too many of them are friendly. There are a number of hazards, too, that make the game rough going.

Other things make this game interesting, like the full day and night cycle (there's only one because you have only the one day and night to complete your transactions), the 10 minute animated introduction, which gives you more detail than the above thumbnail sketch, and the music, mentioned below.

The game itself plays like most Sierra games, with game controls to move you around and the keyboard to type in commands. It uses enough of Sierra's standard parser to make it playable, but error handling could

have been a bit more entertaining and/or creative ("What's a kuss?" "What's a sarch?" "What's an eap?"). And they're still using brixels, the Sierra standard graphic unit (in the GS's case, it's two standard pixels stuck side by side), reducing the resolution to 160 x 200.

Then there's the music and sound that I promised I'd tell you about. Frogs croaking, ravens cawing, and then there's William Goldstein. No, you don't actually hear *him*, but you *do* hear some of his work, commissioned specifically for the game. In case you don't know, Goldstein did the music for *Fame*, *Hello Again* and *Switched On Classics*. In all, he has about forty minutes of original music which he performed himself. Sound good on paper (contradiction intended)? On the GS, which virtually has a built-in synthesizer, the selection of instruments used for said fantastic music is pretty thin.

Overall, though, I'd have to say I'm pretty satisfied with *King's Quest*

IV. It's playable, it's pleasing to the eye, and I haven't gotten through it yet. And *that's* where it has my respect.

Look: 8/10 (Brixels, brixels everywhere! Still, the scenery is nice if you sit two feet away from the monitor).

Feel: 9/10 (The standard Sierra parser is very good; the one on *Manhunter: NY* was fortunately just a phase).

Play: 9/10 (Some good puzzles, good characters, a good week's entertainment. Or a month, it all depends...).

Total: 9/10 (It had minor flaws, but what game doesn't?). 🍎

**Go to the
GameSIG!**

June 1st, 7:30 p.m.
at the WAP office

Apple II Games

The Magic Candle

by Charles Don Hall

The *Magic Candle* (Mindcraft, Apple II family, \$49.95 list) is kind of a sequel to *Rings of Zilfin*. In other words, it was written by the same author and uses a similar play system, but the package never mentions the earlier game. This is probably copy-right-related; the two programs are published by different companies.

Magic Candle apparently takes place in the same world as *Rings of Zilfin*, but on a different continent. The backgrounds are the same: thousands of years ago, the region ("Deruvia" in this game) was attacked by demons from the evil land of Gurtex. The army was defeated with the help of the Eldens, a race of powerful magicians. In the centuries that followed, the Eldens mysteriously vanished and most of their lore was lost. Now, Gurtex is invading again. Modern day

magicians are too weak to put up much resistance; Deruvia's only hope is to recover the Elden lore and artifacts that were used to repel the last invasion.

The primary artifact is, of course, the "Magic Candle." It seems that the last invasion was halted when the opposing commander, the arch-demon Dreax, was captured and imprisoned within the flame of this candle. Since candles tend to burn out, a group of Guardians was appointed to cast the spells to keep the candle repaired. At about the time of the latest invasion, all of the Guardians vanished; presumably, they were slain by the forces of evil. The candle will burn out in 1,000 days, freeing Dreax. If this happens, then Dreax will take command of the invading army, sealing Deruvia's doom. Otherwise, the invaders will eventually be defeated.

The goal of the game is therefore to discover the Elden lore needed to repair the candle. This requires the player to perform a complex ritual, which involves 6 artifacts and 18 magic words, most of which must be found in various out-of-the-way places.

The player's "alter ego" is Lukas, whom the king has appointed to lead the quest. He must always be a member of the adventuring party, and the game is over if he dies and is not resurrected in time. He can have five companions with him; they must be recruited from a list of volunteers. There are 12 volunteers in the castle where the game starts, and 12 more powerful ones in another castle on the other side of the continent. These characters are all pre-generated; you can't create new ones.

In addition to the standard character types (fighter, ranger, wizard), there are a few that you won't see in any other adventure (tailor, gemcutter, blacksmith). These can be surprisingly useful. For example, a dwarven blacksmith can pull his weight in combat, and in town can get a job at the local smithy for 6 gold pieces an hour. When the party's weapons get worn out and break, repairs can be done more quickly if he is a member of the party.

The early stages of the game are spent exploring the king's castle and some of the nearby towns. Conversation is done in the Ultima style: every non-player character (NPC) can be asked about "advice" and "rumors," and some of them will give information on other topics if you can figure out what to ask them about. Characters do not move, but they do have daily schedules, so they might materialize at 9 A.M. and dematerialize at 5 P.M. The best strategy is to spend 24 hours of game time wandering throughout each town, so you can be sure that you meet everyone. The game is pretty forgiving as far as information goes; for every piece of vital information, there will be two or three characters who will give it to you, or at least tell you who has it.

When you're exploring towns, you'll need to have a hobbit in your party. The nice thing about hobbits is

that they are harmless; they have almost no skill with weapons, and no talent for magic whatsoever. This means that townspeople aren't afraid of them. Almost everyone will talk to a hobbit. On the other hand, when a wizard tries to talk to someone, he'll probably get a response like "I'm busy right now (Charisma needed = 30)." From this we can see that NPC's are basically a bunch of snobs, but at least they'll let you know exactly what you need to be accepted into their cliques. You *will* want to take the hobbit back to the castle and trade him for a wizard or a warrior before you get into heavy combat.

Combat is also based on the Ultima system. When the party encounters monsters, the screen shows an arena; combat continues until everyone on one side or the other is dead. Surface combat is fairly easy, but dungeons are *hard*, and force you to use every resource at your disposal.

Your resources are weapons, magic mushrooms and spells. Weapons are either swords or bows. Each character has a sword skill and a bow skill; these can be raised in combat or by taking classes in town.

Magic mushrooms can be bought in towns, or picked in the wilderness if you find a patch of them. They can also be found in treasure chests in dungeons. The types of mushrooms include the "nift," which makes the user immune to the next three physical attacks; the "mirget," which triples the user's strength for one round; and the "sermin," which restores the user's energy and allows him to go without sleep for days (or weeks, or months). If you see a group of Concerned Parents picketing your local software store, it will probably be because of this game.

There are 24 different spells, 6 in each of 4 spell books. In order to cast a spell, the character must first memorize it from a spell book. Characters start the game with no more than one spell book; they must find and buy the other books before they can learn the other spells. As usual, the spell is forgotten when it is cast and must be re-memorized. However, a wizard can hold up to 99 copies of each spell in memory. The only catch is that memo-

rizing a spell takes time, and the magic candle is getting shorter and shorter....

I said earlier that you'll need to use every resource at your disposal in the dungeons; the monsters are tough and smart. For example, the most powerful monster is the Azrael. It gets one or two magical attacks per round, and magical attacks are always successful. Four of these attacks on a character with the maximum possible number of hit points and the strongest possible magical shield will kill him. Azraels are so smart that they almost always direct their attacks at your wizard. There are several rooms with two Azraels and a host of other monsters. The way to survive is to use spells to paralyze the worst of the magic-using monsters, while your fighters down magic mushrooms like they were popcorn and fight their way through the front lines so that they can kill the Azraels before too much damage is done.

You have to be careful to pay close attention to everything. Several times, I've gotten halfway into combat, only to discover that my magic user has run out of paralysis spells, or someone has run out of mushrooms or arrows, or someone's magic-shield needs renewing, or the "wear and tear" on someone's weapon got too high and it broke. Usually I can survive, but it can be a nerve-wracking experience. If you're more organized than I am, you'll remember to bring up the character status screens after every battle and check all the numbers associated with things that can go wrong. If you *aren't* more organized than I am, then you'll be glad to know that you can save the game inside the dungeons.

The game has no difficult puzzles in it. It is frequently necessary to use an item or a chant to get past an obstacle, but careful questioning of townspeople will give you the solution.

The biggest disappointment in the game is that it doesn't have many of the cute graphics that were in Rings of Zilfin. This game is bigger and more complex, so there wasn't as much room for graphics. There is a nice animated sequence where the party crosses a chasm by going hand-

over-hand along a rope, and the endgame is cute (especially if you flub it and release Drex). But there really isn't anything to equal the giant bird and centipede in Rings of Zilfin.

Bottom Line: This is a fairly easy game, but you can get lots of trouble if you don't pay attention to what you are doing. Absolute novices should probably not play it; but those with one or two other role-playing games under their belts will enjoy it. 🍏

Book Reviews

Innocence Ends

by Bob Platt

West of Eden: The End of Innocence at Apple Computer by Frank Rose (1989 Viking, 343 pp., \$19.95)

West of Eden is a very well written book by a professional journalist who brings an objectivity not found in earlier autobiographical accounts of Apple. The style is a bit unnerving, with a nameless narrator sitting in and describing all the

key meetings and events during the formation and evolution of Apple.

Reading books on Apple and the painful reorganization of 1985 is a bit like reading the script for the next Rocky movie. You know there will be a big fight scene, you know who will win, but you are interested in the events which lead up to the scene. This book holds the reader's interest with a narration from 1983-86.

This book adds to previous accounts by placing more emphasis on Apple's product development efforts

after the first Macintosh and the roles of Jean Louis Gassée and Jay Elliot (Apple's Director of Human Resources).

Lest you think that Frank Rose has the last word, you should know that Guy Kawasaki has written his own account, *The Macintosh Way*, to be available in the fall. Guy discussed the book at the recent National Apple User Group Conference, and it will offer both humor and insight into the development of the Macintosh and the current state of the software industry. 🍏

PC RESOURCES, LTD.

1850 Centennial Park Drive • # 300 • Reston, VA 22091 • (703) 860-1100

YOUR #1 MACINTOSH DESKTOP PUBLISHING SERVICE BUREAU & LEARNING CENTER

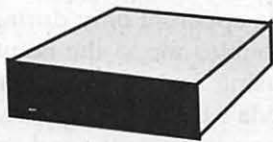
Appointments Recommended

Color Your Output

QMS ColorScript™ 100 output to 11" by 17" including transparencies
AppleFAX Communications • IBM Connectivity
Scanning • Digitizing • OCR Services
Large Monitors • Projection Pads • Slides
Toner Cartridge Recharging

MacUpgrades

Hard Drives



IMPRIMIS

Fastest Drives Available for Mac
 209 Meg Wren V.....\$2212
 160 Meg Wren III.....\$1995
 106 Meg Wren II.....\$1425

Quantum

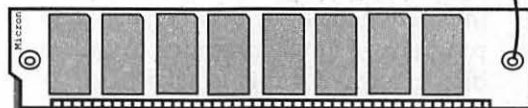
Next Best Thing to a Wren
 40 Meg Pro Series.....\$550
 80 Meg Pro Series.....\$975
 105 Meg Pro Series.....Call

Outrageous Memory Sale

For Mac Plus, SE, II, IIfx & SE/30
 High Quality & Speed (120ns)
 Price Includes Installation
 American Made Micron Memory

1 Meg
 \$199

Call for configuration information,
 or about High Speed Disk Drives,
 High Resolution Video, Accelerators,
 or any Mac products.



Sigma
 Designs
 Full Page
 Pageview
 \$999

Razor Sharp!

Call for Info
 on SilverView,
 LaserView or
 RasterOps

Grand Opening of
 Our Bethesda Showroom
 Call For Directions

589-8888

4336 Montgomery Ave • Bethesda, MD 20814

A Final Word on Finale

Getting a grand's-worth of music from a \$1,000 music notation and sequencing system

by Raymond Hobbs

In my April column I promised to conclude my remarks on Finale, Coda Software's new \$1,000 music notation and sequencing package for the Macintosh. I am still in a learning mode with Finale, however, so there may well be a number of features of the package of which I haven't yet had the opportunity to avail myself. Nonetheless, I have had occasion to use a great number of notation and sequencing options of the program, and so I will base my conclusions on those features, along with the ease of use and effort required to learn them.

Last month, I discussed two of Finale's several modes of sequencing. The first method is used in conjunction with its "Speedy Note Entry" tool, as an aid to conventional computer notation, while the second method, the "Hyperscribe" tool, involves playing a single line of music at the keyboard, which Finale will record display, in proper musical notation. The third mode is similar to the second, in that you play the music in and have the opportunity to "tap" in the tempo by striking a key or controller (pedal, etc.) to set the beat. This time, however, the tempo can be set after the fact, that is, after you have played in the entire sequence in a free-form style. Also, you may use both hands on the keyboard for the musical entry — Finale will record all parts on the grand staff, using your choice of keyboard split point as the determining factor for which stave the part will appear on.

The Finale tutorial suggests that the user play a few measures of whatever, but I chose to enter the entire Debussy "Claire de Lune." After choosing the keyboard split point, I played the piece, and Finale huffed and puffed and put the thing in a buffer which I would later be able to display in notation. First, however, I needed to provide Finale with a met-

ronome beat. Finale asked me to identify the MIDI control on which I would be tapping out the beat, and I selected a lower note on the keyboard. Then I played the piece back, while tapping out the time with a finger. Again, Finale huffed and puffed (I don't have any type of accelerator card for my Mac Plus, although a speedy Mac is definitely recommended). Finally, the computations were concluded, and Finale put my score on the screen. Unlike my few simpler measures of last month's test, there were a number of differences between Debussy's score and Finale's. I spent another half-hour using Fi-

nal's superb editing tools to clean up the score.

nal's superb editing tools to clean up the score.

I think that Finale passed this test with good marks — proper notation of an impressionist work is significantly more difficult than for a baroque piece (the type that always seems to be used by marketing types as an example of the package's competence).

One last subject should be covered on Finale's capabilities. A package like this requires a great deal of interactive dialogue between user and program — Finale provides countless dialog boxes for this to take place — and this type of interaction consumes a substantial amount of time. Therefore, Finale also includes the capability to load in sets of preferences as to number of staves, spacing between them, key and time signatures, tool set displayed onscreen, ornamentals readily available, and the way that

certain tools default for use. These sets are easily called and, once constructed, become powerful timesavers. The catch is that they must be constructed in the first place, but as I've said before, you shouldn't use Finale unless you're willing to spend the time necessary to learn the package thoroughly.

Overall, I think that Finale does a great many things well. I think also that it does few of them easily. The learning curve for this package still looms in front of me. The "Mac User Interface" will appear, if not utterly alien to the user, at least not as predictable as in other programs. I think

that there will be only Finale power users or Finale nonusers. Casual users will wind up in one or the other of the above categories. Also, for orchestral works, Finale's MIDI implementation (which is apparent only during playback) troubles me to the point that I prefer using one of my other packages. Coda's technical support, which is free for a few months and available at a charge thereafter, responds quickly and confidently with accurate information (which is good, because the manual is not designed to respond to problems, but as a tutorial or a memory-jogger on the proper use of Finale's many tools). Since I never rate packages on a scale, I won't rate Finale, but I would recommend this program only for the most serious computer music enthusiasts, and then only to those willing to climb the alpine learning curve inherent in this powerhouse. 🍏



CD-ROM, Where are You ?

by L. Jay Aceto

Most people in the PC industry are well aware of the potential of optical media storage as the premiere backup technology. But where is this technology today? Articles have been published saying how fantastic CD-ROMs are, but, are they selling, and how come we don't see those silver clear discs in our local software stores? Who's buying? What's for sale anyway? And, is it expensive?... .

The growth of the CD-ROM industry has been below the expectations of industry forecasters as well as that of end users. The forecasts have varied significantly from a low of 40,000 units to a high of 150,000 units for 1988. The reasons for the forecasts are almost as varied. As we are all aware, the price of CD-ROM drives has come down enormously, and data access times have been cut in half to an acceptable average of 35 ms.

However, other factors also determine the variance in market forecasts. The perceived lack of applications and related software have left most of us believing that it is all vaporware. By all industry forecasts, 1989 should be the year of the CD-ROM. Current estimates for 1989 are again as high as 150,000 units worldwide.

Most CD-ROM applications will be targeted towards the vertical markets. The acceptance of those markets will determine the future of the CD-ROM industry. The markets I am referring to are those in the private sector — medical, legal, and technical reference materials. Other markets include government, libraries, education and the computer industry itself.

Estimates on CD-ROM drive sales will be largely dependent on these vertical markets, and whether or not the applications get to the markets. Price will also be an important factor. Considering that almost 80% of all CD-ROM information is reference material that is currently available in other less expensive formats, it is difficult to justify the big bucks for many

of the databases that are currently available.

If the vertical markets that CD-ROMs are targeted towards are currently suffering from inefficiencies in acquiring, distributing, and manipulating data that is currently in other formats such as paper, microfiche, tapes, and online services, then vendors of CD-ROM databases can move to fulfill the growing need for rapid and random access of data on disc.

Many distributors are offering resellers bundled CD-ROMs with CD players in order to help resellers introduce the new format. Apple computer was one of the first to offer the special price bundles. Other bundles are also available, and this should help consumers to evaluate the capabilities of the high capacity/easy portability that has previously revolutionized the recording industry.

CD-ROM sales are up as predicted, and sales in Europe according to Knowledge Research Ltd. will top 50,000 installed units by the end of 1989, and are expected to grow to over 250,000 by the end of 1992.

CD-ROMs have their place in the computer market as a peripheral with

enormous capabilities. Their success is almost certain. What is not certain is how quickly they will reach their markets and trickle down to end users.

Worm drives, EOD (Erasable Optical Disks), and local area networks are the topics of a series of articles to be presented in the future. CD-ROMs may be the storage of choice in the micro-computer industry for mass storage and archiving memory-intensive data.

It is important to remember that CD-ROMs are in their puberty. Consumers do not know exactly what CD-ROMs are, and the media hype — artists are under pressure from vaporware generators to get the word out to the general masses. Despite popular opinion, CD-ROMs are not growing in quantum leaps as did the audio disc. Many big market-oriented companies have decided that it is too early to jump into the CD-ROM market.

Lastly, if you are dying to know what several hundred megabytes of data will sell for, here is a list I have compiled from manufactures information and product releases over the last few months. 🍏

L. Jay Aceto has a degree in Electro-Optical/Mechanical Engineering and is currently employed by AAC Associates. He is a consultant to Image House Graphics, a CD-ROM archiving company in Vienna, VA.

CD-ROM Sampler

Title	Vendor Name	Price	Network Site License
AGRICOLA	OCLC	\$1,095	no charge
AGRI - Stats	Hopkins	\$49	no charge
AV Online	Silver Platter	\$795	no charge
Biblio Med	Digital Diags.	\$950	\$150/node
Bookshelf	Microsoft	\$295	not available
Books in Print	R. R. Bowker	\$395	no charge
Chembank	Silver Platter	\$1,750	no charge
C-CD ROM	Alde Pub.	\$99	no charge
Desktop Photo.	Comstock	\$495	Available
DRUGDEX	Micromedex	\$3,775	Pending
E - Book	Eclat	Unknown	no charge
ECON Stats	Hopkins	\$49	Available
ENFLEX (Fed)	ERM	\$3,000	Pending
ENFLEX (State)	ERM	\$500	no charge

➔ 51

LOWEST PRICES - GUARANTEED

**HIGH SPEED
40 Meg SE**

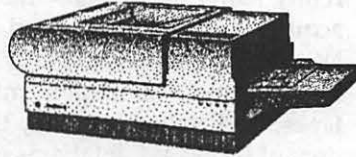


\$ 2,796*

* Keyboard extra

Mac SE with 1 800K DiskDrive
40 Meg Quantum Drive,
(12 ms 2 yr. Warranty) ,
with HD Software, Hypercard,
and Free Stackware.

**Laserwriter II
NT in Stock !**



\$ CALL

**CAI/SONY
800K
External
Drive**

\$ 199.00

HIGH SPEED

80 Meg SE



\$ 3,396*

* Keyboard extra

Mac SE with 1 800K DiskDrive
80 Meg Quantum Drive,
(12 ms 2yr. Warranty) ,
with HD Software, Hypercard,
and Free Stackware.

SONY®

**3.5 " DS/DD
FLOPPY DISKS**

\$ 16.95 10 PAK

**2400 Baud Ext.Modem
\$159.95**

COMPUTER AGE sm

Sales Locations

9433 GEORGIA AVE.
SILVER SPRING, MD
(301) 588-6565

10606 US 1
BELTSVILLE, MD
(301) 937-0300

9431 GEORGIA AVE.
SILVER SPRING, MD
(301) 565-9130



Authorized Dealer

**We have while-you-wait service on
most Apple equipment!**

LOWEST PRICES - GUARANTEED

MACINTOSH SALE!



\$ 2,449*

**With 20 Meg
Hard Disk**

* Keyboard extra

Macintosh SE with Internal MiniScribe 20 Meg Drive (68 ms access 1 yr. warranty on Hard Disk), Hypercard, and Free Stackware.



\$ 1598

20 Meg

MacPlus

Keyboard Included

CAI External 20 Meg Drive (1 yr. warranty On Hard Disk), w/ HD Software, Hypercard, and Free Stackware.

Mac II System Sale

Put together a system that works the way you do.

- 68020 CPU at 16 MHz
- 1 Meg RAM
- 6 32 bit expansion slots
- Wide selection of configurations
- 1 800 K Floppy

\$ CALL



Authorized Dealer

MAC II INTERNAL HARD DISKS

Mac II 40 Meg Drive (12ms)

\$ 599

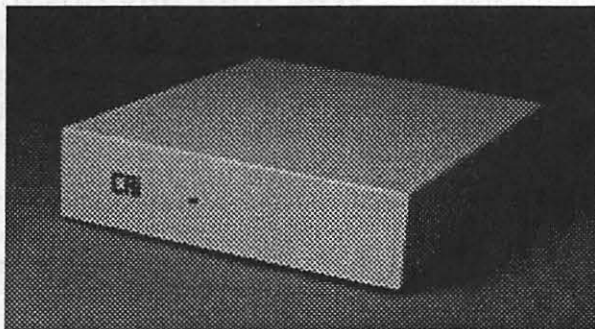
Mac II 80 Meg Drive (12ms)

\$ 849

MacScan Digitizer
on Sale

\$ 695

CAI External SCSI Hard Disks



20 Meg

\$ 399

30 Meg

\$ 549

40 Meg

\$ 649

46 Meg

\$ 599

80 Meg

\$ 899

Desktop Puzzling

Puzzled by desktop publishing bugs?

by Ron Moore

Getting a second opinion.

In a recent discussion covering the continuing saga of virus infection, one person spoke about his conversation with the tech support department of a large software vendor. During the installation of the software, it was normal for Vaccine to warn about some aspect of the loading process. When questioned about the annoying warnings, tech support advised the customer to turn off Vaccine.

I beg to differ. The few beeps that Vaccine gives in performing its function are less annoying than a viral infection. Viral infections can be introduced in the loading process. So, please don't turn off your only means of protection.

Congratulations go to Quark for adding the viral infection integrity checker to version 2.1. Like Fever, integrity checking is a new process that checks to see if your file is bigger than it's supposed to be, a possible sign of infection. One way to check for possible infection is to keep a list of software by name, date installed, size, and last modify date. If experiencing problems, check against this list to see if the file size of the program has changed since the original installation date. If so, you may have a virus.

Take me with you when you go.

Have you ever tried sending your document to a service bureau for output, only to find that certain elements are missing? You may have thought that the document alone was all that the bureau required for output. This is not the case.

For starters, a copy of your screen fonts is needed. The fonts you're using may be Adobe, Bitstream, Compugraphic or Apple; Fonds or Nfonds; or, may use one point size master or many sizes. A suitcase acts as a sort of "translation table" that tells the Li-

notronic how to run your particular job. This suitcase is unique to every customer. If you use a printer font that your service bureau doesn't have, you must also send along a copy of that.

Graphics created outside the page layout program must also be sent with the document. The original graphic should not be sent. Instead, send the graphic in the file format in which it was saved. Even though some layout programs will show a low resolution version of the graphic within the document, the high resolution version will not be printed out unless it is also sent to the service bureau.

Any custom data files (like those in Quark) that are kept outside the program should be sent. They may hold common information like hyphenation exceptions, custom colors, kerning and tracking tables, style sheets, or preference files.

Sending all of these files may be time consuming, or may be forgotten altogether. However, take heart, there is a solution. You can give your bureau a PostScript file. Properly prepared, a PostScript (print to disk) file contains all the graphics, font information, and coding needed to properly run your document.

There is magic in PostScript, but it's still misunderstood. PostScript is not quite the universal language that many people think it is. If you want to create PostScript print files, you need to target the specific printer to which you will output. This is because each type of printer you target creates a different kind of PostScript file that may not run properly on other printers. If you decide to send PostScript files to a service bureau, there are some issues to consider.

First, you should be using the latest version of the Apple printer driver, preferably the same one as your service bureau. Second, many options are available when a file is printed to disk

which should not be exercised. For example, you should not download fonts into your PostScript file if your service bureau has the entire Adobe Library. Finally, PostScript files cannot be easily edited. If you send PostScript to your bureau, you are solely responsible for any mistakes that appear in your final output.

In the final analysis, you can send PostScript print files if you are sure of your technical expertise in printing to a Linotronic. If you decide to send PostScript files, please consult with your service bureau about other important issues. If you are a new or inexperienced user, it's best to let your service bureau take on the problems of printing your document.

Going back to square one.

Many problems that we encounter at our service bureau have to do with people still having problems mastering the basics of their software and utility programs. By the time many calls reach us, the customer is frustrated or on a tight deadline. We try to help them over the phone, but many times we refer them to the appropriate pages of their user's manual.

What we have noted is the surprise that these customers show at the suggestion to read the manual. Effective advertising has lured some customers into thinking that the desktop programs are so simple that their use will be instantly apparent to the user. This is not necessarily true. It's always good to take the time to read the manual because it saves further headaches down the road.

Why did I buy this thing?

How much word processing do you do with your desktop publishing software or how much desktop publishing do you do with your word processor?

Desktop publishing programs continue to evolve, offering new features like color separations or better print speed. New versions of software are constantly being released. These versions may offer drivers for new output devices, or macro keys that will make your life easier, or a variety

of features that not everyone will need. Sometimes it seems as though a software release does nothing more than copy the features of the vendor's nearest competitors.

Many people lose track of the fact that the main purpose of their word processor is to capture keystrokes or provide search and replace functions. If you are happy with the present version of your software, you may want to take the "wait and see" approach to upgrading. See if the new upgrade has features you can't live without. See if the bugs have been worked out. If you need the extra features or love to experiment with new software, fine. Get the upgrade. However, consider the fact that new features require new training. You may not have time to learn them, or time to work out the new problems that inevitably come with new releases.

Print the other side at the same time?

No, it's not a brand new PostScript printer that can do double sides. It's the next best solution—one that will save you money at your service bureau and print shop.

To save money on single sheet back and front printing, try the following. For two 8.5" x 11" pages, compose the job as a tabloid (11" x 17"). The front and back should be next to each other, side by side. The tabloid page should be less expensive to output at your service bureau than two 8.5" x 11" pages.

The bill should be less at the printer's shop as well. The printer can make one tabloid size printing plate instead of two 8.5" x 11" pages. This will save stripping charges and should lower your bill. After the first side is printed, the printer will flip the printed stack over. Then the second side is printed so that the image for the back is properly oriented to that of the front. The only extra cost is to cut the final tabloid pages in half, thereby creating two 8.5" x 11" pages.

You can save even more along the way by having your service bureau process your job to film instead of paper. It will save time and prep charges at the printer.

I'm better – but I'm faster.

When you print are you looking for speed or quality? Proofs or final output? Or, LaserWriter or Linotronic output? After these questions have been answered, it is up to each user to work with the print dialog box options to achieve maximal results.

One item that confuses many desktop publishers is the option for faster or better printing. Selecting faster increases the print speed, which is ideal for proofing laser proofs.

However, faster is not ideal for final, high quality output. For final output, choose better.

Better will increase the quality of graduated screens and color separations when using high resolution output devices, such as the Linotronic.

Other options that will increase the quality of final output are the use of crop and registration marks. These marks will help the printer position the final pages for accurate print alignment.

Screen dumps discontinued on the Mac II?

Do you miss making screen dumps because you believe that it can't be done any more? The manual says it can be done but lets clarify where the manual is lacking. Remember MacPaint, or at least the format the system functions with is black and white. If you try the keystrokes suggested in the manual and don't get the desired results, try changing the settings of the system to black and white. Screen dumps can only be done in the black and white mode.



Your document is esthetically unpleasing
and refuses to print!

➔ 47 CD-ROM

CD-ROM Sampler

Title	Vendor Name	Price	Network Site License
Fast Track	NYNEX	\$10,000	Pending
GEOdisc	Geovision	\$1,500	Pending
Haystack	Ziff-Davis	Unknown	Available
LazerROM	HP	\$2,700	no charge
Life Sciences	Cambridge Sci.	\$1,250	Available
LISA	Silver Platter	\$995	Pending
Metro Scan	Digital Diag.	\$600	no charge
Moody's 5000+	Moody's	\$5,000	no charge
NATASHA	Knowledge Ac	\$495	Pending
NTIS	Silver Platter	\$2,250	no charge
OSH-ROM	Silver Platter	\$900	no charge
PC Plus	Stand. & Poors	\$18,000	Available
PDR	Medical Econ.	Unknown	Pending
Pravda (86-87)	Alde Pub	\$249	no charge
PsycLIT	Silver Platter	\$3,995	Pending
SocioFILE	Silver Platter	\$1,950	Pending
Sports Discus	Silver Platter	\$1,250	Pending
Stat Pack	Microsoft	\$125	unknown
TOMES	Micromedex	\$1,495	Available
Wall Street	UMI	\$990	Available
ZIP +4	Info Design	\$3,950	Pending

Imagewriter Alternatives

by Jay M. Thal

Larry Stedman, in the April Journal, reported on Imagewriter alternatives, and I thought that I should share my experience.

Back in the dark ages ten years ago, when I bought my + (that's II, not Mac), I was very pleased with the output of my (pre)friction-feed 9-pin Epson MX-80. As time went on I craved for a letter quality printer. Finally, after nearly eight years I bought a 24-pin Epson LQ-800 and a switchbox so that I could have the "best" of both worlds: the LQ-800 for word-processing (Appleworks), and the old MX-80 for printing graphics.

Then it happened! My son started college, and he "needed" a Mac. Well, with college costs what they are, you try to save where you can, so we bought a "previously-owned" Mac Plus and "saved" some more by getting an Olympia NP-30. What Larry wrote is true — it is *slow*! But, it works well. Working with computers certainly teaches you the relative nature of time; the NP-30 literally whizzes along compared with a manual Remington or a Selectric and not all of us can save for (or justify) a Laser-Writer — lust, lust.

Well, then came my son's first between semester break. With the dufflebag of dirty clothes and the electric guitar, he could barely lug home his Mac Plus sans printer. What to do?

The answer was right there on the glossy pages of the magazines. The Orange-Micro Grappler-LQ would make the linkage between the Mac and my Epson LQ-800, and all this for a street price of "only" \$95. Seemed simple.

Well, the Grappler's documentation was less than one could desire. So, what's new? It did work but, initially, the result was barely NLQ except in draft mode which was letter-quality with erratic spacing. And, we would get a dash at the left margin 1" down with the text starting 2" down. So off went a letter to Orange-Micro.

I certainly can't complain about

Orange-Micro's user interface because one of their staff promptly called with some answers. First, he suggested setting the DIP switches at OFF, OFF, OFF, ON, a combination never mentioned in the instructions. That cured the top margin and dash problem. The second suggestion brought print quality up to nearly the the letter-quality I'd been getting from my 8-bit/Epson combination.

The problem is one of scaling. The Mac screen displays at 72 dpi, and the IW LQ prints at 216 dpi, three times the density. The multiplication is done automatically. But 24 pin printers can't relate to that figure. They can be made to print at 180 dpi (two and a half times 72) which explains the slightly lower quality I've been experiencing. Orange-Micro will tell you that the difference between 180dpi and 216 dpi is unnoticeable to the un-

trained eye. Don't believe it! And since I've been used to the Epson's 360 dpi horizontal/180dpi vertical capability, I'm spoiled.

If you multiply 72 by four you get 288 dpi which allows you to work with the Grappler LQ and a non-Apple parallel input laserprinter combination from a Mac. In theory I should be able to achieve this (at least horizontally) on the Epson I'll have to keep experimenting.

Anyway, my Epson now, also, chugs along slowly and unidirectionally. Ever so slowly. As Larry mentioned, there is no free lunch.

Another major problem is Apple's protectionism. Our favorite computer company apparently refuses to license its fonts so Orange-Micro uses Bitstream® fonts: SWA Courier, Dutch, and Swiss, the latter two look like Times® and Helvetica® — *but not on the screen!* The screen images will drive you crazy! So work with resident fonts on screen and convert at printing. If your word processor doesn't allow for a global change of fonts upon printing, forget it. 🍏

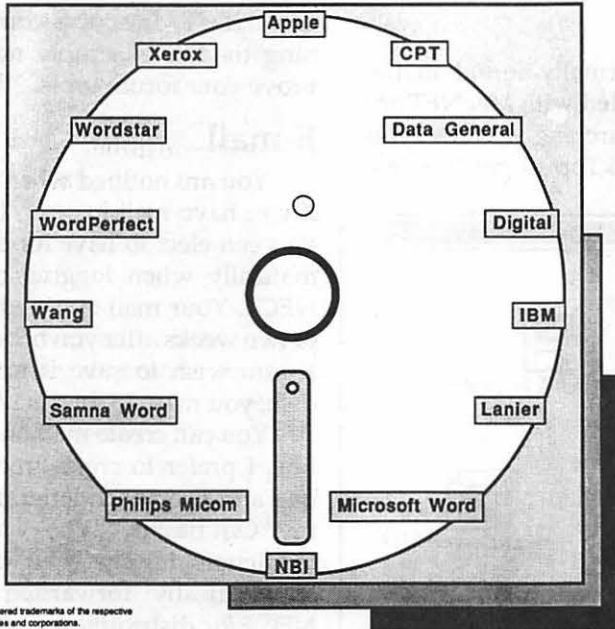
\$2600

The Power to EXPAND
THE MACINTOSH® II, with its 6 slots, math co-processor, and 32-bit microprocessor make it a mighty powerful machine. Price of \$2600 is for the CPU, and is available to Washington Apple Pi members only. **NO DEALERS.** Limit one per customer. Quantities limited to stock on hand.

Apple, the Apple logo and Macintosh are registered trademarks of Apple Computer, Inc.

Sunrise Computers
164 N. Burhans Blvd.
Hagerstown, MD
301-790-3060

Can all these word processing systems interchange formatted documents?



All registered trademarks of the respective companies and corporations.

they can, with our help...

Introducing more alternatives from Summit, the leader in media conversion...

- Media conversion services.
- Hardware/software sales.
- Software only solutions.

We can even convert from your old word processing systems using an impact printer to the new electronic publishing software and laser printing equipment - Xerox 6085, Microsoft Word on the Macintosh, and others.

Summit can do many other conversions...if Summit can't do it, it probably can't be done!

For more information contact:
Mr. Lynn Shanton
 Director, Commercial Division
 Summit Research Corporation
 One West Deer Park Drive
 Gaithersburg, Maryland 20877
 (301) 840-1707

APPLE Discounts from VF Associates

MACINTOSH CORNER

- ◆ DS/DD DISKS, BOX OF 10 \$14.00
- ◆ DS/DD DISKS, CASE OF 50 \$65.00
- ◆ HIGH DENSITY DISKS, BOX OF 10 \$36.00
- ◆ HIGH DENSITY DISKS, PAK OF 25 \$85.00
- ◆ 10 DISK STORAGE BOX \$2.50
- ◆ 36 DISK STORAGE BOX \$9.00
- ◆ MODEM CABLE \$19.00

5-1/4 INCH DISKETTES & STORAGE

- ◆ SS/DD, BOX OF 10 \$5.00
- ◆ SS/DD, PAK OF 25 \$11.00
- ◆ SS/DD, CASE OF 100 \$39.00
- ◆ SS/DD, CARTON OF 500 \$175.00
- ◆ 2-NOTCH/DS/DD, BOX OF 10 \$6.00
- ◆ 2-NOTCH/DS/DD, PAK OF 25 \$13.00
- ◆ 2-NOTCH/DS/DD, CASE OF 100 \$45.00
- ◆ 10 DISKETTE CASES (each) \$2.25

5 for \$10.00

SPECIFY COLOR CHOICES: (BEIGE, BLACK, BLUE, GREEN, GREY, RED, YELLOW)

- ◆ 75 DISK FLIP TOP CASE \$11.00
- ◆ 160 DISK LOCKING CASE \$29.00

PRINTERS

- ◆ CITIZEN 120-D \$189.00
- ◆ STAR NX-1000 \$199.00
- ◆ PANASONIC 1080I/2 \$199.00
- ◆ PANASONIC 1091I/2 \$219.00
- ◆ NEC P2200, LO \$395.00
- ◆ STAR NB-2410 \$495.00
- ◆ STAR NB-2415 \$625.00
- ◆ NEC P5200 \$645.00
- ◆ NEC P5300 \$845.00
- ◆ LASERJET PLUS COMPATIBLE, 1.5 MB \$1825.00

PRINTER ACCESSORIES

- ◆ 1000 SHEETS OF PAPER \$19.00
- ◆ 2500 SHEETS OF PAPER \$29.00
- ◆ PANASONIC/CITIZEN/EPSON RIBBONS \$7.00
- ◆ GRAPHICS PARALLEL INTERFACE CARD \$59.00
- ◆ PRINTER STAND \$14.00
- ◆ PRINTER CART \$59.00

- ◆ SWITCH BOX, 2 WAY \$25.00
- ◆ SWITCH BOX, 4 WAY \$39.00
- ◆ P-LINK 75 FOOT W/32K \$149.00

DISK DRIVES

- ◆ 5-1/4" FLOPPY DRIVE \$95.00

MODEMS

- ◆ 300/1200 EXT. \$89.00
- ◆ 300/1200/2400 EXT. \$129.00

MONITORS

- ◆ MED RES. COMPOSITE \$89.00
- ◆ HI RES COMPOSITE/GREEN \$129.00
- ◆ HI RES COMPOSITE/AMBER \$139.00
- ◆ COMPOSITE COLOR \$239.00
- ◆ RGB COLOR \$269.00
- ◆ MONITOR VLF FILTER \$59.00
- ◆ VGA MONITOR CABLE \$24.00

CHIPS

- ◆ 64K, 150 NS \$2.95
- ◆ 256K, 150 NS \$10.00

GENERAL ITEMS

- ◆ SURGE PROTECTOR \$9.00
- ◆ 6-OUTLETS WITH SURGE PROTECT \$19.00
- ◆ MINI POWER CENTER \$58.00
- ◆ CABLE GENDER CHANGER \$9.00
- ◆ CABLES (S OR P) \$19.00
- ◆ MOBILE COMPUTER STAND \$139.00

COMPATIBLE COMPUTERS

- ◆ LASER 128, APPLE COMPATIBLE \$395.00
- ◆ LASER 128EX, APPLE COMPATIBLE \$475.00
- ◆ VF-PC, IBM COMPATIBLE \$536.00
- ◆ VF-AT, IBM COMPATIBLE \$964.00
- ◆ VF-386, IBM COMPATIBLE \$3164.00

GAME I/O DEVICES

- ◆ STANDARD JOYSTICK \$29.00
- ◆ CH MACH III JOYSTICK \$39.00
- ◆ MOUSE \$75.00

THIS MONTH'S SPECIAL!

High Density Diskettes:
 Box of 10: \$36.00
 Pak of 25: \$85.00

SPECIAL PERIPHERALS

- ◆ COOLING FAN WITH SURGE PROTECT \$39.00
- ◆ POWER SUPPLY \$69.00
- ◆ NO SLOT CLOCK \$39.00

APPLE IIc CORNER

- ◆ SECOND DISK DR FOR IIc \$95.00
- ◆ HOTLINK TO PARALLEL PRINTER \$55.00
- ◆ GRAPPLER C \$99.00
- ◆ PRINTER OR MODEM CABLE \$20.00
- ◆ DISK DRIVE CABLE ADAPTER \$14.00

◆ DENOTES NEW PRICE ● DENOTES NEW ITEM

VF ASSOCIATES

8231 Woodmont Avenue, Bethesda, MD 20814

LOCAL: (301) 652-4232

LONG DISTANCE: call 800-666-STAR.

Bulletin Board Service (Modem) Bethesda: (301) 320-6098
 UPS SHIPPING: \$4.00 per order plus \$6.00 per printer or monitor.
 Computers: \$30.00

Add 10% per 30 days for purchase orders.

NOTE: Prices change often. Price on date of purchase applies. 3/89

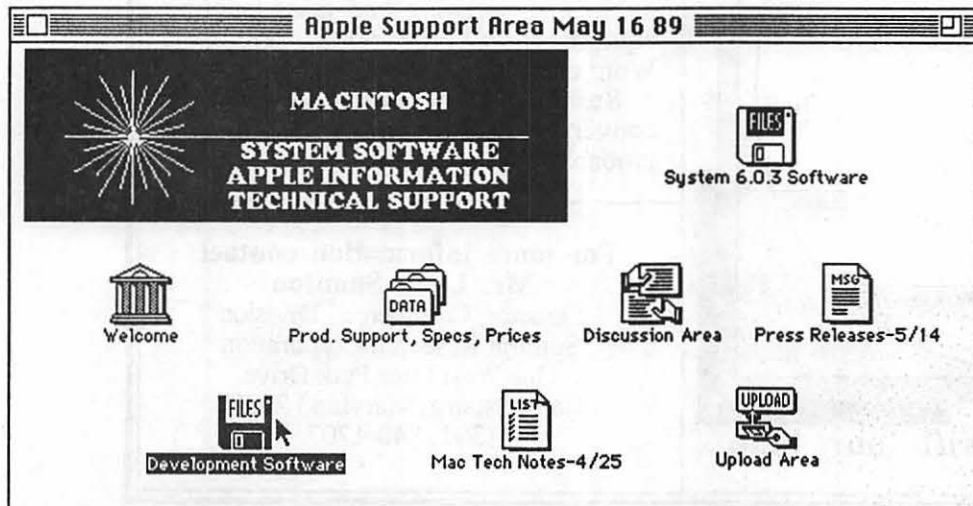
CONNECT with MacNET

Finally a Mac-like front end for telecommunications

by Jeff Alpher

CONNECT Professional Information Network is a full featured bulletin board and electronic mail (E-mail) service. MacNET is a Macintosh appli-

Features not normally found in the Finder but included with MacNET are sophisticated searching options (you need to buy DiskTop to get this fea-



cation specifically written to take advantage of CONNECT's services. For those that lead dual lives, PC/MacNET is similar to MacNET and runs under Windows on PC's and compatibles. The current version of MacNET for the Mac is v1.0.

Because MacNET software is needed to gain access to CONNECT, one cannot really be separated from the other. I will be taking a brief look at both of them here.

Forums

The MacNET software presents a Mac-like front end to access CONNECT. For those familiar with Navigator on CompuServe, this will be no shock. But those used to standard command line interfaces (like the WAP bulletin board) will be amazed by MacNET's likeness to the Mac Finder. Using MacNET to access CONNECT is like using the Finder to access a large hard disk. Folders, pull down menus, and on screen buttons (like Full Impact or SmartCom II) all contribute to MacNET's ease of use.

ture in the Finder) and "Last Since..." which shows you all items added to a folder or set of folders since the day specified. Very handy if you log on every few days and just need to catch up on the latest stuff.

Each separate area of discussion on CONNECT is known as a "Forum." The manager of each "Forum" sets up a number of folders that the user clicks on to gain access to the information within. The individual documents are listed by name, date, and size (newest entries first). Clicking on a document downloads the document to your computer for display in a window. You can read the document, save it to your local hard disk for later reading, or discard it by clicking the close box. A pull down menu lists all the open windows for quick access to buried windows. Documents, which are usually brief, can optionally have an attachment (some kind of Macintosh file), that you have the option of downloading.

Anyone can start a forum at no charge. A private forum (one where the users need a password to access it) requires that you purchase 20 copies of MacNET to sell to the users of your forum. A public forum (no password access) can be started at no cost to you. CONNECT, Inc. (the company running the show) simply needs to approve your forum topic.

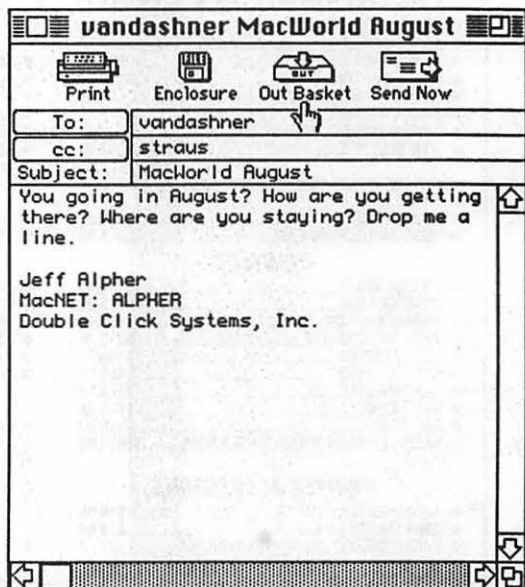
E-mail

You are notified when logging on if you have mail in your "In Basket." You can elect to have it opened automatically when logging onto CONNECT. Your mail is stored on-line up to two weeks after you have opened it. If you wish to save it to your local disk, you may do that as well.

You can create mail on-line or off-line. I prefer to create my letters off-line and drop each letter created into my "Out Basket." When I log on later, the letters in my "Out Basket" are automatically forwarded to CONNECT for distribution.

You can create an address book with nicknames for easy lookup. If you know someone uses CONNECT but you don't know their ID, you can ask the system to find it for you. For example, you can look for last names beginning with "John." Distribution lists can be created for sending the same letter to multiple recipients.

Other features include "Mail Forwarding," "Mail Response," and "Who's read this mail?" options, all available from the pull down menus.



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

Gateways

Gateways allow users of one bulletin board service to transparently access another service. Currently, CONNECT offers a gateway to MCI. Other gateways have been announced and should be on-line soon, including a fax service (currently in testing). The advantage of a gateway is that you don't need to learn how to use the E-mail of other bulletin board services. For example, to send mail to someone on MCI, I prepare E-mail as if it were going to someone on MacNET. The only change is that I enter "username@MCI" on the first line of my message. CONNECT routes my message to MCI and MCI handles the rest.

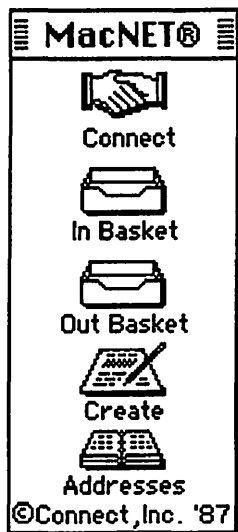
Performance

The 1200/2400 baud connections work without a hitch. MacNET supports 9600 V.32 modems, but I have not had an opportunity to test this out. For those of you that have a 9600 modem, there is a local 9600 access number. I have not benchmarked upload/download times compared to bare bones packages like SmartCom II and Microphone II, but there doesn't seem to be any significant delays when transmitting/receiving files using MacNET.

MacNET seems very robust. I usually have half a dozen INITs, half a dozen applications, and 2 or 3 DA's running at once under MultiFinder. MacNET has never crashed or locked up my system.

Documentation and Support

MacNET comes with 75-page user/reference manual and a phone number directory with local phone numbers used for accessing the system. Most of the manual is in the style of a tutorial. When you want to learn a new feature, you turn to the table of contents or index, find where the command or service is described, and follow the step by step description. Normally I would want to see more technical information included in the manual; but in this case, it turns out not to be necessary. Once you are on-line, you can direct questions to Con-



nect tech support, which is responsive and knowledgeable. Just drop your note off, and next time you log on, there's the reply. They have a toll free live support number as well, but this I haven't used. As for upgrades, I have not seen any announced policy.

I understand that a new version of the software will be out sometime this year. I suspect it may be free or nearly free if you download it from Connect.

Special Mention

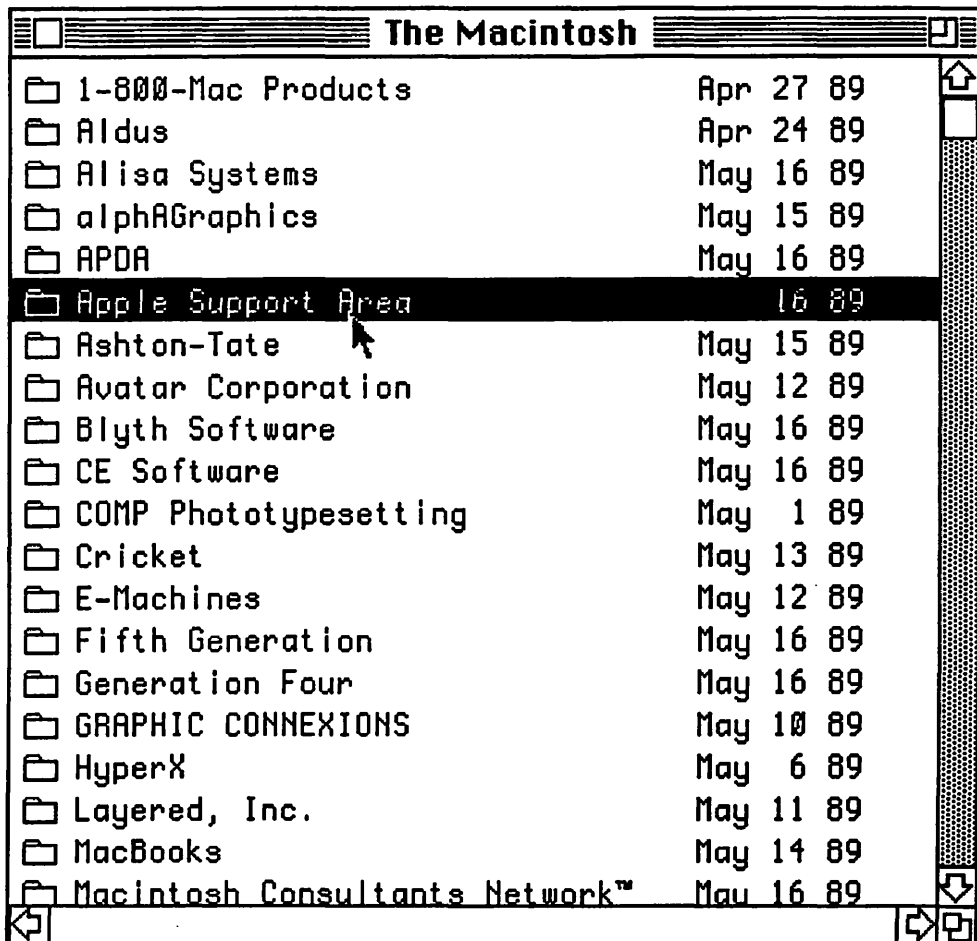
MacNET has some of the best dialog boxes I have seen since the Apple's Lisa computer. The dialogs are informative and suggest solutions to problems. This is something I'd like to see other applications imitate.

Cost

Because MacNET only works with CONNECT, you will still need another communications package to dial up other services. However, if the information/services available on CONNECT are useful to you and the standard command line interfaces try your patience, look closely at MacNET. Also, at \$4/hour off peak and \$8/hour peak (8 a.m. to 7 p.m. local time), CONNECT is a bargain compared with most professional on-line services. (120K of data upload/download is included for each on-line hour.) The retail price for MacNET is \$74.95, PC/MacNET for Windows is \$74.95. (I think user group members get a break on pricing, check with CONNECT, Inc. on that.)

Mac NET® and PC/MacNET™ available from CONNECT, Inc., 10101 Bubb Road, Cupertino, CA 95014, 408-973-0110.

Jeff Alpher (MacNET: ALPHER) is a consultant specializing in database and systems design. Call him with questions at (301) 630-2036. 🍏



Life & Death

by Gail West

The halls are dark. You walk to the patient's room. As you enter the room, the patient is lying on the bed, waiting for your examination and diagnosis. You slowly palpate the abdomen, 'listening' for specific complaints or absence of complaints. From there you make a decision, whether or not to obtain additional tests. Once you have reached your conclusive diagnosis you must decide: surgery, observation, or medication. A wrong choice and the patient winds up in the morgue. If you decide to operate, proper technique is essential, from opening incision to closing suture and everything in the middle.

In case you were wondering, no, I didn't send this to the wrong journal. I am referring to a program called "Life & Death" by The Software Toolworks. It's available for the Mac. Apparently it's been available for some time in color on the IBM (Oops, did I really use that word? Sorry my language is deteriorating these days!!). The Mac version is monochrome (even for a Mac II).

Once you make yourself "known" on the floor with the nurse, you are instructed to report to the medical school. There instructions are given to you in a classroom. There is a "slide projector" to catch your most awkward moments in the operating room. (The copy protection is a "beeper" that has you looking up doctors and places for phone calls; if you don't get the right number your "privileges" are suspended.)

Next the nurse tells you where your patients are. Once you enter the patient's room you must do a physical

exam of the patient and view his/her chart for symptoms. Then you decide if further tests, such as an X-Ray or Ultrasound is needed or if the patient needs a referral, medication or simply observation. If the X-Ray or Ultrasound indicates that the patient needs surgery, all you need to do is to order it. The patient's chart looks like a clipboard; there is even a place for you to "initial" it. The program saves the initials you put in the staff office, where you also get to pick your assistants for the surgeries you will perform. You also choose your level of skill there.

The surgeries you are allowed to perform are: an appendectomy and an

“ DO NOT BUY OR PLAY THIS PROGRAM IF YOU ARE FAINT-OF-HEART! LIFE & DEATH IS THE WORLD'S FIRST INTERACTIVE MEDICAL MOVIE. IF YOU PLAY IT, YOU WILL HAVE THE TERRIFYING RESPONSIBILITY OF HOLDING HUMAN LIFE IN YOUR HANDS AS YOU CUT INTO LIVING FLESH! ”

aortic aneurysm graft repair. The graphics are rather vivid (or at least as vivid as monochrome can get!).

For the appendectomy, once you make your incisions you have to clamp and cauterize bleeders. Sometimes, especially on the subcutaneous layer, it's difficult to see the bleeders. You incise the skin layer, the subcutaneous layer, oblique muscle, transverse muscle, and the peritoneum. Then you get into the technical stuff. Like finding the appendix, removing it, and putting everything back where it belongs. The patient sometimes has some other plans for you, like having some sort of cardiac arrhythmias (that's an irregular heart rate to you lay people) that you have to treat properly. The Chief of Staff is constantly

looking over your shoulder and thinks nothing of pulling you from a case if he thinks you are negligent. (Hmm, maybe we need more Chiefs like him in the real hospitals.)

Once you have become proficient with appendectomies you are presented with a certificate of achievement from the Chief of Staff. From there you may progress to aortic aneurysms. With the aortic aneurysm repair you must begin the operation with a different type of incision. More mid-line rather than diagonal. Once you get through the skin, subcutaneous, and muscle layers, you must get through the peritoneum, as the aorta is retro-peritoneal. Once you successfully complete the aortic grafting, you will also get another 'certificate' from the Chief of Staff. From there your patients could need any kind of treatment or surgery.

If I'm sounding more confusing, don't worry; there is printed information that will make the situation a bit less cloudy. The Chief of Staff will give you helpful hints as well, but you have to watch closely. The program keeps track of your cases: Successes and

Failures! If you make a major error you will send your patient to the morgue!!

I have found the program to be a bit quirky. It occasionally crashes right in the middle of an important operation, or decides you did something wrong when you in fact did not.

I have successfully completed both operations & countered the complications successfully on the beginning level. For Intermediate and Advanced levels, the arrhythmias and complications come much more quickly but I have found that the program also becomes more touchy and crashes easily.

It is distributed by Software Toolworks; 800K drives required. It costs about \$35. 🍏

Mac Answers

Q & A

by
David Morganstein &
Martin Milrod



I recently upgraded my SE by adding an accelerator card. All of a sudden my hard disk is not working right. Is there any connection?

Unfortunately, there may be. Both CMS and Micronet have indicated there may be problems with their hard disks (HDs) and accelerator cards. We have experience with 60M drives (using the Seagate 272 HD) not working right with Radius accelerator cards and DataFrame Speedcards. They fail in one of two ways; they won't boot at all or you get random bombs when accessing the HD, such as when launching an application, saving a file, etc. If you can start your Mac with the accelerator turned off, you can determine if your problem is a conflict like this. With the Radius accelerator, for example, do a re-set and hold down the mouse button. You will get a dialog box that lets you disable the accelerator till the next reset. Try this and see if the problems disappear. If your HD is still in warranty, you probably can swap it for another unit. According to Micronet, the problem is unpredictable (and our experience backs this up). Some HDs work fine while others will not.

One small word of caution, however. The Radius Accelerator does not turn off completely; some residual program variations still occur even when the accelerator is turned off. You may want to be sure by testing the non-working software on a "straight" (non-accelerated) Mac.

Should I upgrade to Apple's latest LaserWriter Drivers and the latest System/Findér?

If you use a LaserWriter, the answer to the first question is an unequivocal YES. The latest LaserWriter Driver and Prep files eliminate most bugs and add many enhancements. You can use these drivers with most recent versions of the System/Findér (S/F); as discussed below you *don't* need the latest S/F to use them and you may not want the latest S/F. Please note that Apple has just announced a new LW Prep and printer driver version 6.0. It purports to deal better with gray shadings on LW output. The current version is 5.2 for Laser Prep and LaserWriter. *Make sure if you are on a network system of LaserWriters that all Macs on the net have the same version of the LW printer driver.*

The answer to the second question is more difficult. If your Mac has only one Meg of RAM you should probably stick with version 5.0 software, even though Apple recommends that you

use System version 6.0.2 or better. This is particularly true if you are using a floppy drive system – without a hard disk. The main reason is that System 5.0 uses less memory and leaves more room for your applications. If you *need* MultiFinder, add more RAM and then go to version 6.0.2/6.1. Only Macs with 68030 chips (SE30, IIx or IIcx) need version 6.0.3. I want to buy a color Mac. Should I buy a II, IIx or IIcx?

We would only suggest buying a II if you can get a really good price, say on a used one. If you are going to spend the extra money for a new machine, make it one of the 68030 'x' machines. These new machines don't offer major performance advantages over the II at this time. They do offer modest (10-20%) speed improvements [*My Mac IIcx is noticeably faster than my II; I think it has a faster disk drive—ed.*]. They have a PMMU chip built in, something required for A/UX, Apples Unix system. Of course, you can add a PMMU chip to a II if you want to use A/UX. The IIcx offers

➔ 78

MacSource

2121 Crystal Drive
Arlington, VA 22202
(703) 521-9292

...just across the bridge from downtown D.C.

1MB SIMMS prices
have gone down...call
today for latest

Come see the
WalkMac SE
portable computer

rent time on our Macs for scanning, laser printing, data translation (MS/DOS to Mac), OCR translation, or just to do your resume or presentation graphic. We also have one of the largest selections of software and peripherals

External floppy "superdrive" now available for 512Ke and up...read/write all MS/DOS 3.5" disks from 720K to 1.44MB and format Mac disks up to 2.5MB per disk!

LINOTRONIC
L300/RIP 2
LASER IMAGING

For Macintosh® Users

As Low As
\$4.40
Per Page
with 24-hour
Turnaround

8.5" x 11" page at 1270 dpi

- Free Pickup & Delivery for Orders over \$100.⁰⁰
- Up to 2540 dpi Resolution
- RC Paper, Film or Plates
- Typesetting & Illustration
- Complete Camera Service

(703) 354-1600



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



MacHeaven™

Your source for all
things Macintosh!™

- We **BUY & SELL** used
Macs & Mac peripherals
- We **RENT** Mac systems
- We **SERVICE** Macs
- We also sell **NEW** Mac
peripherals*, including:
 - **SuperMac**
 - **Jasmine**
 - **Levco**
 - **Everex**
 - **Seikosha**
 - **Olympia**
 - **Dynamac**

**The Best Prices
in the Metro Area !!**

* Call us if you'd like **your** product featured...

(703) 263-2567

14101-D Parke-Long Ct, Suite 206, Chantilly, VA 22021

"Providing Good Homes to Experienced Macs Since 1987"™

	A
1	Excelling On Your Mac
2	Part 24
3	by
4	David Morganstein

offered free to registered users. It fixes a number of bugs but doesn't tell you which ones! It does add the option of using external macros (xMacro) but this is for programmers.

In my mind, Informix' WINGZ has moved into first place

OK, now we have a real shoot out. We have Informix' WINGZ, Ashton-Tate's Full Impact (FI) version 1.1 and Microsoft's promise of Excel 2.2 RSN (Real Soon Now). If you don't own a spreadsheet now, what should you do? Or, if you own Excel 1.5, should you switch? Let's look at the options.

I won't say much about Excel 1.5 other than by way of comparison with alternatives. It is solid, field tested and a very useful product. Its biggest disadvantages are it can't see beyond one Meg of RAM no matter how much you have paid for, you can't mix fonts or font styles, and the macro language is beyond all but the most dedicated programming types. It has a modest variety of charts, but nothing fancy. The charting process, while easier than in Lotus 1-2-3 (what isn't) has some important limitations, particularly that titles and legends can't be linked.

Ashton-Tate is a big software house. When they put a product on the market, everyone takes a look. Full Impact (reviewed in the April '89 WAP Journal) went beyond Excel in a number of ways. First, it broke the 1 Meg limit. Second, it offered your choice of fonts and font styles. Third, it used a higher level language for its macro environment, bringing the joys of macros to the dedicated spreadsheet enthusiast. In my mind, it fell short in several areas. It was not very broad in the functions it offered. Frequently, if you imported a sheet from another source, you would be told many cells couldn't be translated because FI didn't support a particular function. A disappointment. Ashton-Tate added virtually no new charting options. The same array of bar/column/line/area and pie charts found in Excel. All in all, a mixed entry.

Recently released version 1.1 of FI is basically a maintenance upgrade,

when it comes to useable raw spreadsheet power. (Reviewed in the May '89 WAP Journal.) It has added several brand new 3-D chart styles, dressed in full color. It uses all memory available. You can mix fonts/styles to your desktop publishing heart's content. Its macro language is easy to use, offering long variable names and a high level language grammar which includes all the needed control structures such as DO WHILEs and CASE statements. What is still nicer, WINGZ provides a HyperCard-like option of placing buttons on your spreadsheet. These can trigger macros. Very nice.

Before you spread your WINGZ to fly, take note. There are a few 'problems' that need to be addressed. You can't split the screen as you can with XL and FI. You can open a second window, but the top and left of the WINGZ screen is so loaded that two windows barely fit on a 9" Plus or SE screen. Implementation of the Tables statement is absurd. Rather than be dynamic (you change the data and the Table changes), you must 'manually' compute a table. This means, if you have five tables and you make one change in your data, you'll have to recreate the five tables. I put the process of creating five tables into a macro (this part was easy as WINGZ, like XL and FI, has a recorder. Just turn it on and record the mouse-tracks). However, to play back the macro and recompute the tables took almost three minutes where XL recomputed the tables in less than half a minute. Another problem: I saved a text file which took 60K of space in XL. The resulting WINGZ file took over 500K! If you have a large hard disk, this may not be a concern ... however ... it needs some attention from Informix.

Given this as background, what do the recent articles about the upcoming Excel version 2.2 do to the

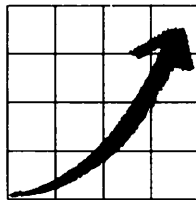
unfolding spreadsheet drama? First, by way of setting the scene, I ordered my Word version 4.0 update in late July of 1988 when Microsoft was saying it would ship in October. As I write this, on May 7, 1989, I have yet to receive the upgrade. Regardless of what v. 2.2 offers, you can't be sure when it will appear. If I was losing sales to Informix, I'd probably try to convince the followers to hang in there for the upgrade.

What can we expect of version 2.2? It will finally (four years later) break the one Meg barrier. It will, as does the MS-DOS version, offer mixed fonts/styles. It will add a whole bunch of macro commands for doing charting and eliminate some of the charting options associated with earlier releases. While it may offer a couple of new chart styles, these will not be as significant as the 3-D ones found in WINGZ. It will continue to use an arcane, assembly language-like macro grammar. It will be improved in performance, however. It will be faster and offer 'sparse matrix memory management' which will help those with only one Meg of RAM. You can expect better auditing tools and the addition of notes attached to cells (features found in WINGZ). You will be able to import dBase files and comma-delimited text files. As FI v 1.1 added external macro calls, so will Microsoft. Interfacing with other Microsoft products, XL will offer links to MS Mail and to MS Word. Database users will enjoy the easy creation of a data entry window. All in all, many major new enhancements.

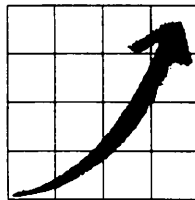
Who will be the winner of spreadsheet wars? Why you and I of course! The consumer always benefits from active competition in the market place. None of the current crop of Mac spreadsheets offers three dimensional data, layers of rows and columns. The FI and WINGZ macro languages are very nice, much easier to use than XL's. If you don't do macros in your windows, you won't need this facility. I remain impressed by the WINGZ charting options, not perfect but moving in the right direction. I think people who have invested time in Excel will stay; however, I'll bet Informix is doing well with WINGZ....

Find out what's up at MACWORLD Expo.

Attendance 1985 - 1988

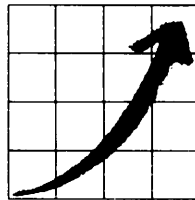


San Francisco
Up 144%

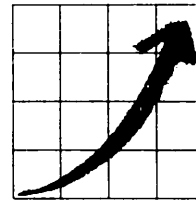


Boston
Up 166%

Expo Booths 1985 - 1988



San Francisco
Up 300%



Boston
Up 280%

You can always count on seeing the newest, the best and the most at MACWORLD Expo. That's why, year after year, the original Macintosh-exclusive computer show keeps getting more and more popular, both for users and for vendors.

Fact is, MACWORLD Expo will:

- Save you time and money . . . by literally putting at your fingertips the hardware, software and peripherals that represent the entire state of the art of Macintosh™ computing. You'll make smarter buying decisions.
- Build your knowledge . . . by enabling you to attend a helpful tutorial that meets your specific need, whether you use your Mac at the office, at school or at home. You'll learn from the experts.
- Develop your skills . . . by giving you plenty of opportunities to practice what you've learned, using one of the many Macintoshes that will be available to you. You'll get hands-on experience.

• Introduce you to the latest Macintosh products . . . MACWORLD Expo has traditionally been the platform for major new product announcements such as the SE/30 and HyperCard. You'll be at the forefront of new technology.

• Connect you with the best minds in the business . . . through user group exchanges, advanced user tips sessions, and discussions with the industry's veteran techies. You'll join a network of Macintosh pros.

The next MACWORLD Expo to come in 1989 is:

BOSTON
August 10-12, 1989
Bayside Expo Center • World Trade Center

The next move is up. Just fill in, detach and return the coupon below to MACWORLD Expo, Box 155, Westwood, MA 02090. We'll mail you the information you need to: get a special reduced rate on your admission, avoid the registration lines and make the most of your time learning what's up.

What's up, MAC?

Please send me details about MACWORLD Expo/Boston 1989

Exhibiting Attending

Name _____ Company _____

Street _____ City _____

State _____ Zip _____ Phone _____ APP

Sponsored by MACWORLD, the Macintosh™ Magazine. An IDG Communications publication. MACWORLD Expo is an independent trade

**MACWORLD
EXPOSITION**

show not affiliated with Apple Computer, Inc. MAC, MACINTOSH and MACWORLD are trademarks of Apple Computer, Inc.

MacWorld Expo — Washington

by Martin Milrod, MacWorld Coordinator

The Washington Convention Center saw the first MacWorld exposition take place April 25 - 28, 1989. This was first year occurrence and while no great bombshells were announced during the show, it was still counted as successful by both the MacWorld people - Mitch Hall Associates, and by most of the 230 vendors who took part. Some 25,000 people attended the show and, while earlier guesses as to attendance figures range from 20,000 - 45,000, most vendors were pleased with the dollar activities of their sales.

Some of the "bigger" firms did not appear: Adobe, Aldus, QMS, Claris etc. Aldus and Claris had separate suites at the Grand Hyatt hotel, across the street from the Convention



Nancy Pochecko

Center. Despite such disappointments, Mitch Hall assured me that he was pleased with the DC site location and that he would be returning to Washington "on a 12 month or 18 month" cycle. His company still has not announced their full listing of Expo dates for 1990, except for the San Francisco site which will take place in April, 1990. The Boston MacWorld will take place August 9 - 12, 1989, and we have already arranged that WAP will be in a 10 by 20 foot booth (#5027) in the World Trade Center.

The purpose of this article is three-fold, to thank the many volunteers

who helped make our booth a success, to report to the membership on the results of our first major booth effort and, lastly, to make some general recommendations concerning future WAP performances at the MacWorld Exposition. President Platt has suggested that it would be desirable to "spread the responsibilities for MacWorld" among other WAP members, so someone else will be handling the Boston MacWorld Exposition; this frees me to suggest important changes to that person without any fear of giving the appearance of a conflict-of-interest. (It also permits to celebrate an important family birthday at home, which I have missed over several years because of the timing of the Boston MacWorld Exposition.)

The Volunteers Who Helped

The following persons are listed at the risk of having omitted others who should have been named. Apologies in advance to those whose names should have been listed but are not. Let me also take this opportunity to publicly thank Jay Heller, Jim Russell and the great folk from BMUG without whom our booth breakdown and the return of supplies and materials to the WAP office would not have come off as well as it did. Thanks, Raines Cohen and your crew of tie-dyed T-shirted helpers.

The following gracious people helped staff the often hectic booth at MacWorld Expo (some even did multiple four-hour stints, bless their hearts and tired feet: Nancy Adams, Chris Bastian, Ralph Begleiter, Nancy Bird, Roy Blocher, Will Cate, Joe Chelena, Tim Childers, Richard Clark, Ellen Crockett, Ronnie Day, Manny DeVera, Benis Frank, Robert Fukuda, David Harris, Bruce Jacobs, Paul High, Mary Hockmeyer, Charlene

Jones, William Jones, Ann Knust, Paul Koskos, Bob Leedom, Susan Meehan, Kevin Nealon, Robert Platt, Colin Povey, John Ruffato, Tony Salerno, Bob Shaffer, Paul Schuh, Dana Schwartz, Lynn Trusal, Ron Weinstein, Rich Wohltman, Don Wong and Bob Vandegrift.

There were a few volunteers who offered to help out for limited hours



Marty Milrod

and were not called upon, but their offer to help should not go without recognition. They were: Anthony Bocci, W. Russell Bradley, Anthony Gonclaves, Alice Giancola, Stan Silber and George Spiers.

...Booth duty is a tougher job than you might think.

And a special thanks to the MacWorld Committee - Eric Rall, who coordinated booth volunteers, Bob Shaffer, who helped in the setup and breakdown of the booth, Lynn Trusal, whose signs, balloons and "video-capture machine" attracted so many people to our booth, David Weikert and Tony Salerno for the great job they did, respectively, in preparing the Mac Disks and the Mac Disketeria Catalog, and in supervising the stocking of our Mac Disks at the show. These persons were simply great and they worked in friendly, cooperative and pleasant manner. It was a pleasure working with them.

The Results of our First Major
June 1989

MacWorld Participation

Sorry, but as this was being written, I was told that the details of how we did were not available to me. (WAP received roughly \$13,000 in gross revenue, a quarter of which was received for the raffle-Ed) Regardless of our financial outcome, however, I rate the show a success for WAP. We gained, I estimate, about 100 new members and presented a competent and professional appearance for WAP. In short, our club was presented in an extremely favorable light at the MacWorld Expo.



Tom Ellis, president of Falcon Microsystems, drawing the lottery winners.



John Ruffato

WAP's New Booth

by Cynthia Yockey

Starting with April's MacWorld, where we debuted our new portable booth, Washington Apple Pi's name will now appear in lights at computer shows!

Our new booth is 8' X 10' and composed of hinged velcro panels that enable us to change its shape to suit our space at any computer show. WAP's name and logo can appear in lights on both sides of the booth. Because WAP's logo is usually shown in red, the dominant color of the booth is "Spanish red," with a platinum grey stripe in the middle — similar to the color Apple now uses for its computers. In addition, metal shelving purchased separately provides storage for the disks, membership kits, and other items the club sells at shows.

As chairman of the Booth Committee, I want to thank a number of people who contributed their effort and expertise to the booth's design and purchase. WAP President Bob Platt assisted at every step and helped steer us to the velcro panel-type booth, which turned out to be an excellent choice in that it can be adapted to different booth shapes, it easily accommodates an island display area, and artwork can be changed simply by having new pieces mounted with velcro hook tabs.

Booth Committee member Marty Milrod ensured that we had perfection in both form and function by reminding us that we had to create a booth that would look professional and serve customers. Booth Committee member Ray Hobbs made many useful suggestions on potential layouts for enhancing customer service.

Artist Judy Treible took the time to educate me on design principles that would make the booth both attractive and functional. Nancy Seferian and Marianne Chiguerre did a great job re-creating WAP's name and logo in Illustrator for use in creating signs. And Ron Moore ran the Linotron output for the signs on very short notice.

I would also like to thank the Board of Directors for voting to fund this project. I believe it is a wise purchase that will last many years and attract many new Washington Apple Pi members and Disketeria buyers. 🍏



Lynn Trusal

Woody Hume, Government Account Manager of Claris Corporation, presenting the array of Claris software to the winner of the MacWorld-WAP raffle, Drew Steis, President of Language Systems Corporation, Herndon, VA.



Language Systems FORTRAN

by Lou Pecora

A New FORTRAN

Last summer a new FORTRAN was released for the Macintosh. There were already two FORTRAN compilers in existence for the Mac, but the new release heralded the entrance of the Mac into the arena of big-time scientific computation. The new FORTRAN was developed by Language Systems Corp. of Herndon, VA and it now enables scientists and engineers to write number crunching code just like on mainframes. In fact you can write and run number crunching programs on the Mac and transfer them to the VAX computer (a favorite of scientific types) or even a CRAY and, with very few changes, expect them to run just like on the Mac, only perhaps, faster.

The Language Systems FORTRAN compiler will be reviewed here with mostly an eye toward number crunching, although I will say something about Mac toolbox access. I will also admit up front that I beta-tested the Language Systems FORTRAN compiler and, initially suggested many of the features they added. I don't mean to imply I had that much to do with the development, but that, in my opinion, they added the right stuff, and I saw it from the start. None-the-less, I believe this review to be objective. If you're looking for a FORTRAN compiler for your Macintosh, read on. This one's a beaut!

Why FORTRAN ?

I'll first tackle the general question of why FORTRAN for a programming language on the Macintosh? Yes, I've seen the smirky messages on the local bulletin boards whenever the FORTRAN language is mentioned. All those Pascal and C programmers wonder why anyone would bother with FORTRAN when more modern languages are available. For programming the Macintosh with toolbox stuff (windows, menus, icons, mouse events, etc.) or what is often called

systems programming, they're usually right. But consider this (get out your high school algebra books!): suppose you have an expression like this (where x and z are complex numbers):

$$x = y z a / (1 + e^{-z})$$

If you can't remember complex numbers, just trust me on this. Suppose this expression were needed to calculate something on a computer (very common for scientific-engineering computing). How would this look in a program? Here's how:

In FORTRAN:

$$x = y * z ** a / (1 + \exp(-z))$$

In C or Pascal:

$$x = \text{cxdiv}(\text{cxmult}(y, \text{cxpow}(z, a)), \text{cxadd}(1, \text{cxexp}(\text{cxneg}(z))))$$

The FORTRAN version looks almost like the actual equation. The C or Pascal version needs the user defined functions cxdiv, cxmult, cxpow, cxadd, cxexp, and cxneg to handle the division, multiplication, power, addition, exponentiation, and negation of complex numbers, I'm assuming the user has implemented a complex data type using structures or records. If you're a scientist, you can easily read the FORTRAN version; the other is opaque. No contest, boys and girls. FORTRAN wins hands down.

How important is this? Very! I can show you scientific programs where line after line consists of nothing but equations. It is easier to write and debug this type of computer program when the language allows you to express the equations in a form that is almost like the mathematical form. I speak from long, hard-won experience on this.

This is not to say that C and Pascal don't have anything to offer. Not so. I wish FORTRAN had many of the flow control features and data structures of both languages. But that brings me to my next point. FORTRAN is now being rewritten. The new version is labeled FORTRAN 198x. The x = whatever year the committee decides that the new FORTRAN is ready (it

looks like 9 or FORTRAN 199x now). The new FORTRAN will retain all of the mathematical fluency of the older language. In addition, it will add *many* more mathematical niceties, as well as C and Pascal flow control features, user defined data types, overloaded operators and much more. If you don't know what all that means, don't worry. It just means that FORTRAN will most likely remain the scientific programming language of choice and it will be a good one.

Finally, all those scientists and engineers have been busy writing lots of libraries of subroutines to calculate all sorts of things. Many of these are now available on the Mac (see below, again). It's nice to have them already written and *not* to have to rewrite them in Pascal, C, Ada, or whatever.

Language Systems FORTRAN is totally FORTRAN 77 compatible (this is the standard on all machines) and it already boasts some of the FORTRAN 8x structures as well as VAX compatible structures (see below). This makes it a good platform to use now and in the future on your Mac to develop and do number crunching.

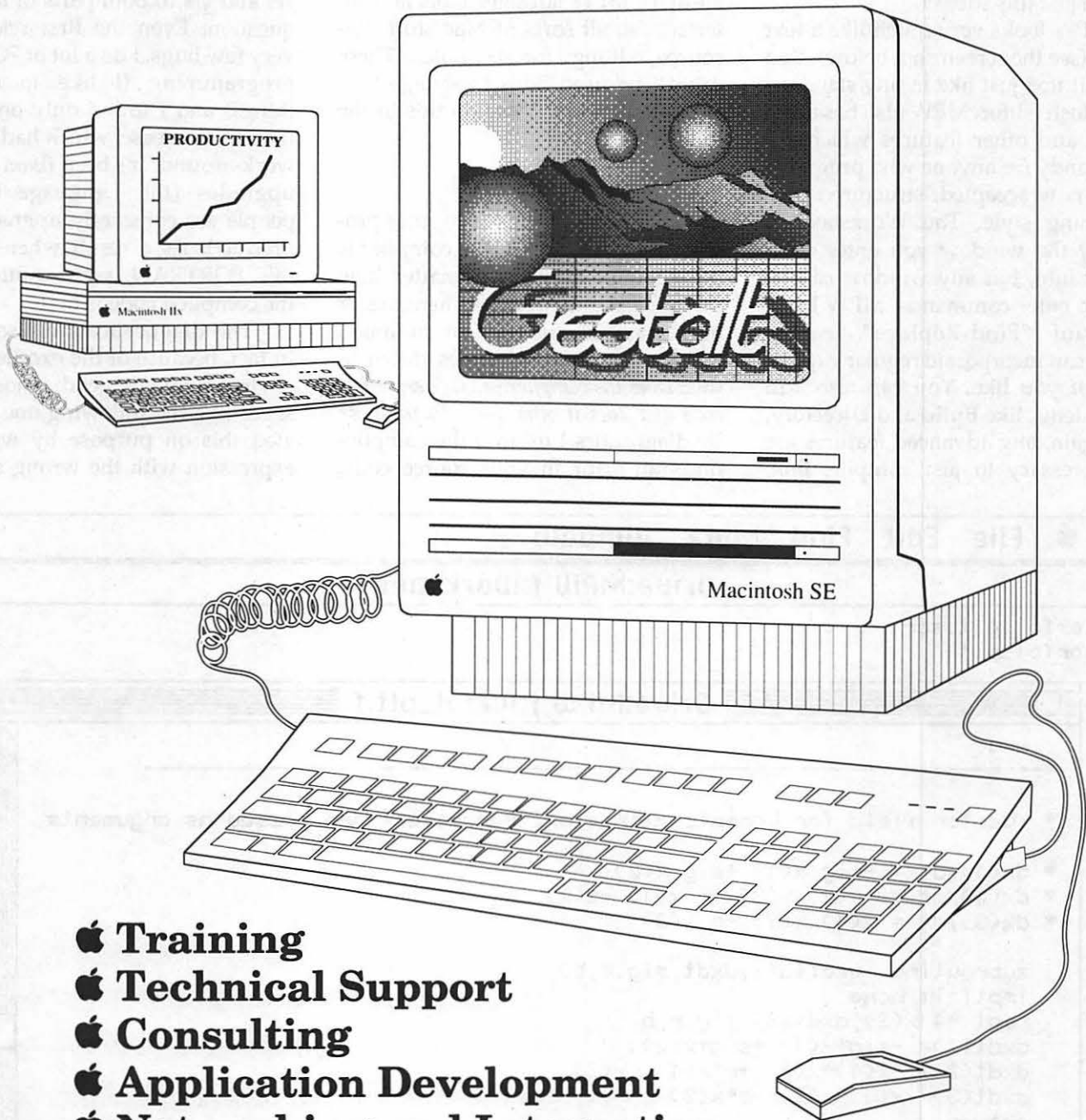
The Environment: MPW

Language Systems Fortran runs in the MPW environment, which you can purchase with the FORTRAN. MPW stands for the Macintosh Programmers Workshop. It is a "shell," in the parlance of computer scientists, along with several enhancements. That is, it is like the Finder, only in more of a UNIX or MS-DOS-like form. MS-DOS? Before you barf, that is meant only as an analogy. In fact MPW is more UNIX-like. Very powerful in its ability to handle files, be customized, and be enhanced. But you just want to compile, link, and run a FORTRAN program? No problem. That's easy, and easily learned in MPW.

Don't let all this scare you. To do number crunching you need know very little about MPW. It's just a nice environment to work in. If you need its power, it's there. If not, it remains hidden. You can be up and running Language Systems FORTRAN in MPW in 15 minutes. Perhaps the only confusion comes from the need to

Gestalt

Working to Maximize Your Productivity



- 🍏 **Training**
- 🍏 **Technical Support**
- 🍏 **Consulting**
- 🍏 **Application Development**
- 🍏 **Networking and Integration**

Gestalt Systems, Inc.
"Integrating People, Technology, and Organizations"

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

understand the Macintosh file and path-names. MPW has certain definitions for these and if your source file is buried in a folder (as most are), you must know how to tell MPW where it is. I think Language Systems could devote a little more manual space to this. It's the only point that I think is confusing to the MPW novice. Anyway, I've provided an Appendix for you on just this subject.

MPW looks very much like a text editor (see the screen shot below). You can edit text just like in any standard Macintosh editor. MPW also has auto-indent and other features which are very handy for anyone who programs in the now accepted, structured programming style. The Worksheet is usually the window you enter commands into, but any window can be used to enter commands. MPW has a powerful "Find-Replace" feature which can incorporate regular expressions, if you like. You can also add menu items, like Build and Directory, but, again, any advanced features are not necessary to just compile, link,

and run a FORTRAN program.

So, in MPW you can edit your programs and immediately compile, link, and run them. If you have sufficient memory, run it under MultiFinder to have quick return to your editor-compiler. Just like Lightspeed C, for example.

For those who have desires to get into the Mac toolbox (QuickDraw, and all that), MPW supplies tools and interfaces to all sorts of Mac stuff (Resource editing, for example). These can all be used with Language Systems FORTRAN. More on this in the following.

The Compiler

Like in most other computer programming languages, the compiler is the heart of things. No matter how many bells and whistles there are or how many claims for fast compiles, much programming comes down to this: *Does the compiler produce error-free code and does it offer good diagnostics?* By diagnostics I mean if the compiler finds an error in your source code,

does it report it back to you in a clear fashion so you can "fix things"? You'd be surprised how often in the computer world the answer to both these questions is no. In fact my own (bad) experience with the first FORTRAN on the Mac (Absoft-Microsoft FORTRAN) taught me to ask these things.

Happily (very happily), Language Systems FORTRAN has the answers *yes* and *yes* to both parts of the above question. Even the first release had very few bugs. I do a lot of FORTRAN programming (I like to calculate things) and I found only one bug in the initial release, which had a simple work-around. It's been fixed in recent upgrades (the Language Systems' people are constantly upgrading this product). As a result when you use this FORTRAN, your confidence in the compiled code is high.

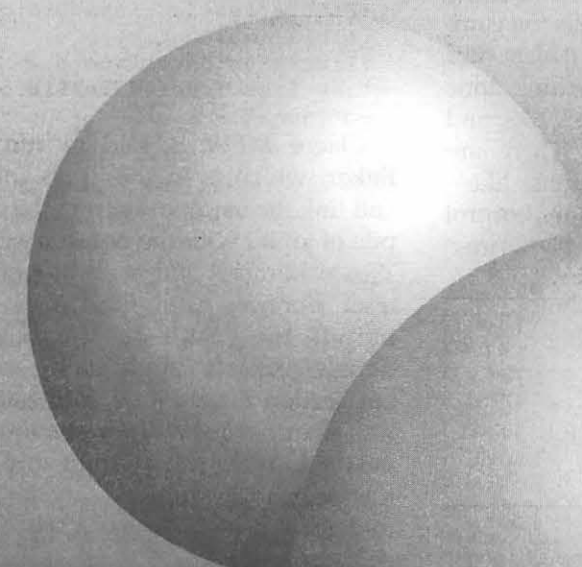
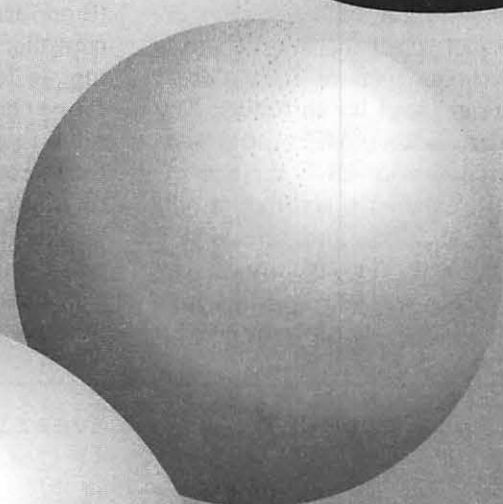
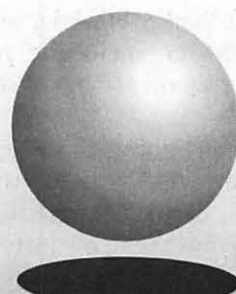
The diagnostics are also superb. In fact, because of the excellent MPW environment you get diagnostic messages like the following one. I generated this on purpose by writing an expression with the wrong syntax in

```

File Edit Find Mark Window
Drive:MPW f:Worksheet
lorfol_plt.scr
lorfol_plt
Drive:MPW f:lorfol_plt.f
end
*-----
* Vector field for Lorentz attractor. Parameters are passed as arguments
* dx(1)/dt = -sig x(1) +sig x(2)
* dx(2)/dt = -x(1) x(3) +r x(1) -x(2)
* dx(3)/dt = x(1) x(2) -b x(3)
subroutine vecfld(x,dxdt,sig,r,b)
implicit none
real *4 x(3),dxdt(3),sig,r,b
dxdt(1)= -sig*x(1) +sig*x(2)
dxdt(2)= -x(1)*x(3) +r*x(1) -x(2)
dxdt(3)= x(1)*x(2) -b*x(3)
return
end
MPW Shell

```

BEYOND IMAGINATION



**WE ARE NOW
OPERATING A
SECOND LINOTRONIC
TO SPEED OUR
OVERNIGHT SERVICES**

***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

the file *junk.f*. Figure 1 shows how a compile statement and the resulting error statement would look like in MPW.

The D points to the spot the compiler detected an error (I never completed the assignment expression $x=y+$). But the really nifty feature provided by the MPW environment is that when you get such compiler errors, you just select the line that says *File "..."; Line ... (as in File "junk.f"; Line 2, above)* and hit the Enter Key (not Return, Enter). MPW automatically searches your disk for the offending file, opens it, scrolls the edit window to the line, and selects it! I showed that to one of my fellow workers who was struggling with Microsoft FORTRAN on a souped up

PC-AT. It blew his socks off.

In the above text from the MPW window you can also see how easy it is to compile a source file. The MPW statement *FORTRAN -opt=1 -ov -r -saveall junk.f* was typed in followed by pressing the Enter Key. FORTRAN tells MPW to run the compiler, *-opt=1* tells the compiler to optimize at level 1 (there are 4 levels, 0-3), *-ov* tells the compiler to include overflow checking, *-r* tells the compiler to include range checking, *-saveall* tells the compiler to save all local variables after exiting a subroutine (something done on other machines, like the VAX), and *junk.f* is the source file. There are many other compiler options, like *-opt=1*, which give you more control over the way your program will run.

In general, this kind of compile command will be very familiar to anyone who has used UNIX or VAX VMS or many other command-line mini-computer interfaces. This is true for most other commands in MPW. For example, to link the object code that comes out of the above FORTRAN command line, one would write something like:

```
:Tools:Link junk.f.o
:FLibraries:FORTRANLib.o ∂
:FLibraries:IntrinsicLib.o ∂
:Libraries:Runtime.o ∂
:Libraries:Interface.o ∂
":my Libs f:univfile2LIB.o" ∂
-o "junk"
```

Here MPW is told to run the linker, which is in the Tools folder, and link the object code from the compile of *junk.f* with the necessary FORTRAN libraries and with one of my own libraries (*univfile2LIB.o*) and output the result (a stand-alone, double-clickable application) as an application named *junk*. In the above link example *∂* stands for continue on next line in any MPW command and the quotes (") are necessary for any folder/file name that has a space em-

```
FORTRAN -opt=1 -ov -r -saveall junk.f
x=y+
Δ
### FORTRAN - Illegally formed expression
File "junk.f"; Line 2
#_____
#
```

Figure 1: Compiler error statement illustration

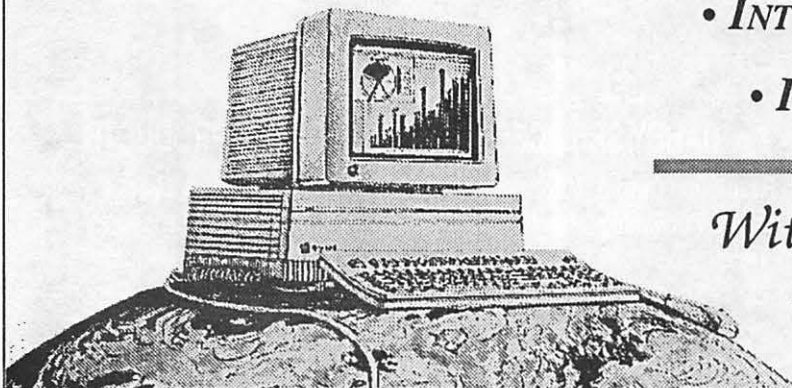
MacInOffice®

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

*Providing Macintosh® Solutions
 to Your Computer Needs*

- CONSULTATION
- SERVICE
- INTEGRATION
- SUPPORT
- INSTALLATION
- TRAINING

*With over 50 years experience
 in networked environments!*



©1989 MacInOffice

bedded in it.

The Language Systems FORTRAN compiler does its job very well. The compile step is slower than the two other FORTRAN's available on the Mac, but this is probably due to the overhead of running under MPW. Don't worry about this. Don't be misled by claims of rapidly compiling many lines of code per second. You get things done faster when the compiler generates error-free code and tells you, clearly, when you've made a syntax mistake.

After years of experience struggling with various compilers, I'll take the slower, but more accurate compiler anyway. You can waste a heck of a lot of time (not to mention getting high blood pressure) looking for an error that the compiler actually generated. You won't do this with Language Systems FORTRAN.

Language Systems has also added many data types beyond FORTRAN 77 of great use to number crunching people like me, like COMPLEX * 16 (DOUBLE PRECISION COMPLEX), extended precision data types (how's

80 bits?), POINTERS, STRUCTURES (a la VAX, and Mac extensions), Pascal-like STRINGS, and many more.

Flow control includes the usual FORTRAN 77 stuff plus DO...ENDDO, DO WHILE (...), CYCLE, LEAVE (a la FORTRAN 8x), and more. CASE ("switch" to you C types) is soon to come.

If you're inclined to mess with the Mac toolbox, you're in good hands. Language Systems FORTRAN supports toolbox calls, and in the style of Pascal (as in *Inside Macintosh* volumes I-V). You can access the deepest reaches of the Mac ROM and system calls. And you do it in a syntax very similar to the Pascal routines defined in books like *Inside Macintosh*. Furthermore, MPW also supports (and supplies) many toolbox development tools. Even I, toolbox shy that I am, have messed with some minor toolbox stuff. The use of "include" files from Language Systems helps greatly with this, as do many example files they provide.

The manual is clearly written, although on some of the topics, like

MPW, I think it is a bit sparse. But I must remind you (and myself) that this product is only 10 months old! There have been several updates to Language Systems compiler, example files, and manual (Language Systems has been impressive in its continued support of its product). The updates include some very nice technical notes which are of interest to both the Mac novice, the number cruncher (me), and the Mac expert. The example files help greatly to introduce the user to using Language Systems FORTRAN with the Mac toolbox. I hope Language Systems continues to add these to its package.

The bottom line is that this is a solid compiler with lots of useful features and extensions. It works well in the MPW environment and makes programming in FORTRAN more fun on a Mac II than on a VAX.

To Be Continued...

...next month. 🍏

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



Authorized
Apple Dealer

• Looking for the Best! •

MacInOffice is seeking strategic alliances with Macintosh Consultants, Value Added Resellers, Technical Writers, and Instructors. If you are interested in working in a quality environment support-



ing a quality system or teaming with the best, please drop us a line, send us your résumé, or send an MCI Mail message (c/o MacInOffice).



CAD & Engineering Solutions!

Bits and Bytes

by Lynn R. Trusal



First Impressions of Aldus Persuasion

This "First Impression" is not meant to be an in-depth review of this product. I recently purchased Aldus Persuasion and was interested in comparing it to Power Point which I have used extensively at work. I originally tried it out at MacWorld in Boston and was favorably impressed.

I have found Persuasion to be more intuitive, and I liked its overall approach to creating presentation graphics compared to Power Point, except for the inability to change the color of imported graphics (see below).

Persuasion uses an outline-like approach, similar to MORE, to enter textual information for slides. This facilitates layout and editing of presentation material; it must be done on individual slides in Power Point.

Unlike Power Point, Persuasion offers master slides, speaker notes and handout pages like other presentation programs, and charting and graphs like Cricket Presents.

An extensive collection of autotemplates is included, similar to other programs. These serve as a good basis for beginning a custom presentation. Each template includes six types of masters which can be used for graphics, text or organizational charts.

Persuasion offers layers for each slide so you can assign text or graphics to individual layers, which can be individually controlled during an on-screen slide show. In the manual slide show mode, a click of the mouse moves from layer to layer and then slide to slide or you can chose an automated approach by setting not only the time between slides but also between layers.

Another nice feature is the ability to control the amount of shadowing behind text to include its color, and offset in two directions. This can not

be done in Power Point.

I do prefer Power Point's method for manually clicking between slides and the ability to change the color of imported graphics. I would like to see Aldus make these changes in version 1.1 whenever it is released. Both applications have spelling checkers and find-and-replace functions.

If you need "desk-top presentation" software, give Aldus Persuasion serious consideration. I prefer it to both Power Point and Cricket Presents. I have not had any hands-on experience with Stand Out.

Video Show for the Mac is Here!

For you MS-DOSer's out there who know what Video Show is, you may be interested in its availability for the Macintosh. General Parametrics Corporation (415) 524-3950 has released a Macintosh version of their well known Video Show presentation software and hardware.

It is available in three versions: the Companion (\$1,795), Executive (\$2,695) and Professional (\$8,995). The Companion must be attached to a Mac to run a slide show, while the Executive and Professional are self-contained units which do not need the Mac to do a presentation.

General Parametrics also sells the PhotoMetric SlideMaker for preparing 35 mm slides from Video Show presentations. It lists for \$4,495. The prices aren't cheap, but if you like Video Show for MS-DOS applications, you might want to check out this product.

4MB DRAM Chips !

Just when you scraped up enough cash to buy 1 MB SIMMS, and supplies of 1 MB RAM chips were coming into more bountiful supply, two Japanese manufacturers are beginning to produce 4 MB memory chips. Both Toshiba and Hitachi may have already begun selling commercial samples of their 4 MB DRAM chips. Toshiba plans to build an \$81 million factory to begin production with capacity of 100,000 per month by next summer. These memory chips have an 80 ns access speed and will initially be

used in high-end workstations.

Although no price has been set, they are expected to cost several hundred dollars for each chip. A 4MB SIMM will contain 8 of these chips to equal 4 MB. This makes the theoretical capacity of an 8 SIMM slot Mac II to be 32 MB, which I believe is the maximum the 68020 CPU can directly address.

Dear Bill:

I was sorry to see that your (Bill Gates') net worth dropped \$177 million due to lower than expected earning of Microsoft, but remember that you are still worth \$1.1 billion dollars, so you won't have to be hitting the unemployment lines any time soon.

Perhaps I can shed some light on part of the reason for those "lower than expected earnings." I have largely stopped using Microsoft Word for large documents and switched to Full-Write because I got tired of the very buggy Word 3.01 and its lack of basic features. I also switched to Aldus Persuasion from Microsoft Power Point because Persuasion is a much better and more powerful program than Power Point.

You can also understand my dismay after increasing the memory in my Mac II to 5 MB so that I could make full use of MultiFinder, I could not do so if I wanted to continue to use Excel 1.5. My large system took up enough of the first MB of RAM that Excel could not load since it needs the same space. Therefore, I am seriously considering switching to WingZ since it does not have these limitations and passes Excel in features and technology. Also there is no release date for Excel 2.0 in sight.

Therefore, Bill, I have either ceased using or largely switched to three other companies' products because Microsoft has rested on its laurels and has not kept up with the marketplace. If enough Mac users do so too, you will no longer be the richest "thirty-something" in America.

Please do us all a favor and get your programmers going again so that Microsoft will once again be on the cutting edge of Macintosh programming and not on the "bleeding-edge."

More Uses for MultiFinder

For reviewers of software, MultiFinder comes in very handy. You can install a word processor to write the review and also one or more of the applications you are writing about. In other words, I opened up Microsoft Word, Power Point and Persuasion to prepare my comments about my "first impressions" of Aldus Persuasion. If you need to compare the features of each program, it is easy to switch between them and then back to Word to write the review. You do not have to open and close applications one at a time.

Another use of MultiFinder is for easy access to the desktop while you are in an application. If I wish to check out the location of a folder or throw something in the trash, the desktop is just a click away. This saves the need to open and quit multiple applications.

Finally, I am always encouraging people to use multiple applications to achieve a desired result, and it is easy to cut and paste between applications without opening and closing each one individually.

On the down side is that MultiFinder really needs 2-4 MB to be useful, since more and more applications are becoming memory hogs — such as Full-Write Professional, MacDraw II, etc. I even find that 5 MB is sometimes not all I need. The 8 MB Mac is coming soon!

Real Bits

1. There is another book about Apple Computer on the shelves of your local book stores under the unlikely title of "West of Eden — The End of Innocence at Apple Computer." It is written by Frank Rose, published by Viking Press and sells for \$19.95. I found it captivating reading, with some juicy tidbits not found in the "other books." If you're an Apple junkie, you might want to give it a try.

2. If you're a Steve Jobs trekkie, there was an interview with him in the April 1989 issue of "Inc." magazine, by whom he was chosen "The Entrepreneur of the Decade."

3. Steve — you told us you were only going to sell your NeXT computer to the higher education market, and many of us wondered how you could survive doing so at \$6,000. Well, that didn't last long and now you are going to replace Compaq as a new supplier of computers in the Businessland chain. The main difference is the NeXT computer is going to sell for about \$10,000 to the general public. I guess you finally came to your senses!

4. Motorola has pre-announced its latest CPU, dubbed the 68040 (but then again, what else would they call it?). It contains more than 1.2 million transistors and is rated at 3 times the speed of the new 68030 CPU now offered by Apple in the Mac IIcx and SE/30. This translates into 4 to 8 million instructions per second (MIPS). It is the first CPU to offer on-board floating point capabilities instead of necessitating another chip. Perhaps the best point of all is that it is fully upwardly compatible with the 68000 family of Motorola CPUs, which have a very large installed software base. The estimated cost is \$500 to \$700.

5. Informix tells me that they are producing WingZ 24 hours a day, six days a week and are still 11,000 copies behind. Time will tell if it truly becomes a competitor to Excel.

6. One of my criticisms of WingZ was its less than true conversion of Excel SYLK files. Dates sometimes changed format, and dollar signs disappeared. I have been told that a fix is now available and can be obtained by calling Informix customer support at 913-492-9922, 8:30 AM to 5:00 PM, central time, Monday - Friday. You will need to give your WingZ serial number when you do so. I received the new disks, and the dollar sign is still not preserved during the SYLK transfer. This needs to be fixed along with the number of decimal points displayed. Informix is going to have trouble getting users to switch from Excel if they cannot at least offer a true SYLK transfer.

More Suits Against Apple

Apple was recently sued by Apple Records, owned by the Beatles, but it is also being sued by an independent dealers' buying group called

the "ASCII Group, Inc." It seems that this dealers' group is upset that Apple Computer has refused to sell it computers. The group is based in Washington, D.C., and is made up of 300 stores, of which 80 carry Apple products. The ASCII Group is interested in getting larger discounts from Apple based on the power of group purchasing, but Apple says it does not recognize buying groups. Stay tuned for round two! (Source — PC Week, March 27, 1989)

Super 3-D, Super Offer!

Silicon Beach Software has offered registered owners of SuperPaint its latest application, called Super 3-D, for the low price of \$53 including shipping and handling. This new package retails for \$295, and a price of \$50 is unusually low for such an offer. MacUser magazine gave it a five mouse rating. I believe it only supports black and white at this time.

Word Perfect 1.0.2

Apple has apparently started a trend with the x.x.x numbering system for upgrades. (I prefer the old method of using whole numbers for major upgrades and fractions for minor upgrades.) Word Perfect has begun shipping its "maintenance" upgrade version 1.0.2. It is not considered a major upgrade and includes AU/X support, elimination of screen flicker, graphics resizing enhancements, better Radius monitor support, and better super- and sub-script support.

Word Perfect is currently testing a PageMaker filter for import of binary WP files into PageMaker, such as is now possible with Word and several other word processors.

Users of the MS-DOS version 5.0 of Word Perfect who wish to transfer files to the Mac version still have to save them as version 4.2 version documents. Direct transfer between version 5.0 and the Mac will be released at a later date. 🍏

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

MacWorld Expo Washington

A great place to see what's hot for the Mac today

by Robb Wolov

The dust has cleared, the banners have been taken down, and the folding chairs put away. Washington's first Mac-only exposition is now over. At the end of four days (I was lucky and "had" to go to Industry Day), I feel like I walked enough miles within Washington's Convention Center to have trekked around the beltway six times and picked up enough brochures to have populated a forest — in other words, I loved it!

Three hundred plus exhibitors showed their wares; such expos, usually restricted to Boston and San Francisco, are a great spot to see what's hot for the Mac today and what trends are being established for the Mac tomorrow.

Buzz-words leave me a bit cold — though I must confess to having perpetuated my share within these pages. The one for this year is "Multimedia." I confess, I really did not comprehend this term until I had a chance to experience it first hand. What multimedia really is, is the addition of real-time, full-frame video editing and presentation within the Mac environment along with the previous sound, text and static graphics. The technology is currently available to capture and edit video images from any source, then display and control those images by the Macintosh. Video now is just another resource to be called up and controlled within HyperCard.

The applications for training and education are staggering. When HyperCard was first released we got a first glimpse. Many spoke of interactive training using hypertext and the Mac. Graphics were limited to bit-mapped images or relatively lower res 8-bit color. Though crude, animation by "card flipping" through HyperCard proved useful. Some of the medical education stacks I have spoken of in these pages used that very technique.

Now, we can take a full motion video of the actual subject, zoom in or highlight sections of it, add labeling overlays and HyperCard links, and call it up from a script. Students can now see the real thing on screen, not just a moving diagram. They can freeze frame, replay and step through the stack just as before.

Such technology has two obstacles that desktop video will have to overcome — storage and transmission. Full motion (30 frames per second and up), 24-bit color videos are huge, somewhere around 2 Megs/second of video, before compression. If such material is to be accessible by a variety of users, the lines of communi-

“a whirlwind few days, looking at how the Mac has grown over the last five years”

cation have to be fast, somewhere in the order of 100 Megs/second or better. The equipment currently is somewhat large and certainly expensive, but it will get smaller and cheaper. The use of laser disks solves the first problem — at least for the present. Careful planning of standards for future transmission protocols (those "rules" that govern the form in which we transmit information from computer to computer) will deal with the second.

My dream of an electronic encyclopedia, where instead of still pictures or diagrams, the reader could actually experience the subject, is just about here. The technology is in place and is currently being used. No hypotheticals, thank you. The U.S. Coast Guard is using interactive video extensively via Mac technology.

This technology does not come cheaply; therefore currently it is limited to large organizations and agen-

cies. However, as time goes on and economies of scale operate, prices will come down. Nine years ago a 5 Meg hard disk could cost you about \$2,000. Times change.

Large-screen, high-res monitors

Another trend is large screen, 24/32 bit color. It seemed like everyone was exhibiting on huge 19" color monitors from such suppliers as Radius, Moniterm and SuperMac. Any video supplier worth its salt had a 24-bit video card to complement Apple's recent announcement of 32-bit QuickDraw. The results were uniformly dazzling, yielding photographic-quality color images. Alas, this technology too is priced beyond mortal man.

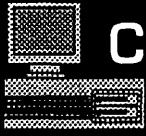
The corporate wisdom of Apple's involvement in the new High Definition Television (HDTV) industry is starting to make sense. HDTVs are much like high res computer monitors. They require the same stringent specs and super wide bandwidths.

A 19" color monitor costs the better part of a Japanese car partly because they are made in such relatively small numbers compared to consumer TV's. Electronically, comparing a high res computer monitor to a consumer TV is like comparing a Chevy to a Ferrari — they look somewhat similar, but tolerance of parts, precision of calibration and power (bandwidth) place one an order of magnitude above the other. When the consumer HDTV industry ramps up, such monitors will be mass produced, and computer monitors will drop in price...or so goes the scenario.

Also, the anticipated wide use of HDTV is forcing the reevaluation of cable transmission protocols and bandwidths, the same cable systems that we will be plugging our computers into in the future. Stay tuned.

Optical disk drives abound

When Steve Jobs released his NeXT computer one aspect of the machine which got attention was his use of an optical disk drive. These too were in abundance for the Mac, in many cases in a more advanced format (double sided, double capacity)



COMPUTER DESKTOP PUBLISHING CENTER

(301) 770-9470



FULL SERVICE
"GET HELP" SERVICE
OR
DO-IT-YOURSELF

WE HAVE IT ALL !

- PC & MAC Workstations
- Lots of DTP/Graphic Software
- Laser printing
- File conversion
- Photocopying
- Binding
- Laminating
- Tele-communicating
- Training

Examples of our LOW prices:	
Computer w/ software	\$ 8.00 /hour
Laser printing	\$.50 /page
Scanning	\$20.00 /hour
Binding	\$ 1.50 /copy
Resumes	\$25.00 /page

Our assistance for an additional charge

Here's what we can do for you:

- Resumes • Charts
- Newsletters • Reports
- Invitations • Books
- Sales Literature • Proposals
- Advertisements • Letterheads
- Menus • Business cards
- Dissertations • Flyers
- Manuals • Term papers
- Brochures • Custom forms

Bring this ad with you and receive \$5.00 off a membership

5541 Nicholson Lane • Rockville • MD 20852 • 1/2 Block From White Flint Metro

then the NeXT. Again, we are looking at industrial grade pricing! But, if demand is high and manufacturing costs come down through scale...

Charlie Jackson's aloha-shirted troupe from Silicon Beach Software consistently drew a crowd as they exhibited their soon-to-be-released full-screen, full-color HyperCard clone, SuperCard. Delivery is still a vague "second quarter of 1989." But, they did confess that the owner manuals just came back from the printer as well as the shipping boxes. Hopefully it will be on the shelves by the time you read this.

More than exhibits make an Expo. There were dozens of roundtable discussions and lectures. John Sculley based his keynote address on the first five years of the Mac around the use of the new multimedia technology. He punctuated his talk by using a HyperCard stack linked via MacroMind's new video control cards in a new Mac IIcx to present video highlights. A very high tech walk down memory lane. Things happen fast in computer-

dom. It is nothing short of amazing to think that only five years ago all we had was the 128K Mac and three or four relatively simple applications.

Open session with Gassée

An open afternoon session with Jean-Louis Gassée gave the audience a chance to vent their spleens or probe for trends. Gassée did intimate that the Mac line would be expanding in both directions. (A Mac engineer on industry day confided that a machine beyond the IIcx was on its way...and soon. Perhaps the IIcx I alluded to a few months back?)

Gassée was coy when it came to plans for expanding Quickdraw to match the power of Postscript. In other forums, Apple has been less reticent to talk of their plans for outline fonts to match Display Postscript on the Mac. Gassée was frank and quite diplomatic, saying that Apple will not relinquish control of any part of the operating system to third parties. The scenario of Apple having to go to Adobe for some feature of their own

computer's screen display code, when Adobe works for Apple's competitors, was telling as an argument that we will not see Display Postscript on the Mac...end of discussion.

The Expo was a first for Washington, an experiment. I do hope that the "powers that be" decide that it is in their interest to make it a yearly affair. At the moment that decision has not been made. These shows are, after all, for the exhibitors to do business. It did serve as a unique high-intensity arena for Apple and third-party developers to show the power of the Mac to government officials, a market that Apple has been aggressively pursuing. In my opinion, the Expo served this function better than FOSE, the "standard" computer show targeted to government.

It was a whirlwind few days, looking at how the Mac has grown over the last five years. There are and will be many exciting developments in the coming years. The next five will be interesting to say the least.

Until next time... 🍏

Random Walk Macro in Excel

Plus a look at Wingz graphics

by Fred Seelig

This article features an auto-exec macro that causes a cell to randomly walk about an Excel worksheet. Each cell of the spreadsheet tells how many times it has been the active cell. The RandomWalk macro is quite mesmerizing to watch. It makes a great screen idle program. At the end you will see how to copy the numbered cells, transport them into Wingz, and make an interesting looking 3-D plot.

Creating the Macro

Before you begin, check that you have no open macro sheets active. *Close all open macro sheets.*

Open a new macro sheet. Select cell B1. Begin typing down the main column. You can add items in the left column later. Column B contains the macro name, five cells with comments, and then the body of the macro in cells B7 through B34. Column A contains visual reminders of cell labels. Column C is usually used for comments only.

When you type in the macro commands, you do not have to use capital letters for Excel commands, like "SAVE.AS" or "GOTO." For example, after you type "=new()" and then hit the return key, Excel recognizes the

command NEW and automatically converts the NEW command into uppercase characters.

If Excel beeps an error message when you hit the Return key, chances are you missed a quote or a parenthesis mark.

After Typing the Macro

Once the text of the macro is typed, save your work. Call the name of the file "RandomWalk_Macro"

Now create labels for cells. In this macro, the control structure consists of a series of GOTO commands that refer to cells by their names. All the cell names are column A. The corresponding cells with those names are in column B. Select cells A7:B34.

Under the Formula menu, select the Create Labels... command. Select the Left Column option, or simply type L. Click OK. If you have created this macro sheet for the first time then nothing further happens. If this is the second or third attempt, then Excel will ask you if you want to redefine the cells named "loop1," "firstquartile," "secondquartile," and so on. Click yes if you see such alert boxes.

Naming the Macro

You are ready to name the macro and assign an option-1 key equivalent to this macro. First, select cells B7:B34. Cell B7 contains the =NEW() command. Cell B34 contains the =RETURN() command.

Next select the Define Name... command under the Formula menu. In the Name box type in "RandomWalk." Click the Command radio button.

Clicking the Command radio button activates the small box in the lower right corner. Type "r" into this box. Click OK.

You *must make sure* that there is no other macro assigned to option-1-r! Macro command keys are case-sensitive, so if another macro is assigned to option-1-R, then you can assign option-1-r to the RandomWalk macro.

Make it AutoExec

If you want to make the RandomWalk macro begin execution immediately after opening the macro sheet, then follow the procedure of

	A	B	C
1		RandomWalk	opt-cmd-r
2		Creates a blank worksheet, then walks randomly across it.	Automatically
3		Cells tell number of times they have been selected.	executes
4		Frederick W. Seelig, 4/5/89	when opened.
5		The Nova Consulting Group	
6		P.O. Box 244, Vienna, VA. 22183 (703) 280-9028	
7		=NEW()	
8		=SAVE.AS("RandomWalk")	
9		=FULL(TRUE)	
10		=SELECT(!A:EE)	
11		=COLUMN.WIDTH(0.5)	
12		=DISPLAY(.FALSE)	
13		=FORMULA.GOTO(!A1)	
14	loop1	=SET.NAME("randnum",RAND())	
15	firstquartile	=IF(randnum>0.25,GOTO(secondquartile))	
16		=SELECT("RC[1]")	
17		=FORMULA(DEFER(ACTIVE.CELL()+1))	
18		=GOTO(loop1)	
19	secondquartile	=IF(randnum>0.5,GOTO(thirdquartile))	
20		=SELECT("R[1]C")	
21		=FORMULA(DEFER(ACTIVE.CELL()+1))	
22		=GOTO(loop1)	
23	thirdquartile	=IF(randnum>0.75,GOTO(fourthquartile))	
24		=SELECT("RC[-1]")	
25		=FORMULA(DEFER(ACTIVE.CELL()+1))	
26		=GOTO(loop1)	
27	fourthquartile	=SELECT("R[-1]C")	
28		=FORMULA(DEFER(ACTIVE.CELL()+1))	
29		=ACTIVE.CELL()	
30		=SET.NAME("RowNum",ROW(ACTIVE.CELL()))	
31		=SET.NAME("ColNum",COLUMN(ACTIVE.CELL()))	
32		=MESSAGE(TRUE,"Row: "&RowNum&" Col: "&ColNum)	
33		=GOTO(loop1)	
34		=RETURN()	

this paragraph. Otherwise proceed with the next paragraph.

At this point cells B7:B34 are still selected. Reissue the Define Names... command as in the previous paragraph. In the Name box, type "auto_open". In the Refers To box, replace "=\$B\$7:\$B\$34" with "=RandomWalk_Macro!\$B\$7:\$B\$34". In spreadsheet lingo, you have replaced a reference (the range of cells \$B\$7:\$B\$34) with an external reference (RandomWalk_Macro!\$B\$7:\$B\$34). The external reference includes the filename as well as the range of cells. Details of autoexec macros can be found on pages 153-154 of Excel v.1.5's Arrays, Functions, and Macros manual.

Running the Macro

Save your work. Now you're ready to run it.

Running the RandomWalk macro is simplicity itself. If you are on the Desktop, double click on the macro sheet—the macro begins execution immediately upon opening. If you are within Excel you have two options: you can either use a pulldown menu or you can launch it directly from your keyboard.

From the Desktop: If you are on the Desktop, double-clicking on the RandomWalk_Macro icon opens the macro sheet and automatically begins executing the macro (if you followed the steps under "Defining the Macro

as an Autoexec Macro"). Excel version 1.04 users will not be able to take advantage of this feature, since it is only available for Excel 1.5.

From an Excel menu: Under Excel's Macro menu, select the Run... command. Click on "r RandomWalk_Macro...". Click OK. Away you go.

From the keyboard: If you are a keyboard person and you are already within Excel, you can bypass pulldown menus by merely pressing option-1-r. Figure 2 shows your Macintosh screen once the macro begins its random walk.

How the Macro Works

The macro creates a new worksheet called RandomWalk. It resizes columns A through EE to a column width of 0.5 so that the cells in these 161 columns are roughly square. The worksheet takes up the full screen and gridlines are removed. The first active cell, i.e., the cell with the box around it, is cell A1.

Each cell visited by the active cell box is assigned a number. This number is the number of times that the active cell has passed through that cell.

The message bar shows the location of the active cell by row and column number.

Movement of the active cell can be up, down, left, or right, except when the active cell is at the boundary of the worksheet. The active cell's motion is

controlled by a random number. A random number is generated. It can take any value between 0 and 1. Movement is controlled according to the following rules:

- If *randnum* is between 0 and 1/4, then move right.
- If *randnum* is between 1/4 and 1/2, then move up.
- If *randnum* is between 1/2 and 3/4, then move left.
- If *randnum* is between 3/4 and 1, then move down.

Stopping the Macro

The RandomWalk macro will keep chugging away until memory is exhausted. Since memory requirements aren't too critical here, you can keep this macro running for a long time. If you want to stop its execution, simply type 1-period.

A dialog box will inform you that the macro was interrupted. You have three choices: Halt, Step, and Continue. Click on Halt. If you want to put away the worksheet you will be asked to save changes. Click No, unless you really want to save your sheet of random integers.

Charting with Wingz

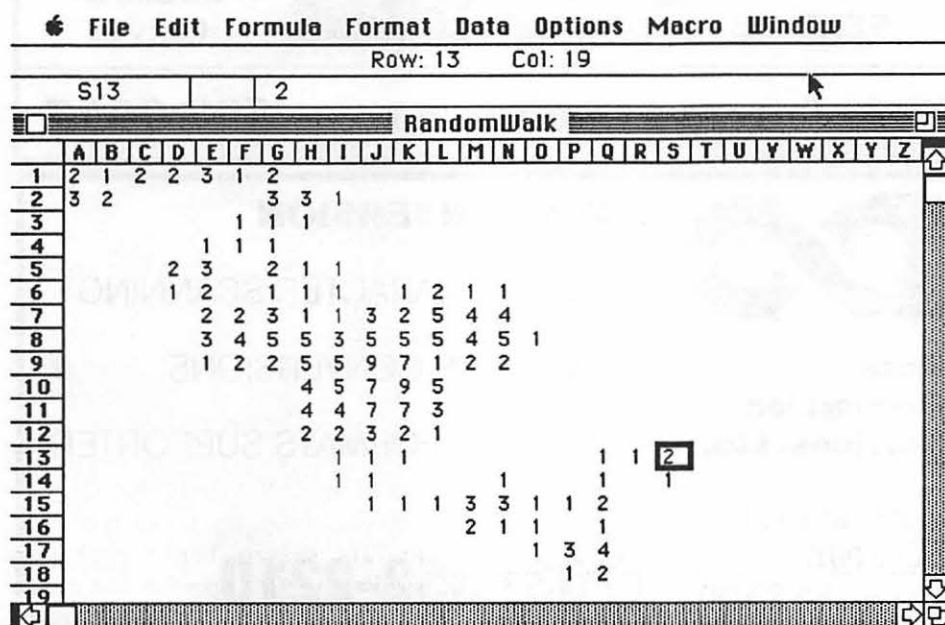
Open Wingz. Select cell A1. Paste the cells into the worksheet.

Resize the column widths for all columns that contain non-blank cells. This is a snap with Wingz. Select all the columns which contain numbers. Make sure you select the column headers. The selected columns will be darkened.

Put your cursor between the column headers of any two darkened columns. The cursor will turn into a column-resize icon that looks like two parallel vertical lines. Hold down your mouse button and resize the column. Presto! All selected columns automatically resize by the same amount!

Now select all active cells. In Figure 3 I dragged across A1 to L8. Copy these cells using 1-C. Click on the graphics icon. In Figure 3, this is the tool to the left of row 8.

Move to a blank area of the spreadsheet. Drag a box diagonally from upper left to lower right. Don't expect cells to darken. When you are



in Wingz's graphics mode you do not select cells. Rather, you are creating a box outline within which the chart will appear.

Change this graph to a surface plot by selecting Gallery under the Graph menu. A submenu appears. Move the cursor to the submenu and drag down until you select the Surface plot command.

The figure at the left shows the surface plot. Although it looks rather ordinary on a black and white SE screen, it looks spectacular on a Mac II with a color monitor.

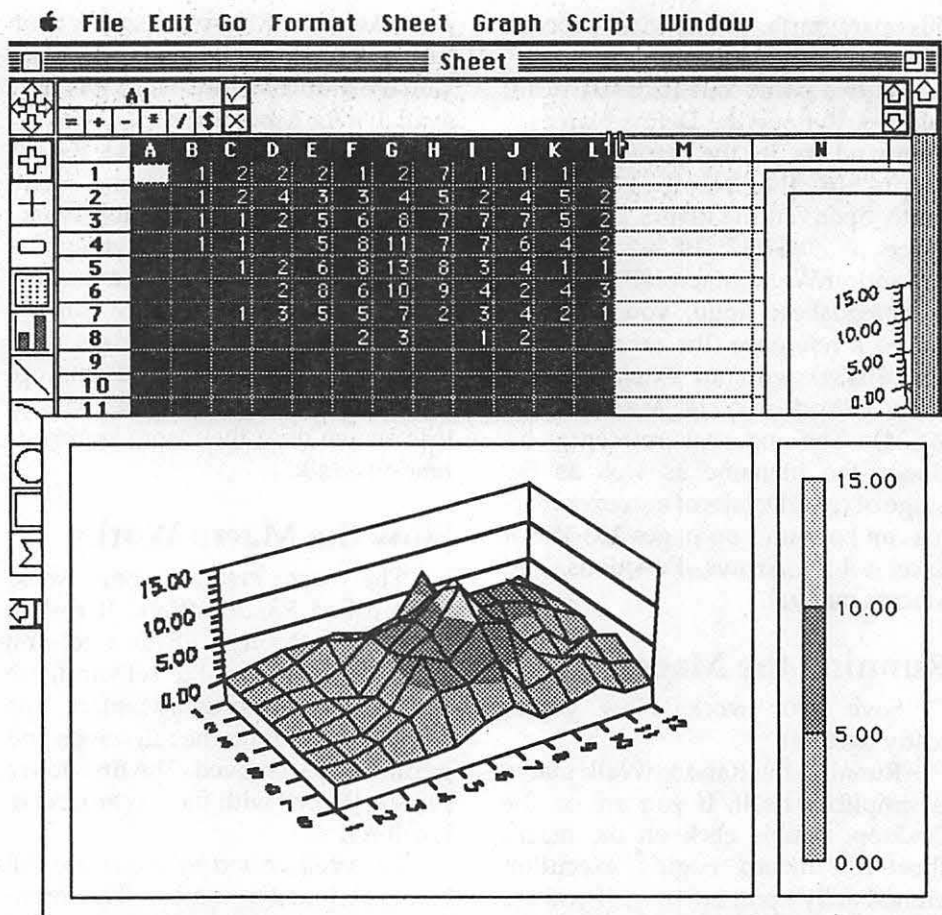
The base of the surface plot represents the original two-dimensional area of the spreadsheet's selected cells. The peaks represent the number of times cells have been active cells. High peaks correspond to cells which have been active a large number of times.

Future Project: A Wingz Macro

Wingz has its own macro language which is different from Excel's. Since I am not as conversant in the Wingz macro language, the RandomWalk macro is written in Excel-ese.

Nevertheless, it seems quite possible to develop a similar macro in Wingz. The reason for translation is obvious. Wingz will, I think, allow you to write a random walk macro and plot the dynamically linked resultant surface plot in real time. If you modified the random walk macro to restrict the active cell to stay within the range A1:Z26, for example, and created a linked surface plot, then you could watch the surface grow and evolve the longer the macro was running. I would imagine that the surface plot would look like a lawn beset by a very busy mole. The active cell would be the mole burrowing under the surface. Now that would be an interesting screen idle program. 🍏

Fred Seelig is the president of the Nova Consulting Group, dedicated to helping small businesses maintain their sanity by solving Macintosh problems and providing personal, reasonably priced training. He is a frequent contributor to the WAP Journal.



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



**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

Choosing the Right Business Accounting Software

by Cindy Carter

The Macintosh has claimed its place in the business world. The usual applications found in businesses are word processing, databases, and spreadsheets. The very foundation of the business, the accounting system, usually has not been included as a software application. There *are* accounting software packages available for business to use along side of other Mac software. Alright, you say, what do I look for, how do I make the right choice, and who can help me?

The first and probably most important step is to determine what your business needs are and will be for the next three to five years. To make the right choice you should work with your accountant and/or software consultant. They should be familiar with your business requirements and knowledgeable of several accounting packages. Installation, training, and support should be included in their services. There are trades-offs to be made in all decisions; you may not get all the features you want. Remember also that no one accounting software package is the right package for all businesses. Accounting software falls into three different categories of usage. I have labeled these types as "personal", "gray zone business use", and "comprehensive business."

"Personal" packages can perform a variety of services. They show your expenses, net worth, checkbook reconciliation, and some even produce financial statements. Some of these personal packages are successfully being used in business. The important thing is to understand your needs well enough to be able to determine whether this is an option for you. One example of a business which might use a personal package would be a business consultant. This leads us into the "gray zone business use" packages.

I refer to these packages as "gray zone use" because the end user is usu-

ally not very clear in understanding what is needed. This gray zone includes software designed for the small business. These businesses have little or no accounting knowledge, therefore they don't know what to look for in software packages and end up making a choice that creates more work and problems for their operation. Most of the present accounting packages on the market are for the small business. They perform in accordance with accepted accounting procedures. Generally, they lack the ability to handle businesses with special accounting requirements. Some of these special needs can be handled with spreadsheets; after a point this will become too cumbersome and inefficient. Another difference I have found among gray zone packages has been the way in which they allow the user to enter and process data. Without the proper support team involved in the decision-making processes these packages can be disastrous. As a business' special requirements become more of a problem to handle, looking at the third type of package becomes more important. Service oriented businesses with little or no inventory requirements might use this type of software.

The "comprehensive business" package is the third type. Besides meeting the majority of your everyday business needs, they supply the information needed to make decisions for the future. They are not for everyone. They are more complex and require a qualified bookkeeper to properly operate. I don't recommend that any business operate without a bookkeeper of some type but I am also aware that many businesses cannot afford to pay for this position. Therefore, I recommend that you hire either a part-time bookkeeper or someone who can handle more than one function. The comprehensive packages include all modules (usually eight) required by a

medium to large business, and can operate in a multiuser environment. Businesses that have complex needs, require in-depth managerial reports, and forecasts, will need to take a close look at them. Businesses needing these packages vary from appliance retailers to property managers.

To aid you in making the right decision, I have listed the ten most frequently expressed misconceptions and mistakes made. Secondly, I have produced a list with some of the factors you need to consider when reviewing accounting software. Working with a consultant or accountant who knows several accounting packages that are available can help make this an easier process. It is very important to buy the most appropriate package for your business without getting too much or too little. Deal with someone who will let you work with the software first.

Misconceptions/Mistakes

1. Accounting software will straighten out present records when you just enter the information.
2. With an accounting package we don't need a bookkeeper.
3. We can install and train our staff ourselves.
4. We can read the review articles and choose the best package for our business needs ourselves.
5. We don't need to consult with an accountant on how to set up our books or everyday procedures before computerization.
6. We won't need support for the package.
7. It is not important to run in parallel with another system.
8. We won't need extra help to maintain both systems.
9. Choose a package that is either too complex or not comprehensive enough.
10. With networking, we don't need someone who understands networking maintenance.

Factors to Consider

Format & Flexibility

- Ease of use
- Use of Mac interface
- Separate or all in-one-module



MacSlides

35 mm Color Film Recording Service

- 2000 - 4000 line resolution
- Priced as low as \$3.25 per slide

(301) 384-3562

Silver Spring, MD

Virus Problems? Crashed Disk?



DiskDoctors

(703) 641-0215

(301) 585-2927

➔ 58 MAC Q&A

a smaller box, which may be important to some. In future versions of the system, Apple will add a multi-processing feature. This will let two or more programs run simultaneously and communicate with one another, passing results from one to the other. However, we don't expect this option to be available till 1990. Why wait till then to use color or a bigger screen? Go out and buy one of the three today!

I notice that Informix is shipping their WINGZ program and Ashton-Tate has upgraded their Full-Impact to version 1.1. All we hear from Microsoft is there will be an Excel 2.2. What spreadsheet should I buy?

See this month's Excelling on Your Mac column for a comparison of these products.

Can I work with my machine while doing software downloads through my modem?

Many telecommunication pro-

grams have been upgraded to allow this under Multi-Finder. Red Ryder and Versaterm, for instance, allow you to start a download going, then click into another application to do something else. They beep at you when the download process is finished. You should know that the download time will be a bit longer this way. If it is a commercial telecomm service you are working with, you may want to consider this. Of course, you are probably going to need more than one Meg of RAM to do much useful work with MultiFinder.

- Security levels
- Cash or accrual basis
- Prints on plain paper or pre-printed forms
- Supports dot matrix and/or laser printers
- Smooth movement between modules
- Prints to screen
- Custom report writer
- Exports to spreadsheets
- End-user creation of financial statements format.
- Ability to find vendors, clients, account numbers etc. without knowing their identification number
- Allows for growth in a business's database of vendors, clients, and inventory items.

Comprehensiveness

- Modules offered: General Ledger, Accounts Payable, Accounts Receivable, Inventory, Sales Order, Purchase Order, Job

Costing, and Payroll

- Editing of entries before posting
- Several levels of review before posting
- Allows for partial payments, prepayments, and several types of credit
- Does it allow the option of starting journal entries, stopping and then resuming
- Complete audit trails
- Allows for standard methods of inventory evaluation
- Realtime vs batch updating
- Do accounting periods have to be closed before making entries into the next period
- Checkbook reconciliation
- Database maintenance
- Allows for the distribution of manual checks
- Prints computer checks
- Allows for distribution of payments, checks, etc. at a later time
- Allows for invoicing of inventory and non-inventory items in

the same module

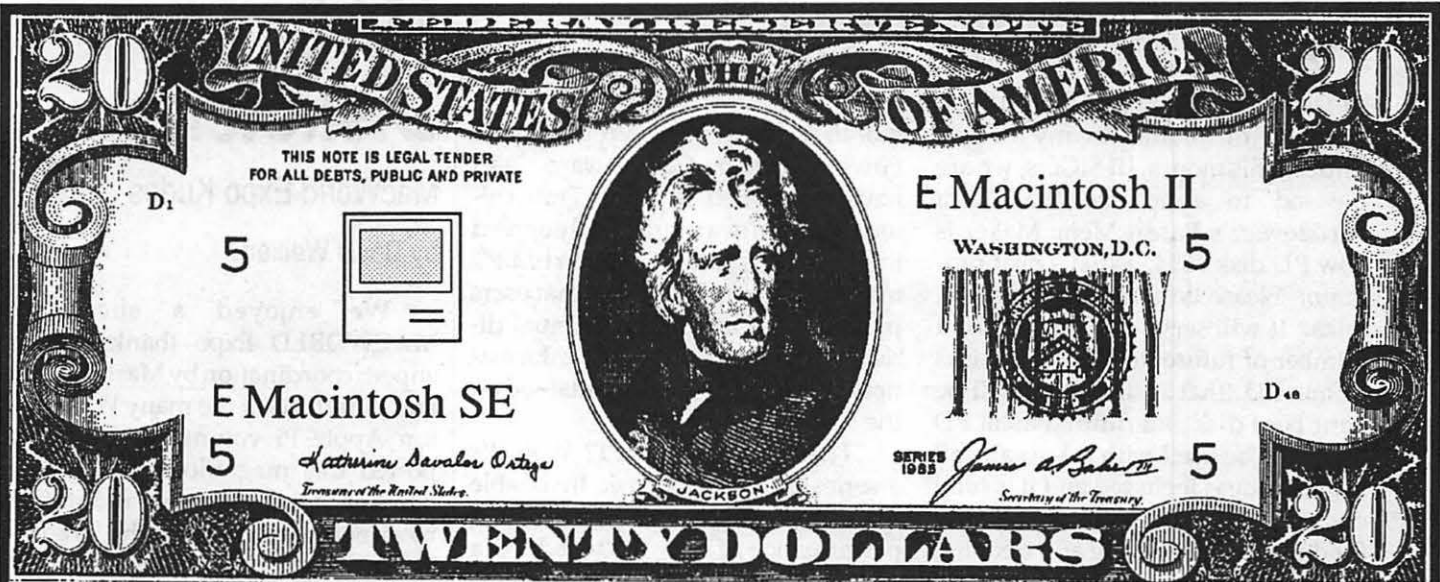
- Allows for different types of invoices
- Error checking ability

Special Needs

- Single/Multiuser
- Modifiable database
- Vertical packages available to fit different type of businesses
- Record/File locking
- Network requirements
- Remote site entry
- Import/Export of data
- Cost of new releases
- Policy on upgrades
- Processing and printing speeds

The above by no means includes all you need to consider — it includes the basics. Different businesses will have additional requirements. Remember, *accounting software is an investment in your company's future.* 🍏

Cindy Carter is president of Automated Accounting Systems. You can reach her with questions at 942-3502.



Unfortunately It Doesn't Come With Instructions

Sometimes the question isn't how to make money, it's how to use the money you've already made. At Mid Atlantic Telesis our experienced staff can assist you when buying any Macintosh computer by making sure that you get the best from your hard earned dollars. Mid Atlantic Telesis is your one stop source for Macintosh needs. Whether it is new or used hardware, software, networking, training, technical support, consulting, service contracts, or just maintenance. Mid Atlantic Telesis offers easy to use solutions with competitive prices and broad reaching support on every product we sell. Unlike other companies, we're not all talk.

If you need a new computer or want to expand one you already own, we invite you to call our sales support staff to show you what we have to offer.

Give us a call, we're always home!

Mid Atlantic Telesis - Complete Computer Solutions
4930-A Eisenhower Avenue., Alexandria, Virginia
(703) 823-4788

Apple III Disketeria

by David Ottalini, III SIG Co-Chairman

As I mentioned in my "Trail" column this month, III SIGers, we are pleased to announce that Tom Bartkiewicz's Pascal Menu.Maker is now PD disk 1054. What a neat program! Please don't pass us this one, folks. It will serve as the basis for a number of future Pascal-based disks in our PD (that is, this disk will be your boot disk and future Pascal PD disks can be used with it.) Again, all source code is included and it is fully documented. Thanks to Jim Salerno for doing a little editing and cleaning up for us on this disk, to get it ready for the PD.

Our second offering this month is PD disk 1055, "The Best of ATUNC." As with other "Best of" disks, this one contains articles and other material from an Apple III user group, the Apple Three Users of Northern California. ATUNC has a tremendous resource of Apple III knowledge and they remain one of the most active Apple III groups in this country. This disk is self-booting on Side One and contains the following files: A3.NOTES, ADVANCED.VC, ADVANCED.VC2, APPLE3. FOREVER, BASIC.LIMITS, BUSINESS.BASIC, DOCUMENTATION, EM.REBOOT.

And on Side Two you will find: A T U N C . N W S L T T R , BUSNSS.GRAPHICS, CATALYST.MENU, COMPUSERVE, DELETE.KEY, DYNAMIC.DRIVERS, KEY-STROKE, MANEFESTO, POWERKEYS, QUESTIONS, QUESTIONS2, RAM.TEST, SERIAL.CABLE, SOS.DRIVERS, THREE.EZPS, UPGRADE.512K, UTILITIES, VIS.BRIDGE.

The file on Side Two named "ATUNCNWSLTTR" is a 3 EZ Pieces Data Base file containing a bibliography of ATUNC Newsletters going back many years. There's a lot of good information on this disk, and I think you'll enjoy using it. We've ordered more ATUNC Newsletters on disk by the way, so we can produce more "Best of" disks in the future.

Finally, our last PD offering this

month is disk 1056, Programmers Powers Tools by CE Software. As I have mentioned in prior Trail columns, CE Software graciously agreed to place the Apple III version of PPT into the PD with the proviso that users purchase the instruction manual directly from them for \$10.00. Information on how to do that is contained on the PPT disk.

That said, what is PPT? Well, it's a series of Business Basic Invokable Modules, designed to improve the performance of BB. We've added a number of such programs into our PD over the past few years (Daryl Anderson's Basic enhancers and Foxware's similar programs, for example). PPT's Basic Invokables will add these command enhancements:

TEXTIN
Get an alpha-numeric value from the user
TEXTGET
Get an alpha-numeric with cursor control
INTIN
Get a numeric whole number from user
INTGET
Get a whole number with cursor control
NUMIN
Get a fixed-point numeric value from user
NUMGET
Get a numeric value with cursor control
DATEIN
Get a date from the user
DATEGET
Get a date with cursor control
SORT
Sort a string array
NUMSORT
Sort a numeric array
SEARCH
Search a string array
NUMSEARCH
Search a numeric array
UCASE
Convert a string to all caps
RESETOFF
Deactivate the RESET key
RESETON
Reactivate the RESET key
FORMAT
Create a data diskette

Disk 1055 is self-booting on Side One and includes programs to demonstrate what some of these commands can do. Everything is listable and readable. We do NOT have the source code however.

Next month: More Ottalini disks (oh joy!) and some other surprises... ☘

MAC Disketeria

MacWorld Expo Kudos

by David Weikert

We enjoyed a successful MACWORLD Expo thanks to the superb coordination by Marty Milrod and the efforts of the many Washington Apple Pi volunteers who supported this magnificent show. Our new booth was attractive and staffed by an enthusiastic crew who, in addition to selling disks, catalogs, memberships, raffle tickets and other items, served as Washington Apple Pi ambassadors to the crowd that stopped by the booth. Marty's article on the show elsewhere in this journal recognizes their contributions and lists their names. The Mac Disketeria volunteers, a significant number of whom appear on Marty's list, also deserve special thanks for their efforts in duplicating about 2500 disks for the show. Thanks to Hampton DeJarnette, John DeMarco, Garry Elliott, Ben Frank, Andy Gallant, Gary Grey, Mary Hockmeyer, William Jones, Fred Rodgers, Chuck Sicard, Joe Swick, Bob Vandegrift and the Synertech Associates team. I want to extend extra special thanks to Tony Salerno, who not only duplicated disks but also managed our disk inventory at the show. Tony was a fixture in the WAP booth all four days.

Prices Return to Normal

Normal pricing for disks and catalogs will be in effect again starting June 1. Disk prices return to \$5.00 each for singles, \$4.00 each for five or more, and \$3.50 each for designated sets. The special Mac Expo edition of the Mac Disk Catalog, current through the disks released this month, is available for \$3.00 at the office and general meetings or by mail for \$4.50, including postage and handling. The catalog includes a list of disks and titles, a new introductory section, descriptions of files on all the disks, a list of significant files on all disks sorted in alphabetical order by file name, and a simi-

lar list of files sorted alphabetically, first by file type and then file name.

Recent Disks

We have no new disks this month, as we shot our wad last month by releasing 34 disks for MACWORLD Expo. The disks included three Anti-Virus Utilities, 10 Desk Accessories, four ImageWriter Fonts, seven Sounds, six System Utilities and four StackWare. Some of these were all new, and some are being reissued as we continue to remove obsolete and redundant files. Last month, we published program notes for all of the new material and the revised ImageWriter Fonts series. This month, we have included the program notes for the remaining disks that are being reissued as the result of consolidating the material from prior disks: Mac Disks #1.01 through 1.03 and #16.01B through 16.04B. Abbreviated descriptions of the new and revised series follow.

Anti-Virus Utilities Series

The new Anti-Virus Utilities series includes Mac Disks #1.01 through #1.03. Files from Disks #16.07A through #16.09A were consolidated, earlier files were replaced by current versions, and some new files were added. Disk #1.01, is self booting (starting) from a System Folder containing abbreviated System Software 6.0.3 and includes the essential files for detecting, eradicating and preventing virus attacks. The second and third disks are not self booting and contain only anti-virus utilities. The price of the series is \$10.50 for the three-disk set.

Desk Accessory Series

Since the Desk Accessory series had gone a long time with only the addition of new DAs and revisions to DAs already issued, it was ripe for purging old and prior DAs. The result of this effort is the release of Mac Disks #2.01B through #2.10B in replacement for Disks #2.01A through #2.12A. The price for the 10-disk set is \$35.00.

ImageWriter Fonts Series

The ImageWriter Fonts four-disk set, Mac Disks #5.01 through #5.04, is assembled from fonts previously on 400K Mac disks deleted from the library. The only new fonts in this collection are updated versions of the "super fonts" Clairvaux and Palencia. Price for the four-disk set is \$14.00.

Sounds

Seven new sounds disks, Mac Disk #12.25 through 12.31, add to this popular series. This is the last (for a while) segment in the incremental extension of the sound series. The last set of sound disks is available at a special price of \$24.50 for the seven disks.

System Utilities Series

The System Utilities series has been reissued as Mac Disks #16.01B through #16.06B. Obsolete and early versions of current files were removed, and the remaining utilities were consolidated to the first four disks. Prior material is consolidated on Mac Disks #16.01B through #16.04B. The new material has been added to the end of the series as Mac Disks #16.05B and #16.06B. All of the material on these two disks is new to the series, and most is new to the disketeria. Pricing for the series is \$21.00.

StackWare

Four new disks have been added to the HyperCard StackWare series: Mac Disks #19.26 through 19.29. This disk series continues to grow thanks to the efforts of David Condit and his crew of dedicated volunteers. If you know your stacks and would like to help test and annotate disks, give David a call at (703) 349-8752.

A Request

Once again, it is time for elections of officers and the Board of Directors. I would like to take this opportunity to encourage you to review the list of candidates and their statements and to choose those that you believe will best represent your interests in this coming year. The Pi has enjoyed significant progress since I first became a member, primarily as a result of the

efforts of officers, board and active volunteers. The Pi needs your interest and support to further its growth and progress; please express these by voting and volunteering your services.

Disk #2.01B — DAs 1

Desk Accessories

DA Utils f: DA Tester 1.51: By Raymond Lau. Installs up to two desk accessories to test them. After loading a DA, some text characters may be replaced with unprintable characters (the rectangular box) and you will have to quit the application to restore proper characters. *Shareware - \$4.*

DA Utility f: DA Utility: A small program by which desk accessories may be renumbered and renamed as noted in DA Utility Docs. Useful, for instance, to renumber an application's private desk accessories.

Font/DA Mover (v 3.8): By Apple Computer. The version of the font and desk accessory program distributed with System Software 6.0.X.

FontFkeyDalnitPicSnd Sampler f: The FONT-FKEY-DA-INIT-Picture-Sound Sampler: By Dave Kallin. Allows you to look at FONT, FKEY, DA, INIT, Picture (MacPaint or PICT resource), or Sound (SoundCap or snd resource), without the hassle of running the FONT/DA mover, ResEdit, SoundCap™, or Paint-type programs. Sampler Instructions is the documentation. *Shareware - Your donation.*

3D Tic Tac Toe: As the name says.

Abacus: A representation of a mechanical abacus. Use the mouse to move the counters.

ABCcalc f: ABCcalc: By Guido van Rossum. A text-oriented calculator with unusual syntax and precision. See the ABCcalc.doc.text documentation for full details.

AddLPrepDA f: AddLPrepDA: By Software101. Adds a modified version of the PostScript code from the Laser Prep file to a PostScript file (created by hitting Option-F) producing a file suitable for downloading to any PostScript printer or typesetter. AddLPrep is an application version as described in AddLPrep docs. *Shareware - \$20.*

Adventure! f: Adventure!: By Patricia B. Smith. A text adventure like we used to use mainframes and mini-computers to play (when the boss wasn't looking) is now a desk accessory. Put Adventure-File in the System folder to run "The Temple of Goth" as described in Adventure!ReadMe. *Shareware - \$15.*

AdventureMaker f: AdventureMaker: By Patricia B. Smith. The application which makes the Adventure files for the Adventure DA. Adventure-Maker Docs.txt and Example BlockFile are the supporting descriptive and example files respectively. *Shareware - \$30 (if you distribute your adventures).*

AmortDA.acc.: By Roger V. Mitchell. Calculates various elements of a typical loan and prints an amortization schedule.

Analog clock: A simple analog clock with single-line hands.

Analyse 1.2 f: Analyse 1.2: By Claude Johnson. Permits you to look at and modify the content of the memory, and perform hex and ASCII searches and dumps. See the Analyse.txt documentation for details. *Shareware - \$10.*

Animator: By Eagle I. Berns. Animates a portion of a MacPaint document. See some cryptic instructions by clicking the "guilt" button. *Shareware - \$15.*

Appointments: A simple appointment calendar with room to enter engagements.

AreaCode f: Area Code: By Ron Butcher. This DA displays the state, a representative city, and time zone for individual area codes contained in the Area Code File. It doesn't work properly in HFS unless you use ResEdit as described in the file Area Code HFSFix to install the full path name for the Area Code File in the DA.

ArtBrowser 1.0b6: By Adobe Systems. Allows one to browse or print encapsulated PostScript documents.

Artisto+ 2.01 f: Artisto+ 2.01: By Tom Taylor. Allows you to open up a MacPaint or FullPaint document from inside any program that supports desk accessories and select any portion of the image and copy it into the clipboard. This is all described in the Artisto+2.01 Instructions. *Shareware - \$5 or \$10.*

ASCII: By Bob Perez. A screen full of ASCII equivalents.

ASCII Chart DA f: ASCII Chart DA: By Jon Wind. The chart shows all 256 ASCII characters and their decimal and hex equivalents in Geneva 9 font.

ASCII-char f: ASCII-Char: An application which provides a table which displays all the ASCII characters and their decimal and hexadecimal equivalents. ASCII-Char.da is the same thing in a DA.

ASL f: ASL Talk: A simple communications package in a DA. See the MacPaint documentation for guidance. ASL Launcher is an installer for ASL Talk. (Font/DA mover or Suitcase will work as well.) ASL Font8 is a font necessary to ASL Talk.

Disk #2.02B — DAs 2

Desk Accessories

AT View.DA v1.0 f: AT View.DA v1.0: By Randy Dees. Lets you view the status of an AppleTalk network as noted in the AT View Info(MacWrite). *Shareware - \$5 per network zone. "but if you don't want to send me \$5 per network zone this DA is installed on, use it anyway for free (and just feel guilty)."*

AutoDial: By Scott Zimmerman. Designed to allow you to dial your modem from within MacTerminal. *Shareware - "Any contribution greatly appreciated."*

Autolog 3.2 f: Autolog 3.2: By Steve Fine. A DA which performs log-on macros while a terminal emulator such as MacTerminal is active. Autolog should work with most terminal emulators. See the Autolog Doc documentation (for version 3.0). *Shareware - "what you think it is worth."*

AutoScrap 0.9 f: Demo AutoScrap 0.9: A desk accessory replacement for the Scrapbook DA. All the features of the original Scrapbook, plus new ones. *Demoware (holds only three items) - \$20 for a functional version.*

BackDown/Delta+2 f: BackDown/Delta+2: A background XMODEM downloader DA. Downloads while you are working within an application. BackDown Manual is the BackDown documentation in the form of a comprehensive manual.

Bagels A number-guessing game like Mastermind. Select four different numbers with the keypad,

then click on the question mark to see how close you've come to guessing the number the Mac has in mind. A happy face marks the right digit in the right space, the arrows mark a correct number in the wrong space.

BCS*Clicker2.1: By Ken Winograd. Notes the screen location where the mouse is clicked, compares it to the location of the last click. This is an update of Clicker on Mac Disk # 2.02A.

Beacon DA: By Lighthouse Systems. Launch, delete, copy and rename files. Examine and edit file type, creator and flags. Strip the high bit, control characters and line feeds. The shareware fee gets you instructions to make the DA full featured by activating the Launch and Strip functions. *Shareware - \$15.*

BezierDA f: BezierDA: By C. Heilman. A modest painting program with a special talent. Like a French curve drafting tool, it helps you construct smooth curves as described in AboutBezier.

Big Ben: By Riccardo Etorre. An analog clock with the face of the historic tower clock of Westminster, London. (Trivia note: Big Ben is the bell, not the clock.) Like the original, this has no second hand.

Big Caps: By Cliff Joyce. A substitute for KeyCaps with some additional features.

BigBen II: By Riccardo Etorre. A updated DA version of London's famous clock. This one looks just like the earlier one (Disk #2.01) except for the copyright date, but it's twice as large in bytes, so Riccardo must have done something to it.

BiPlane DA 1.02 f: BIPPlane DA 1.02: By Alan G. Porter. This is a relatively full functioned spreadsheet in DA form. (There is a companion application in Mac Disk Series 15.XX.) Instructions are provided on 1.02 Intro to BiPlane. *Shareware - \$40.*

BlackJack1.76 f: BlackJack1.76: By Brad Slutsky. A Blackjack game where one player plays the house. BlackJack Manual is the comprehensive MacWrite document describing the program. *Shareware - \$20.*

Bouncy: Sets the cursor in motion across the screen. Re-boot to stop.

BreakKey f: BreakKey: by Harold D. Bray. Desk Accessory which emits a timed pulse of logic zero (line space or break key) over an asynchronous channel which the computer on the other end should recognize as an interrupt request - interrupting command input or interrupting the display of data. The emission period can be controlled. BreakKey.doc is the documentation. *Shareware - \$10; \$2 for source code.*

Bricks: By Rainmaker Research, Inc. A mildly challenging version of Breakout.

BugOut DA: By Clay Budin. An arcade type game

as a DA. Move the bug cursor with the mouse. Pick up any of three types of symbols to get points. Bump into any of six types of symbols and you are killed. Three kills and the game is over. *Shareware - \$5.*

Calc.RPN: By Apple Computer. A calculator which works in Reverse Polish Notation, like Hewlett Packard calculators.

calculatorum DA f: calculatorum DA:(v0.7) By Robert Bailey. A four function calculator for Roman numerals described in Calculatorum Docs. *Shareware - "...a nice color postcard of your hometown with comments or criticisms."*

Calendar 1.7: By David Oster. A calendar and agenda pad for your appointments. *Shareware - \$5.*

Calendar v2.2: By "Mr. Bill." A simple monthly calendar without notational capacity.

Call-151: By Ronald Nicholson, Jr. This DA allows you to go into machine code, just like the Apple II's command "Call -151".

Camera: By Keith Esau. Permits you to take a picture of the screen after a certain delay, like the timer on a camera. Allows you to take "screen shots" of pull-down menus. This is an update from an earlier release but it doesn't work with System Software version 6.0.X.

Casio.da f (1.2): Casio.da: By Ralph Muha. A digital watch for your desktop, with a variety of features - multiple alarms, counters, timers. Casio doc tells all about it. *Shareware - \$5.*

Change Font D.A. 1.03: By Loftus Becker, Jr. Change the default application font so that text in all applications will be in the font of your choice.

Charger 1.1: By James Finnegan. A timer and calculator to compute the costs of long distance calls, on-line services, etc., with an alert when a preset time or dollar limit is reached.

Checksum f: CheckSum: By Mike Cohen This DA performs a CheckSum function on a file. It is useful for making sure that a file transfer was successful. ChkSum.doc explains how it works.

ChemIntosh™ MMCalc (Molecular Mass Calculator 1.1): By SoftShell Company. Calculates molecular mass or exact mass of a chemical compound once the chemical formula is entered in the formula box.

Chime 1.0: By David Kalin. Know how annoying it is when your neighbor's digital watch beeps during the soft movement of a Kennedy Center symphony? Now you can set your Mac up to do much the same. *Shareware - Chocolate.*

Choose Scrapbook +: By Imad Alosstaz. Lets you pick any scrapbook file on any disk. *Shareware - \$10.*

CIS Commands: By Bill Steinberg. A lo-o-ong list describing the commands available on CompuServe.

CIS Help: By Bill Steinberg. Another lo-o-ong help file to assist CompuServe users in learning the new forum menus.

Disk #2.03B — DAs 3

Desk Accessories

Clarity DA f: Clarity DA: By Andrew Welsh. A DA used in conjunction with Clarity application which takes a bit mapped image and processes it for sharper reproduction by an ImageWriter or laser printer. Clarity DA Docs describes the programs. *Shareware - \$10.*

Clipper DA 1.0b2: Sets the line width and adds or

**How to Read
MacDisketeria Descriptions**

- The folder information, where appropriate, precedes the listing of program contents.
- Folder information is underlined.
- **Program and file names are printed in bold type.**
- ***Shareware information is printed in bold italic type.***

strips returns on any text that is in the clipboard. Useful for extracting text from a word processing document and using it within a telecommunications program.

ClipPrint DA 1.24 f. ClipPrint DA 1.24: By Steve Maller (Apple Computer). Sends the contents of the clipboard to a printer as described in the ClipPrint notes.

Clock: A simple digital clock.

Collapse: The screen contents slowly collapse into rubble much like a building in an earthquake. Recover by rebooting your Mac.

Commander 2.0: By Tom Fernandez. This full screen of information displays the Hayes modem (and compatibles) AT commands and S Registers.

Comments f. Comments: By Carlos Weber. Lets you read, write, or modify the comments normally found in the Finder's "Get Info" box from within an application. Menu.curs is a cursor resource to allow the use of a special cursor set with the DA. It is optional, and installs with ResEdit. Note: The Comments.doc says, and experimentation concludes, that the DA doesn't work with Finders later than 4.1.

Compress It: By Jerry Whitnell This DA allows you to compress or decompress files for archiving or uploading/downloading. *Shareware - \$15.*

ConCode 1.5 f. ConCode 1.5: By John S. Stokes III. Demonstrates the condition codes of the M68000 processor. ConCode1.5 Doc just brings you up to date on recent changes. *Shareware - \$15.*

confineDA f. confineDA: By Dana Basken. Takes control of the cursor and confines it to an area of the screen no matter what. Exit the application to recover (if the application has implemented the command Q keyboard command); otherwise reboot. Author information is in the confineDA.doc. *Shareware - \$15.*

ConSITer DA 1.2.1 f. ConSITer DA v1.2.1: By Joe Sewell. A desk accessory to make life easier for folks using Auto UnStuffIt 1.00. It converts SIT files to Auto UnStuffIt and back again by changing the file type to APPL or SIT!, respectively as described in ConSITer DA 1.2.1 Doc. *Shareware - Free if you've paid for StuffIt, but send a message to Sewell.*

Control Panel + 0.85 f. Control Panel +0.85: By Raymond Lau. A replacement for Apple's control panel. This version is not complete as pointed out in the CP+ 0.85 Notes. *Shareware - \$5.*

convert US: By Tseung Ngai Cheung. A calculator for precise conversion between metric and imperial measure, etc. *Shareware - \$15.*

Convert f. Convert: By JAM Technologies. A small DA calculator that also provides a large variety of English and Metric conversions. Install Convert takes the place of Font/DA Mover to install Convert and About Convert is the very brief text file. *Shareware - \$15.*

Coordinates: By E. Wrench. Puts the mouse's coordinates (in cm., in., or pixels) in the menu bar.

CopyFile 2.0: By Claude Wynne. Allows you to copy files while within an application. Later version than on Mac Disk #2.02A. *Shareware - \$10.*

Crabs2: They start from the menu bar and work their way down.

CrashFix: By Jan Eugenides. This DA will help you recover a Ram disk in case of a crash.

CRAY5A.BIN f. CRAY5A.BIN: By DesktopCAD Inc. This full featured scientific and programmer's calculator has many functions. The scientific features include exponential, power and root, trigonometric and coordination transformation functions. Programmer's features include base selection and conversion (in binary, octal, decimal and hexadecimal), logical operations (such as and, or, xor, etc.), register rotate and shift and an ASCII table with Apple's extensions. CRAY5P.BIN is the standalone application version and the comprehensive User's Manual describes how to use it. *Shareware - \$8 for use, \$19.95 for license and updates.*

Create TextDA: By James H. Moore, Jr. Create a DA with your own text in a scrolling format. Use any application capable of saving a text file.

CScan: By Larry Nedry. Checks C code for various unmatched symbols. *Shareware - \$15.*

Cube: A cube á la Rubick's. Much more challenging than the puzzle.

Cursor Maker DA: Converts screen objects in a selection square to a cursor which may be saved in a file named MyCreatedCursors.

DA Book f. DA Book: A desk accessory for text data storage. Open the desk accessory and read the file Book or use MacWrite to read DA Book Doc to see how it works.

DABase DA v1.4: By Vik Rubinfeld. A DA that reads .DBF files including FoxBase, McMax and dBasell and III (IBM format). *Shareware - \$14.95.*

DAFile: By Ken Winograd. Does basic file and disk operations such as eject, file info, free space, rename and delete. *Shareware - \$5 to \$10.*

DAFont3.1: By Ken Winograd. Displays fonts and styles or statistics about fonts. *Shareware - \$10.*

DAfx 1.32 f. DAfx 1.32: By James K. Miles. A full-featured, user-friendly special effects paint utility contained in a DA. Version 1.31 was on Mac Disk 2.08A. This version works under Suitcase II. Supporting files include DAfx Sampler 1/88, DAfx Sampler Description, READ ME! (1.32), DAfx Docs.1.32(word), DAfx Docs.1.30(MW), DAfx Quick Start.text and DAfx.Icons. *KeyWare - \$10 or \$20 for a full-featured version.*

Daleks DA: By Mages Software. Avoid the avenging Daleks by clicking near your character; use the Sonic Screwdriver to do them in. *Shareware - \$20.*

Disk #2.04B — DAs 4

Desk Accessories

DAMenus f. DAMenus Tester: By Russ Wetmore, Apple Computer. Shows the use of hierarchical menus in a DA. The document DAMenus.c is the commented source code for the DA. DAMenus.Project and DAMenus.Project.Rsrc are provided for the hackers out there.

dCAD Calculator V3.0 f. dCAD Calculator V3.0: By Desktop CAD. A full featured scientific and programmers calculator. Most scientific functions including hyperbolics. Base conversion and register operations for programmers. See the CRAY5A.BIN description and the dCAD 3.0 User Manual in this folder for more information. *Shareware - \$8.*

Delay: Does the Mac move too fast for you? This DA slows down its response to any action. (It doesn't slow down the mouse's movements, but watch how long it takes to open a folder.)

Demo Font Mover: Installs, copies, etc. fonts from

the DA menu, rather than through Font/DA Mover. This version is disabled. *Demoware - \$25 for a working version.*

Density Altitude: By Moore. Computes density altitude, temperature (Celsius) and Standard temperature (Celsius) from temperature (Fahrenheit) and pressure altitude.

DePICTer v1.61: By Brian Burton. Translates any picture file on the clipboard into a text file of its hex code.

DeskDialer: Lists phone numbers and dials them in tones to the sound port. *Shareware - \$15 for an update and a hardware adapter for the phone.*

DeskPaint f. DeskPaint Demo: A demonstration version of a bit-mapped Mac graphics editor. It deals with both TIFF and MacPaint images, with a variety of features. *Demoware - The real thing is at dealers. \$59.95 list until 3/1/88, \$129.95 thereafter.*

DeskZap f. DeskZap (v1.32): By Bruce Tomlin. Lets you perform many functions from anywhere you can use a desk accessory, including setting the Finder information for a file; removing line feeds, control characters, etc. from text files; deleting, renaming, copying, and creating files and HFS folders; moving files to different HFS folders; and closing open files. Described in DeskZap 1.32.doc. A minor upgrade from Mac Disk #2.02A. *Shareware - \$15.*

DevTols 2.0: By David Berry. This is a file utility for programmers. Allows one to delete, rename, "touch" files, examine and change file attributes, and more.

Dice Roller: Lets you roll various numbers of dice of various numbers of sides.

Dimmer.DA f. Dimmer.DA: By Charles Lacos. From Tasmania, way down under, a screen dimmer DA and an INIT (Dimmer 1.3) written to allow background tasks, such as printing, to continue even when the screen is dim; and to minimize interaction with other applications. About Dimmer is the documentation that describes the setup. *Shareware - \$10 (whether US or Australian, it doesn't say.)*

DirC: By Pacific Micro Computing. A directory creator which will create new folders in any HFS File. *Shareware - \$1; \$5 for source code.*

DiskInfo 1.45 f. DiskInfo 1.45: By David Dunham, Maitreya Design. Lets you see all mounted disks and their free space, set the default drive, see how much memory is available, see the names and other information for all files on a disk, delete or rename any file, and find a file in any folder, on any disk. DiskInfo.doc has all the information on how to use it. *Shareware - \$10.*

DiskLock™ 1.0: By Jeffrey S. Shulman. Allows local disks (floppy or hard) to be locked or unlocked. (As the Get Info box would.) Be careful folks, you can only unlock the disk with this DA and not via the Get Info window, Disktop and other utilities.

Disktop 1.2: By Gil Beecher. An evaluation copy of CE Software's utility which will find HFS files, copy, delete, and move files, folders, and more, all from within any document or application. *Shareware - \$49.95 for the full version, 3.0.3. (Note: This is a revision from the information in the folder.)*

Display Message: By Steve Christensen. Gives you a lighted banner-strip across your Mac with your written message. Change the author's cred-

its to print your own message.

DisplayRLE: By Steve Christensen. This DA displays RLE graphics which can be found on CompuServe. File to screen, screen to inverse screen and screen to file conversions are provided.

Doodle Pad: An expandable blank window in which you can doodle with the mouse as with the pencil in MacPaint, but with no fancy features at all. (Cut from the Edit window will clear the pad.)

Double Apple f: Double Apple: By Stefan Bilaniuk. This DA allows you to run another DA, not in the system file as explained in Double Apple doc. The DA is retained only until you quit from Double Apple. *Shareware - donation accepted.*

Download Cost DA f: Download Cost DA: By T. Trinko. A timer and calculator that computes the cost of downloading a file from a service with a billing rate or a BBS with a long distance toll charge. Documentation in the READ ME Download Cost™ Doc file. *Shareware - \$5.*

DtC f: DtC (Desktop Calculator): By Lars Sundström, S.I.M.P.L.E.. A basic scientific calculator. *Shareware - \$5.*

Dvorak 3.0+ f: Dvorak3.0+: Turns your keyboard into a Dvorak keyboard. It acts as a toggle switch. Dvorak (MacPaint) shows the Dvorak keyboard layout.

Easy Envelopes DA f: Easy Envelopes DA (v6.0): By Andrew Welsh. Lets you print envelopes with a return address, up to 99 stored addresses, and an optional endorsement line. Easy Envelopes Docs, Easy Envelopes File and Updater 2.0 are supporting files. *Shareware - \$10.*

Envelope 1.0a4: By Loftus Becker. A neat answer to an old problem; once you've written the letter, how do you address the envelope? You do it here by copying the address to the clipboard, then open the DA. (Note - in typing your return address, use the µ character (option-m) instead of a carriage return between the lines of the return address.) *Shareware - \$5.*

eps->pict.da f: eps->pict.da: By Gary Odom. Converts encapsulated postscript (EPS) files into PICT format for pasting into Word or WriteNow, for example, without losing the LaserWriter print quality. eps->pict info is the brief text file.

Error: By Jim Usalcas. Displays and describes four screens of Mac error codes. *Shareware - Donations accepted with thanks.*

Event Reference: Displays the cursor location and other information useful to programmers. (Note: for some reason, doesn't work well with Word 3.01.)

Extras f: Extras: By Bob Luce. A multi-function DA with functions such as free memory, free space on disk, delete file, and application to launch (run) after quitting. EXTRA15.DOC is the documentation. The application Install FKEY 8 installs an FKey into slot 8 for use with Extras 1.5. *Shareware - \$10.*

Ez-Mail 1.10 f: Ez Mail 1.10: By James K. Miles. Maintains multiple files of names and E-Mail addresses for up to four different services for frequent E-Mail or bulletin board users. Ez-Mail (READ ME NOW!) is the documentation. *Shareware - \$15 for full featured version.*

Fade to Black 2.0 f: Fade to Black: By Brian L. Matthews. A DA screen blanker which creates an INIT file to blank the screen after periods of

inactivity. When you activate the DA, you can specify the delay period you want. Fade to Black Doc explains it all. *Shareware - what you think it's worth (but you don't have to).*

FatMouse3.1: By Ken Winograd. Displays the time, date, global cursor location (in pixels) and a fat bits view of the location of the cursor.

FFT 0.96 f: FFT 0.96: By Greg King. Calculates the Fourier transform of numeric data that it finds on the clipboard and replaces the original values with the transformed data. Fourier 0.96 doc explains all.

File Printer: Prints any text file from the desktop. Be sure you want to print it when you start - there doesn't seem to be any way to stop printing short of re-booting.

File Splitter DA f: File Splitter DA: By Andrew E. Page. Lets you split large files into small ones. The configuration of the files can be changed by holding down Shift when the DA is opened. File Splitter.APP is the standalone application and File Splitter.DOC briefly describes the process. *Shareware - \$3.50.*

File Tools: Provides access to information about individual files and the ability to change it, and to copy, delete, rename and launch applications and files.

File Utilities DA: Lets you inspect files to determine Type and Creator, Creation and Modification dates and resource and data fork size. Also permits you to copy or delete files or to change lock or invisible status.

FileChange f: FileChange: Version 1.0 By Tom Dowdy. Converts various other word processor files to MacWrite. See FileChange Doc documentation for items supported. *Shareware - \$10.*

FileCopy: By Mike Cohen. Lets any selected file be copied. *Shareware - \$10.*

FileFixer: By Bill Steinberg. Works on text files to add or subtract line feeds and to filter out untranslatable characters.

Disk #2.05B — DAs 5

Desk Accessories

FileMaster f: FileMaster: By Alexander Falk. An advanced DA that permits you to inspect files to determine their various attributes (size, type, creator, flags, etc.) and to browse the contents of the resource or data forks. The comprehensive FileMaster 2 describes its features and explains how to use it. *Shareware - \$25 U.S.*

FileStar (DA): By Scott Searle. Shows file info (type, creator, flags), allows files to be renamed, deleted, copied and moved, and new folders created. *Shareware - \$15.*

FileTran: By James Robinson. Allows you to copy, delete, and do a "get info" for files. *Shareware - \$8.*

FixPix: By Michael Casteel. Fixes bit maps pasted from MacPaint so they come out darker within text documents. Run before pasting the picture in the document so as not to produce the usually "grayer" output when text is printed in less than "Best" mode.

FKEY Runner Demo: By Loftus Becker, Jr.. A demo of the FKEY runner DA, found on Q&D Utilities Vol. 2 from Dreams of the Phoenix.

FKeys: Puts a menu bar up which displays and allows installed FKeys to be operated. This DA will stay in the menu bar until re-booting.

Flow: Watch as the menu flows into the sea of fat

bits. Re-boot to recover.

FolderMaker: By Jan Eugenides. Lets folders be created and named from within applications.

Font Grabber+: By Richard Salley. Within an application, attempts to allow the substitution of new fonts in the font menu, but doesn't seem to work with all applications. *Shareware - \$5.*

Font Lister f: Font Lister: By Jim Leitch. Lists all Font families and the sizes in each family that are in the system file and in a font Suitcase™ file. Note that the source code mentioned in the documentation is not included.

Font Sizer f: Font Sizer: By Chris Carr. Use to temporarily add additional Font sizes between 3 and 127 points to MacDraw Version 1.9 as described in the fontsize.doc. (MacDraw II doesn't need it.)

formfeedDA: By Synthetic Reality, Inc. Advances the ImageWriter like the form feed button when run. *Shareware - No check is too small.*

Forum Help!: By Paul B. McMahan A series of help screens for CompuServe's new commands.

FrCalc DA f: FrCalc DA: By Steve Bryan and David Stovall. A calculator that adds or subtracts numbers expressed in feet and inches and fractional inches as described in FIFC Information. Handles fractions without converting them to decimal values. FrCalcHelpDA is a help DA. *Shareware - \$5.*

FreeMem: Shows the free memory.

FreeSpace: By Neal E. Trautman. Returns free and maximum memory for disk, application heap and system stack and heap. *Shareware - \$5; \$15 for THINK™ C source code.*

Fun House: Welcome to the Mac hall of mirrors.

Function Keys: Puts up a menu from which installed FKeys can be invoked. Unlike the FKeys DA, this one has a close menu so you may remove it from the menu bar without re-booting.

Gabby: This one just talks. (Needs MacinTalk in the System folder.)

Get Comment DA: By Francisco Garcia. Lets comments be inserted in a box associated with an application or document. *Shareware - \$10.*

GlobalPointers: GlobalPointers: By Moore. Shows Global Pointer type address, data, etc. for programmers and hackers.

Gone Fishin' f: Gone Fishin': By Wade S. Blomgren. Design your own blanked screen; be artistic, leave messages for co-workers, etc. Type any key to return to work. GF doc briefly explains how it works.

Graphics Viewer: By Dan Green. Opens PICT (MacDraw) and PNTG (MacPaint) documents for viewing in full-sized or show page formats. *Demoware - \$7 for a version that copies to the clipboard.*

Grep-Wc 1.1 f: Grep-Wc: By Paul DuBois. A fancy word counter with extensive pattern matching and search capabilities. Works with TEXT and MacWrite files. Search function emulates UNIX grep. Grep-Wc doc describes how to use it and perform the patterned searches.

GumbyClock: A large analog clock/current calendar combination with a picture of TwoSheds. Can anybody out there tell us what/who is TwoSheds?

Halloween: Don't worry. It's only a trick.

Heap Picture: Displays the heap.

heap scan: Also displays the heap.

HeapInfo: Displays information about the heap.

ACT QUICKLY
special MacExpo prices
All disks
\$3
Offer ends June 1st

HelpDA f: Help DA: By James McCarthy. Lets help texts be created as desk accessories, with up to sixty indexed sections and 5000 characters of text per section. Text >> Help is the application to convert text to a help file. About Help DA and About Help DA.txt are the supporting documentation. *Shareware - \$25 or what you think it's worth.*

HexFlags 1.2 f: HexFlags DA Version 1.2 By Mark Chally. A specialized DA for the programmer who uses ResEdit or other programming languages, it calculates the content of a menu template's "enableFlgs" field and expresses it in hexadecimal. The Hexflags.doc spells it out for those who understand this stuff.

HFS Find f: HFS Find: By Coyote Systems. Searches an HFS volume for files. May be limited to files by name, creator, type, modification date, or specific folder. HFS Find1.2 Doc describes how to use it.

How Far...VOR?: By Moore. For you pilots, shows distance between two VOR stations.

Icon Maker 2.1 f: Icon Maker 2.1: By Steve Fine. This permits you to make an area of the screen that you choose into a resource type ICON or ICON# as described in Icon Maker Doc. *Shareware - \$what it's worth.*

Idle: A screen blanker with a bouncing Mac.

Illust.DA f: Illust.DA: By The Baxter Group. Four individual DAs (File/Edit, Tools, View Arrange, and Windows) which provide information about the command keys, etc., for Adobe Illustrator. They can be installed within Illustrator by holding down the option key when opening the DA file, then opening the Illustrator application within the dialog box. The Illustrator's DA doc includes screen dumps of the DAs.

InternationalTime f: InternationalTime: By Ted Sapountzis. Displays the time and date in 6 different world cities based on Eastern Time. Adjusts for daylight time automatically in summer. ITNotice is the documentation. *Shareware - \$5 for source code.*

JoliWrite2.0 f: JoliWrite: By Benoit Widemann. An attractive text editor DA. Look for the menu under the JoliWrite heading in the window. Big DAs Runner is a supporting application to assist in running large DAs such as JoliWrite. *Shareware - \$20.*

K & R: By Neal Trautman. Handy K&R reference for C programmers. *Shareware - \$10.*

KeyMouse f: KeyMouse: By John Halleck. Allows the user to perform all keyboard functions with the mouse using an on screen version of the standard keyboard. KeyMouse Document has a description of how it works.

KIWI Envelopes!™ 2.05: By Kiwi Software, Inc. A DA to print envelopes on LaserWriters or compatibles. *Shareware - \$8 for registration and documentation.*

Klutz 1.0: By Bill Steinberg. This DA, for the Mac II only, allows the Color Lookup Table (CLUT) to be changed, hence the name. Just double click on the individual cell you want to change and the standard color picker will appear. Klutz also allows you to load and save CLUT files.

Knockout: By Andy Stadler. This is a DA version of the old Brickout game. *Shareware - \$5.*

Label DA f: Label DA: By Eastgate Systems. Prints envelopes, labels, and file cards as described in

label & envelope da (text). *Shareware - \$15.*

LabelMaker f: LabelMaker: By David Matter. Prints 5 or 6 lines of text to the currently selected printer (not a LaserWriter) sent as ASCII text rather than the usual Macintosh font bit mapped characters. LabelMaker Docs synopsisizes its operation and limitations.

Laser Envelope DA: By North Shore Computers. Prints the contents of the clipboard to the LaserWriter, so can be used to print envelopes easily. Launch: Launches applications or explains why it can't.

Load Keyboard 1.0: By Loftus Becker. Loads a keyboard file. Although the screen shows that it is part of Q & Dirty Utilities 2, it is no longer a commercial product.

Locator: By Eagle I. Berns. This DA locates the position of the mouse on the screen as well as showing a 9 by 9 pixel "fat bits" view under the pointer. *Shareware - \$10.*

LockOUT™: By Stuart Davison, Mike Pell. Allows you to lock out other people from using your Mac by putting up a "password protected" idle screen. Find out about it in Release Notes (LockOUT).

LoftyTime: By Loftus Becker. See the time in any of five preselected locations. Use ResEdit to change the locations.

LoMem: By Neal E. Trautman. Shows memory locations and a number of system and application memory parameters useful to programmers and hackers. *Shareware - \$5; \$15 for THINK™ C source code.*

Disk #2.06B — DAs 6

Desk Accessories

Lookup DA v1.00 f: Lookup DA v1.00: By Hugh Sontag. Provides a Macintosh user interface to standard tables of data. Can access any data stored in a text file. Up to four columns of data may be associated with a descriptive buttons. OpenMeWithLookup takes advantage of the capabilities of the DA to provide a description of operation and ASCII Table is a sample file.

Mac's Headroom: Ca- Ca- Catch the wave!
MacPaint Girl (Revisited): The Japanese woman combing her hair in a full view.

Macros.Demo f: Macros.Demo: By Mike Cohen. A demo version of a text macro program. Macro File is the demo file which may be edited with a resource editor to change the key sequences. MACROS.TXT describes the program. The shareware version can edit and save macros. *Shareware - \$20 or \$15 + blank disk.*

Macster Mind: By John Heidmann. A pattern matching game for the Mac. *Source code is \$4.*

**How to Read
MacDisketeria Descriptions**

- The folder information, where appropriate, precedes the listing of program contents.
- Folder information is underlined.
- **Program and file names are printed in bold type.**
- *Shareware information is printed in bold italic type.*

MacYahtzee: By Edd Vrcich. A dice game based on Parker Brothers' similar item, of which some knowledge is required in the absence of documentation here. *Shareware - \$15 for MPW source code.*

Maxwell 2.2a: Try to get all the "fast balls" on one side of a wall, and all the balls on the other. Tough, takes time and patience.

McSink DA V6.5 f: McSink DA V6.5: By Dave McWherter. A general-purpose text editing DA multi-window memory-based editor. Use up to 16 windows, with the amount of text in each window limited only by the amount of available memory. McSink also provides a number of special purpose editing and file access commands as described in McSink V6.5 Docs. *Shareware - \$30.*

Measles: Spots appear on the left side of your screen and leave trails as they bounce around and move to the right. Re-boot to restore normality.

MegaCalculator f: MegaCalculator: By Jonathon Whitman. A "really big" calculator with all sorts of functions; see the MegaCalculator Docs MacPaint document for instructions.

MegaWatcher f: MegaWatcher: By Scott Gillespie. A DA that tracks the loading and unloading of resources. You may specify any resource type (CODE is default) and MegaWatcher will keep a continuous display of all resources of that type. You can determine the size, location and status (in memory, locked, and/or purgeable) of each resource. See the MW Notes or the MW Docs for instructions.

Mem Watch DA: By Jay Fenton. Shows the contents of memory and lets it be changed. *Shareware - \$10.*

Memoir DA: A DA to permit you to recover fragmented computer Random Access Memory.

Memory Monitor: Displays the condition of the memory as a pie chart with various options as to the heap.

MemroMeter f: MemroMeter: By Dana Basken. A display of the current free memory situation as a thermometer, with free memory represented as the mercury. *Shareware - \$5.*

MemScan: By Michael Wise. Performs a memory dump.

MenuTime: Puts the hours and minutes in the menu bar.

MenuFonts™ v1.0 DEMO: By Stewart Gable, et al. Displays the names of the installed fonts in the styles of those fonts in a standard menu bar display. (Geneva in Geneva, Chicago in Chicago,

etc.) The demo displays only the first three fonts in your system. *Shareware - \$15 for the full program.*

MenuMaster f: MenuMaster: By Fred D. Reed. Change application Menu titles and command key equivalents with this useful DA. MenuMaster docs describes what it does. *Shareware - \$5.*

Message: By Steve Christensen. Puts a message of the user's choice in a streaming news ticker tape across the center of the screen.

Mickey Mouse Clock: Mickey's hands show the hours and minutes.

Microscope: By Eric D. Boegel. Displays the cursor location and a view of it in various magnifications.

MIDI Prog. Sel: By Austin Development. Lets a MIDI program and up to 16 channels be selected or initialized.

MidiHz v1.1: By Mark Erickson. Displays a list of the frequencies and numbers of 11 octaves of musical notes. *Shareware - Donation.*

Mini Sci Calc f: Mini Sci Calc: By Chris Munger. A full-featured calculator, does binary, hex and decimal calculations, summations, and trigonometric functions.

miniDOS f: miniDOS: By Dick Koch. Puts up a mini-Finder which allows you to rename and delete files from within an application. MiniDOS Doc describes its features and use.

miniWRITER™ 1.42 f: miniWRITER™ 1.42: By David Dunham. A text editor with features such as font selection and a find command. miniWRITER.doc is the comprehensive manual. *Shareware - \$12.*

MMDA DA (Midi Mode DA): By Austin Development. Send Midi messages to your synthesizer from your computer.

MockPackage+ 4.3.4 f: MockPackage+ 4.3.4: By Donald Brown. CE Software's famous package of MockWrite, MockPrinter, MockChart, and MockTerminal. The excellent two part manual is included as MockPkg Manual 1 and 2 (MacWrite). MockPackage Utilities permits tailoring of the DAs. *Shareware - \$35.*

Moire f: Moire: A screen idle with circular patterns. Moire Doc describes Moire.

Molasses: Slows the operation of the Macintosh down in three degrees of slowness.

Mouse-o-Meter: Displays the mouse coordinates. **Mouseprint:** By Bill Scott. Displays the mouse's coordinates and a characterization of the location. Move the display to an area of the desktop that has no other windows, otherwise it will disappear.

mPCv01: By Bob Meyers. The MeyersProgCalc () allows calculations in decimal, hex, octal, and binary modes. *Shareware - \$15.*

Multi-Scrapbook: Lets you select from various scrapbooks saved with different names.

MultiCounter: By Andrew E. Page. Counts the words, characters, sentences and calculates average words per sentence for MacWrite 4.5 documents. (Remember to save the latest version of your work before you try to count it.) *Shareware - \$5.*

MW 4.5 Counter.DA: By Andrew E. Page. A smaller version of the preceding DA that counts the words and characters in MacWrite 4.5. (The caveat about saving your work first still applies.) *Shareware - \$3; \$5 for source code.*

Disk #2.07B — DAs 7

Desk Accessories

neko DA: By Kenji Gotoh. An amusing animation of a kitten chasing the mouse cursor patterned after neco.com for the NEC PC-9801.

New Idle1 f: New Idle1: By Larry Rosenstein. An idle with a bouncing Mac. See the New Idle1 Doc on how to change the moving icon.

New Scrapbook (v2.2): By Tim Wasiko. An alternative scrapbook file with additional features. *Shareware - A small contribution or a postcard.*

Note Pad II: By Arthur Britto II. A notepad with an a table of contents feature. *Shareware - \$20.*

NumCaps f: NumCaps: By Jeffrey S. Shulman. Copy any character in any Macintosh font and size to the clipboard for later pasting into an application document. NumCaps.doc describes how. *Shareware - \$7.*

Open It!@ Demo f: Open It!@ Demo: By TEN-point0. This DA allows you to open documents printed to disk using Print It!. The Read Me First documentation tells how to use it and describes the features of the commercial version of Open It! Examples are included in the Sample Files f.

Opus Clock DA: The same clock/calendar as above, but with a cartoon of Opus from Bloom County.

Other...3.09 f: Other... 3.09: By Loftus L. Becker, Jr. Runs other DAs without having them installed in the system or application. Other... 3.09 doc is the comprehensive documentation. *Shareware - \$10; \$15 for current version and goodies.*

PagerDA: Lets you dump the screen. You can save the dump as a MacPaint or MacDraw file or send it to the printer and you can name the file (unlike taking the screen dump with the <Command - 3> key).

Paint DA: By Page Software. Displays Paint type documents, allows them to be copied to clipboard. *Shareware - \$10.*

Paint Grabber: Called Art Thief when it opens, this lets you open, view and copy to the clipboard selected portions of MacPaint-type documents.

Paint Reader: By Page Software. Reads MacPaint documents and can convert them to startup screens. *Shareware - \$10.*

ParmBlaster f: ParmBlaster: By George Deriso. When selected, clears the Macintosh or Mac XL's parameter RAM. The Control Panel desk accessory's settings (volume, mouse tracking, keypress sensitivity, etc.) have been reset to Ø. Does not affect the date and time. If AppleTalk was connected, it will be disconnected. ParmBlaster Docs is the brief documentation.

pattern mover: By Cliff Joyce (Dub-Click Software). Lets sets of patterns be moved from one MacPaint or FullPaint palette to another. Option-click on an individual pattern to edit, create new sets of patterns at random.

PatternList DA f: PatternList DA: By W. J. Bock. Shows the System PAT# resources (number and pattern).

Peeper f: Peeper: By Matt Holiday. A very simple DA which allows you to look inside paint documents. Note: does not work correctly when opened within some paint programs (FullPaint and SuperPaint) See Peeper Notes for the details.

Periodic Table: By Jeff Garner. Displays the periodic table. *Shareware - \$5.*

Phone Book f: Phone Book: By Peter Merchant. A

database to enter and look up telephone numbers. The one page MacWrite document Phone Book Instructions says it all.

Phonemes: A list of phonemes ("the smallest units of speech that serve to distinguish one utterance from another...") and examples.

PictDisplay: By Neal Trautman. Permits you to view up to nine PICT resources. *Shareware - \$10, 25 for source code.*

PictToClip DA: By Mike Calbaum. Opens, displays and prints PICT files and copies them to the clipboard. Also takes data on the clipboard and saves it as a PICT file. *Shareware - \$5.*

Piczie: By Riccardo Ettore. A variation on the Mac puzzle, this time with a familiar picture scrambled. Click the screen to set the pattern, then manipulate the pieces. *Shareware - \$5.*

Pocket Calendar 1.2: By MacBear ShareWare. A small calendar that covers one month at a time. *Shareware - \$3.*

PocketDA f: PocketDA: By Chris Heilman. An implementation of Forth as a DA. PocketDA Docs describes changes implemented in this latest version. TUTOR, Sieve Doc, Pocked DA and Pocket.Glo (Forth) are all associated files but the main documentation (if any) seems to be missing.

Poker Game: By Mike Kory. Poker against the Mac ala a Las Vegas poker machine. *Shareware - \$5.*

Poly f: Poly: By Jeffrey Shulman. A screen idle that generates a moving pattern of lines formed from polygons. Moire Doc describes it.

Popup 1.0 f: Popup: By Robert Stromberg. Allows access to the menu bar from anywhere on the screen as described in About Popup. It will work with (probably) any menu in (probably) any application. *Shareware - \$10 (\$25 for code.)*

Port Watcher 1.0 f: PortWatcher: By Steve Fine. Monitors a serial port for incoming information while telecommunicating, putting up a "string art" screen blanker while you wait. (The blanker can be used by itself; see the PortWatcher.doc documentation.) *Shareware - What you think it is worth.*

PostScriptDA f: PostScriptDA: By Firefly Software. Allows you to select and download PostScript™ files to the Apple LaserWriter. PostScriptDA Notes briefly describes it. *Shareware - \$5 or \$10 (or whatever you think it's worth).*

PowerEdit f: PowerEdit: By Anson Tsao. A DA editor designed to bridge the gap between full-blown program editors like QUES/M and the small DA editors. PowerEdit.wrt is the fairly extensive documentation. *Shareware - \$20.*

Preferences 1.01 f: Preferences 1.01: By Raymond Lau. A replacement Control Panel with more features than Apple's 3.1 version. Preferences 1.01.txt tells all about it. *Shareware - \$5.*

PrinterWheel f: PrinterWheel: By Jerry Gibson. This calculator helps you figure the percentage reduction or enlargement necessary to fit a graphic into a specific sized space. PrinterWheel docs describes how. Note that PrinterWheel is an application that installs the DA when you run it. *Shareware - \$5.*

ProCount 1.0: By John Pintar. Lets you count the number of words in a text file. *Shareware - \$5.*

ProgCalc: By Jan Eugenides. A many-featured programmer's calculator which includes writing the "paper-tape" to the clipboard, disk, or printer. Operates in binary, octal, decimal or hexadeci-

mal.
PS Printer: By Scott Gillespie. Sends a Postscript file to a Postscript printer.
push: Shows a body "pushing" the screen off the Mac. Reset the Mac to stop the action.
QDial 1.6 f: QDial 1.6: By Leo Laporte. Re-dials in the background up to five BBSs, rotating them continuously until one is reached. Supports Hayes compatible modems operating at 300, 1200 and 2400 baud as described in QDial Docs, a comprehensive manual.
Quick Label DA f: Quick Label DA: By Andrew Welch. A simple one-label-at-a-time printer as described in the Quic Label Docs. *Shareware - \$5.*
QuickB Download 1.20 f: QuickB Download 1.20: By Raymond Lau. A desk accessory written for the CompuServe user who downloads frequently. QuickB is a new protocol which allows for significant speed gains and time savings when downloading from CompuServe. About QuickB Download 1.20 is the documentation. *Shareware - \$20.*
QuickPie 0.9 Demo f: QuickPie 0.9 Demo: By Kendall J. Redburn, Prophecy Software. A desk accessory to generate pie charts that may be copied to the clipboard and pasted into documents. Features selectable patterns and exploded and three dimensional wedges. QuickPie Docs is the documentation. *Demoware - \$35 for full featured version.*
QuickScores DA f: QuickScores! DA: By Anthony M. Tuorto. This DA provides a fast and efficient way to check the current operating system file for the SCORES virus. QuickScores! examines only the system file for the virus because SCORES always attacks the system file first, after invading any disk. QuickScores! Docs is the documentation.
Quote of the Day f: Quote of the Day: By Exodus Software. Displays quotes for each day of the month. Additional quote files (of 365 quotes) are \$10 each or 365 quotes, football trivia, baseball trivia and New Testament verses for \$25.
Disk #2.08B — DAs 8
Desk Accessories
RasNIX f: RasNIX By Scott Gillespie. A pseudo-UNIX emulator, which allows files to be examined and manipulated (to some extent). RasNIX provides a command-line-oriented shell, and supports several standard UNIX commands (as well as some Mac specific commands). RasNIX.doc provides a brief summary of its operation.
Rays: Draw rays from a common point.
Reader 1.06: By Bob Perez. Reads and displays text files.
ReadMacWrite: "Reads" a MacWrite file to a plain text file.
Remember?.da (v1.3) f: Remember?.da (v1.3): By Dave Warker. A Desk Accessory and an INIT to recall descriptions of important occasions, both one-time only (such as appointments) and repeating (like birthdays) entered into a file. The Remember? INIT reminds of impending events when the Mac is powered up or reset. Remember? docs, General and Remember? templates are the documentation and supporting files. An update from Mac Disk 2.10A, with bug fixes and some new features described in the documentation. *Shareware - \$10.*

reset.DA f: reset.DA: By Greg King. Sends a software reset command to the LaserWriter as described in the reset.doc.
ResPeek DA v2.03: By Pierre Omidyar. Displays the resources in any file, and lets them be decompiled, copying the listings to the clipboard for incorporation in other documents. *Demoware - \$25 for full featured version 2.1.*
ResReviewDA: Shows computer program resources used in Macintosh system files.
Rhine DA: By C. Heilman. Displays the deck of five cards devised by J. B. Rhine for ESP precognition experiments so you can experiment with your ESP skills yourself. (Don't worry if you don't show any ESP; it didn't work for Dr. Rhine very often either.)
Road AtlasDA: By MicroSparc. A map of the continental United States with major cities and the routes between them marked, which calculates the mileage via the routes shown.
Rolodesk Ver2.0: By Tim Endress. A desk accessory phone list like Bill Atkinson's QuickFile (Rolodex) application. This is an update of the version on Mac Disk #2.05A except it is now free instead of shareware.
Rolodex f: Rolodex: By Tim Endress. A desk accessory phone list like Bill Atkinson's QuickFile (Rolodex) application. RoloHints briefly explains how it works. *Shareware - \$5.*
RoomMate f: RoomMate: By Dana Basken and Chris Mascia. Feel silly talking to an inanimate computer? Here's someone to whom to react. *Shareware - \$5.*
rpnda f: rpnda: By Jonathon Hess. A reverse Polish notation calculator inspired by the Hewlett Packard machines with many features. RPN.doc tells a little about it, but click the ? button on the DA for more useful help.
Rubik's Cube: A Rubik's Cube to solve. The small cube on the left restores the large cube while the one on the right scrambles it.
Ruler: Measure in pixels, cm., and inches between any two points.
Safe Launch 2.2 f: Safe Launch 2.2: By IMI Software. Allows direct transfers between applications without first returning to the Finder. The I'd Read This If I Were You! file describes differences from the version 2.0 documentation (which, unfortunately, was not available). *Shareware - \$5.*
Saviour1+: Automatically saves the active file at pre-selected values of time or keystrokes or mouse clicks. Specify the menu function within your application that saves the file, for example - Save.
Scrap2Lib f: Scrap2Lib: By Symmetry Corp. Converts Scrapbook files to PictureBase Library Files (but there is no way to convert them back unless you have the PictureBase application).
Screensave+ f: Screensave and Screensave+: By John Dunce, updated by M. R. Tollefson. Idle screens for the Mac and the Mac Plus, respectively. There is no animation or illustration; the cursor remains as a reminder that the Mac is on. You may specify the time until activation. ScrnSvDox tells all. *Shareware - Contributions.*
ScreenSaveDA: By Anon. A screen saver with an attractive square spiral pattern and a display of the time and date.
ScreenSaver_DA: When activated, responds to periods of keyboard or mouse inactivity by converting the screen to a negative image of what is

displayed, then alternates between negative and positive views.
Scribbler 3.0 f: Scribbler 3.0: By Brian Newton. An object orientated drawing package in a Desk Accessory as described in Scribbler3.0Manual.txt. An enhancement of the version on Mac Disk #2.05A. *Shareware - \$25.*
ScreenToLife3 DA f: ScreenToLife3 DA: By Dan ?. The game of "Life" as a DA. The Read Me Please is the brief documentation.
Search f: (Text) Search: By M. Moore. Searches a file or folder for the text which is entered. Works in a variety of word processors and desktop publishing programs, including Fullwrite Professional, Microsoft Word, PageMaker, WordPerfect, MacWrite, and Quark Express as well as text (ASCII) files. Instructions is the documentation.
Seek'n Destroy f: Seek 'n Destroy: By Brad Kish. A game much like battleship where you play the computer. The S & D.Doc tells all you need to know in one page. *Shareware - \$5.*
SegWatcher f: SegWatcher: Tracks the loading and unloading of program segments.
Set Paths 1.3 f: Set Paths: By Paul Snively. Lets five 'paths' be automatically searched when looking for a file (the other two paths are for the volume name and system folder). The instructions are included in Set Paths 2.3 doc. The INIT Boot Paths is placed in the system folder to set up pre-selected search paths when the Mac boots. *Shareware - \$20.*
SetMenuFlash 1.1: By Raymond Lau. Allows the rate of menu flash to be set. (Some versions of the Control Panel don't.)
Setsound 1.3: By William Steinberg. This DA allows the speaker volume to be set without having to leave an application.
Show Clipboard: Displays the clipboard; useful in applications where Show Clipboard isn't a menu choice.
ShowDown f: ShowDown (v1.10): By Dana Basken. For sysops of BBSs, it provides a message-taking service while the sysop works on other projects. ShowDown.doc is the brief documentation. *Shareware - \$5.*
SkipFinder 6.2 f: SkipFinder 6.2: By Darin Adler. Puts up a mini-finder that allows applications to be switched quickly instead of going to the Finder every time an application is quit. skipfinder.txt describes how to use the application StartSkip 1.0 to quickly enter the SkipFinder.
Sleep: A simple screen blander with a bouncing Mac.
Sleeper f: Sleeper: By David Oster. A screen saver with a moving line pattern. The description is included in the Sleeper, Stars & Win-dow doc.
Smart Quotes 2.7 DA f: Smart Quotes 2.7 DA: By Philip Borenstein. Changes straight quotes into curly quotes, "fi" and "fl" pairs into ligatures, and double hyphens into em-dashes; and catches double capitals at the beginning of words. *Shareware - \$10 for an INIT version.*
SnapJot f(Demo): SnapJot: By Marcia Edel. SnapJot is a different kind of screen capture Desk Accessory for creating instant notes from information displayed on your screen. SnapJot copies areas of the screen of any size into individual Macintosh windows. This demo version limits window size. *Demoware - \$36, 32 for CompuServe members.*

SnapShotDA: By John A. Love, III. Take a PNTG or PICT (MacPaint or MacDraw format, respectively) snapshot of the Mac screen after a selectable delay time. *Shareware - \$15.*

SoftDisk DA f: **SoftDisk DA:** By Matthias Urlichs. Creates files "soft disks" (or partitions) on your hard disk that may be accessed just like a floppy disk. Just like a floppy disk, the soft disks are not accessible unless opened on the desktop. *Shareware - \$45 U.S. for the full-featured commercial version.*

Sort DA f: **Sort DA:** By Ronald Parsons. Lets lines of text be sorted either alphabetically or numerically. The About Sort (and Tab Expander) describes the DA. *Shareware - \$5.*

Sort f: **Sort:** Another sorting DA, sorts lines on the clipboard alphabetically as described in Sort Docs.

SoundPlay: By Bruce Tomlin. Opens and plays sound files.

SpiralsDA.acc f: **SpiralsDA.acc:** By Lawrence Walker. Generates a rectangular spiral on the screen; see About Spirals to see how to stop it without re-booting.

StackSniffer 1.0: By Jan Eugenides. Continuously displays the stack pointer and the top of the application heap.

Stars 1.8 f: **Stars 1.8:** By David Oster. A screen saver with a receding or accelerating screen of stars. See the Sleeper, Stars and Windows and the Stars.doc for information on how to control the display.

Stars II f: **Stars II:** By Rus Wetmore. An implementation of the Stars screen saver that runs on the Mac II. (Works on other Macs too, but slower; Stars II Doc tells why.)

StickingOut DA f: **StickingOut DA:** By M. Tomiyama. Allows the convenient control of paper from the ImageWriter printer.

Disk #2.09B — DAs 9

Desk Accessories

Strongbox DA: By Andrew Welch, Mark 3 Software. A simple password based file encrypting and decrypting utility. *Shareware - \$10.*

Stuffclip: By William Steinberg. Lets 32 non-typeable figures and control characters be cut to the clipboard, and then pasted into documents as appropriate.

Sun Clock™ Demo: By Michael Trigoboff. A non-working demonstration of a clock/map which shows where the sun is shining all over the world. *Demoware - \$15 for a working copy.*

Sunrise...Sunset f: **Sunrise...Sunset:** A DA which tells the current time of those events based on the latitude and longitude data entered. Note: Washington is at 39 N Latitude; 77 W Longitude for all practical purposes. Create Sunrise...Sunset is the application to create the DA.

Super Ruler 1.0 f: **Super Ruler 1.0:** By Randy Ubillos. Allows objects on the screen to be measured at different resolutions. Super Ruler.doc describes how to use it. *Shareware - \$10.*

SysErrTableDA f: **SysErrTableDA:** By Bill Steinberg. Displays a comprehensive list of Macintosh errors. The window comes set for the proper width, and it autocenters itself on the main screen. On a color Mac II, it'll be in color. With a little work with ResEdit it can be used to display other information too. Click on the author credit of the DA for the documentation.

Tab Expander DA f: **Tab Expander DA:** By Ronald

G. Parsons. Expands tabs into a given number of spaces. Also converts TEXT files into standard file formats for the Macintosh, IBM PC and UNIX. Tab Expander (and Sort) briefly describes why you would use it. *Shareware - \$5.*

Talking Moose 4.1 f: **Talking Moose:** By Steve Halls. This is the classic icebreaker for new Mac users. Install this friendly guy and he will be a constant reminder that you are pausing often and long in pursuit of Mac expertise. The Moose Phrases and MacinTalk files go into the System folder. Moose1.21 is the DA that you install with the Font/DA Mover or with Install the Moose. See the About Moose for information on the About Code, MooseUnit.p, Talking Finder v4.1 and SwitchMoose files.

TalkingKeys 1.0 f: **Talking Keys 1.0:** By Brady Graham. Creates a "talking Mac" using the sound system of the Mac to verbalize typed letters or words as described in TalkingKeys.Info (1.0). Fonts (Toys1/Toys2) are two supporting ImageWriter fonts comprised of illustrations a la Cairo. *Shareware - \$15.*

Talking Mac (MacTalker): By James Jaquin. The Mac will speak whatever message you type or a text file that is read in. Requires MacinTalk in the System folder.

TeaTime: By Takao Teshi. From the land of the rising sun comes this cute animation.

Telegraph: By Steve Capps. Converts typed letters into Morse code.

Text Bender 0.95p f: **Text Bender 0.95p:** By Troy A. Dix. This preliminary version "bends" a user entered text string around a specified size circle in the LaserWriter font of your choice. Creates an Encapsulated PostScript (EPS) file that may be pasted into applications that support EPS such as Word, PageMaker, etc. *Shareware - \$15 for version 2.0.*

Textcount: By Stephen Kirkpatrick. Can be used to analyze various aspects of a text document such as the number of words, sentences, and paragraphs in the document and "the approximate grade level of the document reader." That's fine, as long as it doesn't try to determine the grade level of the document writer.

TextFileView: By Craig Colbert. Permits you to read data files in text format including large size files. Shows one record (a line delimited by a carriage return) at a time.

TheBox: Displays time and free memory, also a built in timer.

Tic Toc II f: **Tic Toc II:** By James K. Miles. A small window that alternately shows time, date or memory or may be locked to display only one. See Tic-Toc II Docs for information and some commercials.

Tide Guide f: **Tide Guide:** By Zihua. A desk accessory that can predict the tides at certain locations along the coast using the harmonic method. Put the Tide Tables document in the system file for it to work. The information here is for 1988 only. *Demoware - \$19.95 for the 1989 versions.*

Tiler 1.1 f: **Tiler:** By Walter R. Smith. Automatically moves and re-sizes windows so that they do not overlap. Handy with applications that allow work in multiple windows.

Time Logger 2.11 f: **Time Logger 2.11:** By Loftus E. Becker, Jr. A DA to keep track of time spent on the Macintosh, by client and client code, comput-

ing the minutes of time spent and billing at any rate specified. The TimeLogger Init 1.1, Time Logger INIT 1.46 and the Run TimeLogger FKEY files are discussed in the Time Logger DA Doc which is a comprehensive 16 page description of the DA and its use. *Shareware - \$15 for latest version and goodies.*

TimeOut.acc: By Greg Kuperberg. A "Breakout" game with a timer and variable speeds. *Shareware - \$2.*

Timer v1.2: By John Cagle. A "stop watch" for the Mac.

Toggle <> 1.3: By Loftus Becker, Jr. "Toggles" the "<" and ">" keys to "." and ":" for users who want a typewriter style keyboard response when the shift key is depressed. (Did not appear to work with Word 3.01 even though the screen display said that it was on.)

Tracks: By Mark Erickson. Prints a track sheet (used for recording) with space for client, producer, title, engineer, reel #, i.p.s., time, notes and 24 track blocks of information. *Shareware - (but it doesn't show a price).*

Tralls: Draws mirrored patterns, then plays them back in delayed real time.

Transfer 2.1: Permits you to switch to another application without returning to the Finder. (Does not work with all applications.)

Translator: By Andrew E. Page. Converts MacWrite 4.5 files to text files. Make a backup copy first as it translates the document without giving you the option of renaming it. *Shareware - \$3; \$5 for code.*

Traplist: Shows the set trap addresses.

Turbo Help DA f: **Turbo Help DA:** By Anthony Tuorto. Provides functions, procedures and resources help screens for users of Turbo Pascal. Zap! Chancery is the font file for the DA screen. *Shareware - donation.*

Turboview 1.02 f: **Turboview:** By James K. Miles. A graphics viewing utility with standard viewing capabilities; the ability to view MacPaint, StartupScreen, and PICT files; a selection tool for copying portions to the clipboard; and picture scrolling for viewing large pictures and features for the more experienced Macintosh user such as the ability to view GIF, RLE, and Macintosh II StartupScreen format files and modest editing features. (GIF is the graphics format used on CompuServe) See the Turboview Docs. for info; the Combo Chart.PICT shows rendering styles. *Keyware - This version is locked and partly disabled \$10 to unlock it; \$15 for update notices, too.*

Disk #2.10B — DAs 10

Desk Accessories

Unit Conversions: By Dan Parks Sydow. Provides conversions from one unit of measure to another for length, area, mass, volume, speed and acceleration. *Shareware - \$3.*

UnPack.DA: By Don Brown. Unpacks files packed with Packit.

UnStuffit DA 1.5/Viewer 1.5 f: **UnStuffit DA 1.5:** By Raymond Lau. A DA which allows you to decompress archives in Stuffit format from within any application which supports desk accessories for you telecommunicators.

Viewer 1.5: By Raymond Lau. A DA which works much like UnStuffit DA except that you may not extract any entries with it. You may only view the

entries in an archive. Useful if you do not have enough free memory to run UnStuffIt DA.

Utilities/User's Guide is the documentation from the version 1.0 package. *Shareware - \$15 for the v1.5 StuffIt Utilities of which these DAs are a part.*

Uriah heap: Graphically displays the nature of the system or application heap.

US Debt.v1.4: By Chris Riley. Displays and increments the National Debt from a base in October, 1988.

Utilities: A useful assortment of file management features (rename, delete, etc.) in a DA accessible within applications. (Many of the same functions as CE Software's DiskTop, but not nearly as nice an interface.)

Utilities V2.0: By Gil Beecher. Does many file functions, such as delete, rename and set Finder file attributes. HFS messes up display. *Shareware - \$10.*

Utils: Copy, rename or delete a file.

ValCalc-Calculator: By Val Scott. An attractive little calculator with a variety of features including a calendar.

VariTyper Fonts f; Vartyper FontMaster v1.1 and Vartyper FontWizard v1.0: By Vartyper Inc. FontMaster simplifies the management of fonts and FontWizard lets you determine FOND resource IDs. The ReadMe file briefly describes their use.

Vi-mode f; Vi-mode: For those of you familiar with UNIX, this DA allows you to use Vi editing commands. The Vi-mode doc explains how.

ViewArt DA: By Louis King. Permits you to view EPSF, PICT and PNTG files. *Shareware - \$10.*

View File: By Neal E. Trautman. Shows contents of resource or data forks of files selected by the standard open files finder. Useful to programmers and hackers. *Shareware - \$10; \$25 for THINK™ C source code.*

VirusDetective™ f (v2.2): VirusDetective™: By Jeffrey S. Shulman. Searches file directories for files containing possible viral resources. Once an offending resource is found it can be removed. The strings and resources for which the DA searches can be edited. *Shareware - \$10.*

vt100 f; vt100: A VT100 terminal emulator with a wide range of baud rates. No documentation; you need to know what you are doing. vt100 font: Needed for the emulator to work.

vt52: Emulates a VT-52. Supports uploads, downloads, allows selection of printer or modem ports and has baud rate selection from 300 to 9600.

Windows 2.1: By Marsh Gosnell. Creates a menu item on which multiple files are placed in either alphabetical or front to back order for applications which may have multiple files open simultaneously. *Shareware - \$5.*

Wind-ws f; Wind-ws: By David Oster. Puts up a menu from which open windows can be brought to the front. The Sleeper, Stars & Wind-ws Doc describes it.

WNTranslator DA 1.60 f; WN-Text: By Edward L. Bolson. The current version of WriteNow has no ability to convert a WN document to Text or vice versa except through the clipboard, an omission solved by this DA. The TranslatorDA Doc is in "Write Now" format. Run the WN to Text conversion feature of the DA to read it. *Shareware - \$5; \$15 for an update.*

Wolfman: Displays the dates of the next twelve full moons and a graphic reminder why you need to know them.

Word Count V3.0: By Steven Martin. Counts words and characters on text and MS-Word Files. (Doesn't seem to work with Word 3.01 or documents saved from 3.01 in Word 1.0 format.)

Word DA f; Word DA: By The Baxter Group. Four DA screens of Word 3.0 keyboard equivalents; easier to access than Word's help data. W-DA's. Word 3.0 describes the DA and has screen dumps.

World Time: The time in Tokyo, Cupertino, Boston, London and Paris.

Wrap: The mouse arrow wraps around the edges.

WRD3KPAD f; WRD3KPAD: By Bill Hultgren. A picture which partially shows how Word 3.0 uses the numeric keypad.

WriteFontSize™ f (v1.0.1); WriteFontSize™: By Jeffrey S. Shulman. Lets font characters be created and viewed in any font size, then pasted into MacWrite (which otherwise limits your size choices). *Shareware - \$10.*

WXModem: By Mike Cohen. Access a modem to send or receive files from within an application. *Shareware - \$25.*

XL Screen: By Frederick Computer and Electronics Corporation. This one's for Mac XL (ex-Lisa) types, change the screen attributes without returning to the Lisa Operating System. No doc., but help screens available. *Shareware - \$10.*

Zoom DA: By Dave Winzler. Shows the location of the cursor and expanded area of the screen in a window. Zoom range is selectable from 1 to 64 times. *Shareware - \$5 if you like it; a Ferrari if you really like it.*

ZoomDA: By Brad Pettit. A screen blanker with a bouncing box pattern and an interesting manner of implementation.

ZoomIdle 1.1 f; ZoomIdle: By Paul DuBois. An idle DA that shows a moving "box" pattern. The ZoomIdle.doc describes how it works. ZoomIdle.1.1.c is the program code.

SuperHelp+ f; SuperHelp: By Jonathan Whitman. Two screens of help hints for SuperPaint. SuperHelp Docs explains how to install it directly into SuperPaint.

µPaint: By John Brehm. A Paint program in a DA. The boxes at the left of the window, perform like the icons in MacPaint.

ΣEdit 1.12 f; ΣEdit 1.12: By Leonard Rosenthal. An extremely fully-featured text editor and it's free. ΣEdit 1.12 Docs, ΣEdit Docs and Future Enhancements are the supporting documentation. An update of the one on Mac Disk 2.06A.

Draw f; Draw 2.5: A very Mac-like drawing program as a desk accessory. *Shareware - \$30.*

Disk #16.01B — SU 1

System Utilities

ApFont f; ApFont: By Jim Hamilton A cdev to change the default font used by applications. The "default font" is the one used by most applications in "Untitled" windows. ApFont Dox.txt is the documentation. *Shareware - \$5.00.*

Backdrop f; Backdrop: By Tim Maroney. A small piece of entertainment software that puts one out of a collection of pictures in the background of the Macintosh screen, behind all the windows, in place of the normal grey pattern. It is meant for hard disk users, since the pictures require a lot of

disk space. In order to use Backdrop, you must have a Mac Plus, Mac 512K Enhanced, Mac SE, or Mac II.

ChooseCDEV™ f; ChooseCDEV™: By CE Software. The control panel orders the cdev files in alphabetical order except for the General screen, which is first. This little application lets the icons be placed in any order desired by the user, so that it isn't necessary to scroll to find those frequently used. See About ChooseCDEV™ for all the documentation needed.

Closer f; Closer: By Rob Johnson. A very simple utility that closes all open access paths to a given file. Useful when a program which is editing a file exits unexpectedly, leaving a file with an open access path. It is supplied here in two formats, an application and an FKEY 8 (the ID can be changed with ResEdit). Both function identically: a standard file dialog box is brought up to select the file to be closed (using the 'Open' button, of course!). Also included in FKEYs is a software programmer switch, FKEY 9. This requires that a debugger be installed at boot time. Closer.doc is the documentation.

Comment Editor 1.01 f; Comment Editor 1.01: By Scott Armitage. Allows you to permanently modify the comment in the Finder's Get Info dialog box for Finder version 6.0 (or later). Comment Editor Docs (MW) is the documentation. *Shareware - \$10 for registration, \$15 for the latest version on disk.*

CompareForks™ f; Compare Forks™: By T.R. Shaw and B. E. Jarrell. A utility to analyze Macintosh™ files. In the compare mode, two files are compared. In the analyze mode, the details of the file is output to an output file. CompareForks Docs is the documentation.

Complete Delete: By Joel McNamara. Assures security for deleted files by writing zeros to both the data and resource forks of a file or application before deleting it.

Curious Cat V1.1 f; Curious Cat: By Bob Boylan. This is a "Curious" cataloger, curious to know which Fonts/DAs are contained in each system file and Font/DA Mover holding files. Curious Docs is the documentation.

DA Utility f; DA Utility: By Paul Cozza. A small program designed to help manipulate desk accessories. DAs may be renumbered and renamed, useful for instance for an application's private desk accessories as the DA Utility Docs explain.

DES f; DES: By John P. Powers. Encrypt those sensitive files into seemingly random bytes, safe from prying eyes. Decrypt them with the proper password. (By the way, DES stands for the Data Encryption Standard of the National Bureau of Standards.) DES Documentation is a short MacWrite file describing the program's functions and the improvements over Version 1.0. *Shareware - \$15.*

DeskMation (v2.1): By Andrew Welsh. An update of the program on Mac Disk 16.01, which once installed shows clicked-on folders as open. *Shareware - \$5.*

Dir-Acta-ry: By David Dunham and James Owen. Creates disk catalogs and file catalogs in Acta™ outliner format.

Disk Dup+ f; Disk Dup+: By Roger D. Bates. A disk duplication program written to automate as much as possible the sector-by-sector duplication of a

floppy onto one or more duplicates. Performs sector duplication of either 400K to 800K floppies. Formats copies as single or double sided as necessary. DiskDup+ Doc. is the documentation. **Shareware - \$10.**

DivJoin 1.0d9 f: DivJoin 1.0d9: Allows large files to be transported via floppy by dividing big files into multiple floppy sized pieces, later rejoining those pieces into a single file. Despite the title, 09-DivJoin doc is the documentation for version 1.09d8 of DivJoin.

DoppleMaker v2.0 f: DoppleMaker v2.0: By Mark Nelson Morrill. Makes DoppleGanger copies (a front or decoy) with the same name as actual applications used on a network so that the actual application may be hidden on the server, preventing its misappropriation. Dopple Docs explains how.

Electric Dvorak f: Electric Dvorak: By Tom Phoenix. Lets you use the Dvorak keyboard. Dvorak Installer removes or installs the Electric Dvorak and the "switching by Keyboard" option. Dvorak Startup and QWERTY Startup are INIT files for the Systems Folder. Read Me about Dvorak contains the instructions. Electric Dvorak Quick-Ref is a keyboard layout document. An optional Membership Application is included for the International Dvorak Organization. **Shareware - but you pay for it if you don't use it or pass it along.**

Enigma 1.1 f: Enigma 1.1: By Mike Pflueger. Another utility that encrypts and decrypts files—including not only documents, but applications, DAs, and fonts as well. Look under the About Enigma menu for two screens of help. Read First!-Enigma 1.1 is a very short MacWrite file describing the program's functions. **Shareware \$10.**

Erase: By Darin Adler & Fernando Alves. As the name implies, this utility will completely erase a whole disk, leaving a blank formatted disk (with name and serial number, if you wish) in its place.

Fast Formatter™ v2.2 f: Fast Formatter™ 2.2 By Stuart Davison and Mike Pell. Formats disks rapidly because the disk name is set only once before multiple disks are inserted. Fast Formatter sounds an alert if a disk is inserted that is already initialized, locked or has problems. Release Notes (Fast Formatter) is the documentation.

Feed Me! f: Feed Me!: By Terry Bertram Installs the cry of Audrey II (from "Little Shop of Horrors") into the Mac's high memory so that when the message "Please insert the disk:" comes up, the Mac shouts "Feed Me!" About "Feed Me!" is the documentation and Feed Me Sound is the sound file for Feed Me!

File Splitter.APP f: File Splitter.APP: By Andrew E. Page. Splits a file into smaller files of a size to be determined by the user. The TYPE/CREATOR of the output files, the size of the files, and the character for the files to be broken on past the block size can all be specified. File Splitter.DA is the same thing in a desk accessory. File Splitter.DOC is the modest documentation of the above. **Shareware - \$3.**

FileZero f: FileZero: By OITC, Inc.. Overwrites a file completely with zeros before deleting the file from the disk directory. This ensures that no information is left recorded on disk to be reconstructed. File Zero Docs and ReadMe-File Zero are the documentation. **Shareware - \$15.**

FolderShare™ f: FolderShare™: By CE Software.

This program is only useful to an AppleShare™ network (will not work with Tops™ or MacServe™) and requires System 4.1 or later. Unlike AppleShare, in which only the creator is permitted access to newly created folders, FolderShare lets the creator decide what access privileges for new folders will be assigned to new folders automatically. About FolderShare™ is the documentation.

Font/DA Mover (v 3.8): By Apple Computer. The version of the font and desk accessory program distributed with System 6.0 and Finder 6.1.

Font/DA Mover+: An earlier version of Apple's font and desk accessory program modified to defeat the limit of 15 desk accessories which it imposes.

Disk #16.02B — SU 2

System Utilities

Font Display™ Ltd. f (v5.4): FontDisplay™ Ltd.: By Jeffrey S. Shulman. A program to display the entire character set of any Macintosh™ font. Multi-bit/color fonts are supported on the Mac II. A window is available to display any text you wish in the selected font in any style. The demo does not include printing capabilities nor are any changes you make to any settings saved. FontDisplay™ 5.4 Doc (IW) and Read Me First are the documentation. **Demoware - \$20 for a fully functional, personalized, copy of FontDisplay.**

FullConvert: By Andrew Welch. Converts MacPaint format documents to FullPaint format documents so that they may be opened in FullPaint by double clicking on them. Also fixes screen dumps (command-Shift-3) to produce FullPaint, not MacPaint files (except on the Mac SE). **Shareware - \$8.**

Hardsave f: Hardsave: By M. Moore. A hard disk backup program. The file Hardsave.doc is the brief documentation of this version.

HDBackup: By PBI Software. Backs up all files, changed files, or individual specified files, and restores all files or specified files.

HFSDir v.1.61 f: HFSDir v1.61: By T. R. Shaw and B. E. Jarrell. Supports the creation of hard copy and soft copy directory listings of HFS volumes. This version operates with system 4.1 and supports the Macintosh SE™ and Macintosh II™. It has no limit on the number of Folders/Files processed and produces complete directory listings for all mounted volumes. HFSDir v1.61 doc is the full documentation of the above. **Shareware - \$15.75.**

Info+ 2.0.1 f: Info+: By James A. Finnegan. Puts a new item in the menu bar which displays the time and date, lets the Mac's volume be controlled, has an event timer, and views disk space and free memory. The Info+ Stuff installs and configures Info+ and the Info+ Doc is a MacPaint file of documentation. **Shareware - \$10.**

InstallMemoryBar: By Tim Endres. Remembers the position of the elevator scroll bar. Hold down the option key when you click in the scroll bar area and the elevator position is shown with a grey outline.

IWprint: By Paul M. Hyman. Prints typed in text or text files on an ImageWriter II using the printer's built-in fonts.

lazymenu: By Eli Bishop. Once installed, causes menus to drop down whenever the cursor is in the menu bar, eliminating the need to click and drag within a menu.

Lock 'em up f: Lock 'em up: By Mike Pflueger.

Keep unauthorized people from even using your Mac with this one. Your Mac will be locked until you enter the correct password. The program also saves a file of invalid password attempts, showing the date, time, and password of any invalid attempts. Read First!-Lock 'em up 1.1 describes the program's capabilities. Read this file before trying to use the application. **Shareware - \$10.**

M/F Rating: By Jim Leitch. Runs under MultiFinder, rating whether other applications running in the foreground or background are MultiFinder friendly or not.

MacDump f: MacDump: By Charlie Burns. A backup based on the UNIX utility dump. It will do nested incremental backups. MacDump decides which files to copy based on the modification date of the file. MacDump.mw is the documentation. **Shareware - \$10.**

MacPSDemo f: MacPSDemo: By Neff Systems Group. A demo version of a macro/procedural/batch processor utility for the Macintosh. MacPS will perform a series of desktop functions automatically without direct intervention. For the sophisticated user, MacPS is a programmable desktop language for the Macintosh. MacPS desktop functions are contained in text 'playscript' documents created and edited with any text editor. MacPSStartup is a startup script for MacPSDemo. MacPS read this first is a brief introduction to the demo while MacPS Documentation includes more details. **Shareware - \$21 for a fully functional version.**

MakeScreen: By Jerry Whitnell. For customized startup screens, run Make Screen on any MacPaint file selecting the part of the painting to be used for the start up screen. Save the file with the name exactly as StartUpScreen. Quit Make Screen and place the StartUpScreen file in the system folder. The new picture will appear on the next boot.

Mass Formatter: By Glen L. Austin. Allows you to format and verify disks in a batch mode. **Shareware - \$25.**

MASS INIT: By Frederick F. Anderson. Allows the mass initialization of double-sided (800 K) disks.

MassCopier™1.2: By CE Software. The only effective, affordable bulk disk duplicator known to the WAP Mac Disketeria team. Folks, this program (and its 800K sister) is the workhorse of the Mac Disketeria producing over 53 disks an hour. Simply insert the disk(s) to be copied. MassCopier will format, write, verify, and eject each disk. For Macintosh 512K, XL, Plus (400K disks only). When you pay the \$20 shareware fee, you get the bonus MassCopier program for 800K disks. **Shareware - License and Disk, \$20; License Only, \$15.**

Disk #16.03B — SU 3

System Utilities

MFMENU 1.2 f: MFMenu: By Fred D. Reed. Attaches a copy of the MultiFinder Application Switching menu to the MultiFinder icon in the menu bar and provides other features when using MultiFinder. MFMenu 1.2 Doc.wrt is the documentation.

MultiLaunch: By Jan Eugenides. Permits you to launch programs without the finder which uses much more memory than MultiLaunch. **Shareware - \$10.**

MultiSet f: MultiSet 1.0: By Donald Neff. A utility allowing you to configure and open 'work sets'

under MultiFinder. With one double-click from the desktop, you can open a series of applications and documents as described in the Multiset Documentation. **Shareware - \$15.**

My Back Up f; My Back Up: By Rick Giles. A backup utility which allows full or incremental backups from a hard disk. Also allows the creation of a journal of backup activities. My Back Up.doc is the full documentation. **Shareware - \$10.**

New copier: By John Mitchell and Dave McWherter. Another single-sided (400 K) disk copier.

New Moose Phrazer f; New Moose Phrazer 1.01: New Moose Phrazer was written to allow easy modification of Moose Phrases, the files used by Talking Moose (Mac Disk # 2.09). NMP Documentation tells all about it.

NewSortMenus: By James Hopper, based on work by Andy Hertzfeld. Causes font and DA menus to be sorted alphabetically. [Shouldn't be needed with the 4.1 and 5.5 and later versions of the System and Finder.]

On Cue™ Demo f; On Cue™ Demo: By Fred Reed. This is a sophisticated application and document launching utility for the Apple Macintosh™. From the moment you start your Mac, the On Cue™ menu is always available ...automatically. A single mouse click from within almost any application, including the Finder, will quickly switch you to any other application, and the document of your choice will be open and ready. Under MultiFinder, in addition to the launch capability, On Cue™ adds the ability to instantly switch to any open application, including the DA Handler layer. On Cue™ was designed to be an enhancement to, rather than a replacement for, other "shells" such as the Finder, HyperCard or PowerStation. On Cue™ Demo Notes is the documentation.

Page Setup Customizer f; Page Setup Customizer: By Daniel P. Smith. Allows customizing of ImageWriter page sizes, and their incorporation into individual applications or the ImageWriter driver. The remaining files in the folder (PSC Kernel, PSC Menu, MLOAD.BIN, and MLOAD.BIN) are required for PSC to work.

Paint Thinner f; Paint Thinner By Software Brewing Company. Two programs (Crusher and UnCrusher) compress and decompress MacPaint documents to save disk space. UnCrusher automatically calls MacPaint when a document is decompressed if (under HFS) MacPaint is in the same folder or on the Desktop. Paint Thinner Documentation is the documentation. **Shareware - \$10.**

Password f; Password v1.0: By Dr. Ralph Martin. This utility is intended to stop other people booting up your Mac from its Hard Disk (or any System Disk you put this on); it will not stop people from inserting another system disk into your Mac and using that to boot it. Password Docs tells all about it. **Shareware - \$10 or equivalent.**

Pattern Librarian: By Eagle I. Berns and Holly Thomason. Allows the creation, retrieval, and reorganization of MacPaint pattern files. **Shareware - \$20., with new sets of patterns.**

PopIt! 1.72 f; PopIt! 1.72: By Pete Helme. A pop up menu that makes a copy of the menu bar for use anywhere on the screen. PopIt! v1.72 dox.macwrite is the documentation. **Shareware - \$10.93.**

PowerStation™/E (v2.3) f; PowerStation™E: By

Steve Brecher, Software Supply. A Macintosh "software control center" that lets you organize your frequently-used applications, documents, and desk accessories in a way that is suited to your working habits, independently of the way they are organized under the file system. And, PowerStation lets you move among applications quickly - much more quickly than is possible with the Finder. Open PowerStation™ is the small file to be kept on the desktop to facilitate opening PowerStation if you don't use PowerStation as your startup application. This evaluation copy of PowerStation is limited in its capability; the full version is available commercially. PowerStation™ Orientation is the documentation.

Preview (fv.1.5); Preview: By Randy Ubillos. A replacement printer driver which allows printed output to be viewed on the screen in miniature. To use it, simply place it in your System folder. If you wish to use the Preview FKEY-6 provided, use the Resource Editor to install it into your System file. Preview 1.5 Docs is the documentation.

Print PICT: By G. A. Edgar. Does what it says - prints PICT documents on any printer.

Print1.0: By Yoshihisa Takayama. Prints text files. **Shareware - \$10 or ¥1500.**

PROTECT: By John Lim. Encrypts and password protects applications. [Run only on backups.] **Shareware - \$10 Australian.**

purgeIcons: Removes unneeded icons from the invisible desktop file, saving disk space.

QuickKeys Demo f; DemoQuickKeys™: By CE Software. QuickKeys allows various Mac functions to be assigned to single keystrokes, and allows the full use of extended keyboards. This demo programs only 12 keys and doesn't allow key assignments to be saved between boots. About QuickKeys is the brief documentation and a sales pitch. **Demoware - \$99.95 for the full version.**

RamStart2.0+: By George A. Nelson. Another RAM disk. For a complete set of instructions, run the program, then click on HELP as soon as it appears, before the disks stop whirring.

REdit1.2: By Gerard Schulten. An easy-to-use resource editor. Change icons, dialog boxes, alerts, and the like with a click of the mouse. Moderate care is required when using REdit. Experiment on backup disks only.

Remove JClock: The first version of JClock (which places a clock in the menu bar) made permanent changes in the system file and couldn't be easily removed. This application removes that version.

Rescue: By William Steinberg. Rescues MacWrite documents by decoding them and writing their contents to a text file.

Disk #16.04B - SU 4

System Utilities

Reverse Screen 1.0b1 f; Reverse Screen 1.0b1: By Darin Adler. Inverts the Mac screen so that it is black on white. Some may find this easier on their eyes. Reverse Screen ⓓ is the brief documentation.

Screen Maker: By Bill Atkinson. Creates custom start-up screens from any MacPaint document. Not as flexible as MakeScreen but this was the first of the genre.

ScreenDump[]: By Mike Wittingham. Creates FKeys which allow screen dumps on Macs of all screen sizes, even works with color images; dumps

either to disk or to a printer. **Shareware - \$12.**
Scribe: By Andrew Welch. Changes the default font which an application uses upon first opening; also convenient for displaying font alternatives. **Shareware - \$8.**

Scrolling Menu Installer: By Michael O'Connor. Adds scrolling menus to some programs running under the Mac's original ROMs (128K and 512K). It does not work on MacDraw. Isn't needed for the new ROMs.

Sequencer f; Sequencer: By Darin Adler. Used to run a number of programs in a row. Sequencer can be invoked from the desktop or from "Set Startup" so that it runs at boot. Modify with ResEdit the STR# resource that defines the programs to be run in sequence. Sequencer ⓓ is the documentation.

Set BackPat: By John Carpenter. Changes the background pattern of any application to one of the patterns set out here. (Patterns can't be edited.) Use only on copies of the applications.

ShowSizes: By Jon Pugh. Displays HFS volumes as folders, identifying what percentage of the disk their contents occupy. **Shareware - Feel free to send money.**

Shutdown II f; Shutdown II: By Raymond Lau. Designed for use with Finder substitutes, this program will shut down the Mac if the shift key is held down when quitting an application. (Otherwise, the Finder specified is launched.) A Mac II will actually turn itself off. Other Macs display the "It's safe to turn off" dialog. Note that the Shutdown application is named MiniFinder, and that the Finder must be renamed in one of the ways specified in the documentation. Shutdown II doc is the documentation on how to use it.

Sizer 1.0: By Al Spohn. Displays a window on the Mac drawn with user-entered coordinates.

SmallFinder 1.1: By Doug Werner. A minifinder that allows simple filing functions.

Start Mac 1.1 f; StartMac 1.1: By Donald Neff. Allows the development of a custom startup routine with a startup screen that talks (using MacinTalk) and automatically loads an application, a RAM disk or whatever. StartMac Documentation tells how to use it and StartMac.Commands is a dummy file to list commands. **Shareware - \$13 for upgraded version.**

StartUpDesk f; StartUpDesk: By Darin Adler. An INIT resource that makes the StartUpScreen into a DesktopScreen. The desktop pattern is whatever the startup screen happens to be. StartUpDesk doc is the simple documentation.

Start Up: Changes the startup disk, like option-command double-clicking on the Finder.

SuperConvert f; SuperConvert: By Silicon Beach Software. A utility application that converts SuperPaint files containing LaserBits™ objects to and from the following high-resolution bit-mapped file formats: ThunderScan®, Tagged Image File Format (TIFF), and Encapsulated PostScript® (EPS). Its main function is to convert scanned images from ThunderScan and TIFF to LaserBits format for editing and to convert LaserBits images to TIFF or EPS formats for importing into other programs, such as page layout applications. SC User Manual is the documentation.

SuperFinder 4.2.1 f; SuperFinder 4.2.1: By Matthew Russoto. A document- and application-launching minifinder that has the ability

to manage an unlimited number of documents and applications. Since the application must go in the System folder, Run SuperFinder can be kept on the desktop to provide easy launching from the Finder. SuperFinder Documentation provides instructions in Word 3.0 format. **Shareware - \$15.**

SuperStation3.1: By Matthew Russoto. Another minifinder that directly launches applications and documents. **Shareware - \$10.**

SwapParamRAM: By Glenn L. Austin. Saves a copy of the pRAM resource in its file and swaps it with that maintained in PRAM.

SystemVersion: Shows the version number of the system file in use. Takes only 2K of disk space.

TextCompactor 1.0: By Carl Powell III. Removes extra lines and spaces from text files. **Shareware - \$10.**

The Front Man f: The Front Man: Selects programs from different folders, or even disks so that they may be printed or opened in one batch (like the print command in the Finder).

Timed Launch2.0 f: Timed Launch2.0: By Jerry C. Welsh, Jr. Lets any application be launched at a predetermined time. Timed Launch Doc is very brief documentation of the upgrade only and does not describe Timed Launch. **Shareware - \$15.**

TinyFinder: By Blake Stone. Another Finder substitute. Must be in System file to work. **Shareware - \$10 to \$15.**

TogCursor: By Andy Hertzfeld. Installs an FKey (FKey8) to toggle the current cursor to one double its size.

Ultra Disk Split/Merge 1.1: Splits a disk into a number of files; or restores the disk into a number of files. Useful when transferring a whole disk's contents over the modem.

VerCheck: By Daniel Stiavnicky. The first message says that this program is probably out of date. However, some of the data is current. The program reads information from your Mac hardware and displays it for you. It lists software releases from Apple for comparison. It reads DAs and gives information on their currency

Verify 1.1: By Harry Starr. Performs nondestructive verifications of single-sided and double-sided disks. **Shareware - \$5.**

Version Data: By Andy Peterson. Reads applications' internal data to obtain their names, versions, and release dates (if the programmers provided it in the first place).

Version Reader 1.1: By John Holder. Gets version information (if available) from an application's signature resource.

Version f: Version: By Mark Jaffe. With the assistance of the other files (MacinTalk, Makefile, sysver.c and sysver.rcsc) in the folder, this speaks the version numbers of the Mac's system and finder. **Shareware - \$5.**

Welcome2 f: Welcome2: By CAM. When run, as, for example, a startup application, causes the Macintosh to speak a welcome, the day, date, and time. Welcome2.hdc is the documentation for Welcome2. Welcome2 Loud is the same thing in a version which overrides the Control Panel volume control setting.

Xerisk: By Chris Gehlker. A disk duplicator which, in addition to allowing copying in the usual fashion, allows two 400K disks to be combined on an 800K disk.

XL Back f: XL Back: Allows backup of an XL's hard disk. XL Back Doc is the documentation. 🍏

Classifieds

For Sale

Apple LaserWriter NT only 6 months old. Asking \$3200. Call 699-3204

For Sale

Mac Plus, keyboard, Apple external 800K disk drive, 1200 baud Avatec modem, and Helix Data Base program (Ver.2.0). Only \$1350. Call Tom at 804-775-1089(W), 804-358-7802(H) in Richmond

For Sale

Apple III 256K with Apple III monitor, Softcard (CPM), universal parallel interface card, video interface kit installed, clock kit installed. Asking price \$295. Call Jeffrey at 617-484-8285

For Sale

AppleWriter III (2.0) with Speller, AppleWriter III(1.0), Apple Business Basic, Apple Business Graphics, Backup III, III Easy Pieces, VisiCalc III, QuickFile III, PPS File, PPS Report, System Utilities, Microsoft Basic (CPM), MicroStat Statistics Package (CPM), Apple III Documentation: Apple III dealer service manual with dealer diagnostics, Apple III owner's guide, device drivers guide, SOS Reference manual I & II, Osborne CPM guide. Complete original docs for all software listed. Prices vary. Will sell packages individually. All sales COD or prepaid. Call Jeffrey at 617-484-8285

For Sale

One 3 1/2 inch Unidisk with controller card, new, in box, \$235. Ramfactor card with 1 MB and ram charger, \$500. Ramfactor card with 0K and software, \$35. Microsoft CPM card with software and instructions also CPM Preach Tree general ledger and payroll, \$200. ProFiler 4.0 new, in box, \$30. Call 617-298-5331

For Sale

Microsoft Word Version 4.0, brand new, never opened includes SuperPaint 1.1 and AutoMac III. \$150.00 Call Charlie at 703-425-1675

For Sale

Word Perfect 1.0.2 (new update) with original documentation - \$100; PowerPoint 2.0 - \$125, Call Lynn, 301-845-2651 evenings before 10:30 PM

For Sale

MAC SE 1 MB memory, 20 MB HD, standard keyboard, \$1800.00 call Larry G. Lemke (h) 202-333-7641 (w) 202-453-8932.

For Sale

Mac 512 KE, 2 800K dr., A-Care-mid-Aug can extend 1 yr, compat. NLQ printer \$1150; WINGZ \$200. Call Lawrence Stedman 573-7519, 3-8pm

For Sale

Mac upgraded to 2 Meg RAM, 800K Floppy Drive, w/ keyboard and mouse, ready used. \$1,600.00. Apple Care Insurance. Call Ann at (202) 526-0904

Help Wanted

HyperCard Aficionado needed for freelance assignments. Must have good bit map drawing skills, interface design experience, and solid mastery of HyperTalk. Call John at (202) 387-1804.

Help Wanted

Person knowledgeable in Quark Express to work on a freelance basis. Call (301) 881-1470

Classifieds

For Sale

Apple II+ 64K 2 drives, NEC printer, graphics card, monitor, stand, software +. Like new. \$850, best offer. 864-0312 or 459-1242

Help Wanted

Consultant knowing both data base and desktop publishing to advise us. (301) 881-1470

Assistance

Consultant needs Real Estate Development Analysis Program.

Contact: Rafferty, 3354 Woodburn Village Dr. Ste. 34, Annandale, Va. 22003, (703) 573-9246

For Sale

Apple Lisa 2 w/5 MB Profile, Printer, SW (0.S.2, Art Dept, Lisa Terminal), Handbooks. \$950 o.b.o. 202-333-5929

For Sale

Prodogy SE 68020 /accelerator w/2 MEG of on board fast RAM. Fastest 68020 configuration available. \$1,200, Call 703-641-0215

Help Wanted

Part time for graphic design studio, familiar with Macintosh. Do small direct mailings, time keeping, check writing, filing, word processing, much of it done on the Mac. Any of the following skills a big plus: Bookkeeping, page make up. Programs, Quark XPress, Word, FileMaker Plus, Project Billing, In house Accountant, Cricket Draw, Letraset Studio. The more you can do, the more hours you can work. Good benefits. Call Linda Sherman Design 591-0604, Gaithersburg, MD

For Sale

Freehand 1.0, \$100.00, call (703) 549-5810

For Sale

Mac IICX, 40 meg, 5 Meg RAM, Apple CLB Mon, Software, more. Best Offer 202-462-3177

For Sale

Apple IIGS, 1.25 Meg RAM, Apl Cd Mon. 3.5 and 5.25 disk drives. Apple writer II printer, cable, stand. Datalink 2400 Modem. Stereo dig. card Base Speaker. Computer Stand. More Software and Supplies. Make Best Offer. 301-460-4046

For Sale

Xebec Model 97104 10 Meg Sider \$100.00 o.b.o. Call 703-751-5302

Employment Desired

I would like to do work processing, data entry, database design and development, or application programming at home on my Macintosh SE. I have experience with Microsoft Word, MacWrite, WordPerfect, various databases and spreadsheets, and HyperCard. I have had four years of experience in database development and management and one year experience programming in Pascal on the Macintosh. I have also done some technical writing and user documentation. I am looking for something a little less demanding than programming because I have a newborn and a two year old at home. I am detail oriented and careful and would dependably meet any of your appropriate needs. Please call Jenny Hoerst at 464-5857

Mac Disketeria Order Form

Disk Series, Individual Disks

Anti-Virus Utilities	Digitized Sounds	Telecomm. (contd.)	Adobe Scrn Fnts (contd.)	HC Stackware (contd.)	Serially Numbered
___ 1.01 - AV 1	___ 12.01 - S 1	___ 13.06 - T 6	___ 18.03 - AF 3	___ 19.25 - SW 25	___ Disk 28.1 •
___ 1.02 - AV 2	___ 12.02 - S 2	___ 13.07 - T 7	___ 18.04 - AF 4	___ 19.26 - SW 26	___ Disk 29 •
___ 1.03 - AV 3	___ 12.03 - S 3	___ 13.08 - T 8	___ 18.05 - AF 5	___ 19.27 - SW 27	___ Disk 30 •
	___ 12.04 - S 4		___ 18.06 - AF 6	___ 19.28 - SW 28	___ Disk 31.1 •
Desk Accessories	___ 12.05 - S 5	Programmer/Hacker Utils	___ 18.07 - AF 7	___ 19.29 - SW 29	___ Disk 32 •
___ 2.01B - DAs 1	___ 12.06 - S 6	___ 14.01 - PH 1	___ 18.08 - AF 8		___ Disk 35 •
___ 2.02B - DAs 2	___ 12.07 - S 7		___ 18.09 - AF 9	Mac II Series	___ Disk 41 •
___ 2.03B - DAs 3	___ 12.08 - S 8	Miscellaneous Utilities	___ 18.10 - AF 10	___ 20.01 - M II 1	___ Disk 45 •
___ 2.04B - DAs 4	___ 12.09 - S 9	___ 15.01 - MU 1	___ 18.11 - AF 11	___ 20.02 - M II 2	___ Disk 46 •
___ 2.05B - DAs 5	___ 12.10 - S 10	___ 15.02 - MU 2	___ 18.12 - AF 12	___ 20.03 - M II 3	___ Disk 54 •
___ 2.06B - DAs 6	___ 12.11 - S 11	___ 15.03 - MU 3	___ 18.13 - AF 13	___ 20.04 - M II 4	___ Disk 55 •
___ 2.07B - DAs 7	___ 12.12 - S 12	___ 15.04 - MU 4	___ 18.14 - AF 14	___ 20.05A - M II 5	___ Disk 56 •
___ 2.08B - DAs 8	___ 12.13 - S 13	___ 15.05 - MU 5		___ 20.05B - M II 5	___ Disk 74 •
___ 2.09B - DAs 9	___ 12.14 - S 14	___ 15.06 - MU 6	HyperCard Stackware	___ 20.06 - M II 6	___ Disk 75 •
___ 2.10B - DAs 10	___ 12.15 - S 15	___ 15.07 - MU 7	___ 19.01A - SW 1	___ 20.07A - M II 7	___ Disk 76 •
	___ 12.16 - S 16	___ 15.08 - MU 8	___ 19.02A - SW 2	___ 20.08 - M II 8	___ Disk 77 •
FKeys (Function Keys)	___ 12.17 - S 17	___ 15.09 - MU 9	___ 19.03 - SW 3	___ 20.09 - M II 9	___ Disk 78 •
___ 4.01 - FKs 1 •	___ 12.18 - S 18	___ 15.10 - MU 10	___ 19.04 - SW 4	___ 20.10 - M II 10	___ Disk 79 •
___ 4.02 - FKs 2 •	___ 12.19 - S 19	___ 15.11 - MU 11	___ 19.05 - SW 5	___ 20.11 - M II 11	___ Disk 80 •
	___ 12.20 - S 20	___ 15.12 - MU 12	___ 19.06 - SW 6	___ 20.12 - M II 12	___ Disk 84 •
ImageWriter Fonts	___ 12.21 - S 21	___ 15.13 - MU 13	___ 19.07 - SW 7	___ 20.13 - M II 13	___ Disk 85 •
___ 5.01 - IW 1	___ 12.22 - S 22		___ 19.08 - SW 8		___ Disk 89 •
___ 5.02 - IW 2	___ 12.23 - S 23	System Utilities	___ 19.09 - SW 9	HyperCard Externals	___ Disk 91 •
___ 5.03 - IW 3	___ 12.24 - S 24	___ 16.01B - SU 1	___ 19.10 - SW 10	___ 21.01 - HE 1	___ Disk 92 •
___ 5.04 - IW 4	___ 12.25 - S 25	___ 16.02B - SU 2	___ 19.11 - SW 11	___ 21.02 - HE 2	___ Disk 95 •
	___ 12.26 - S 26	___ 16.03B - SU 3	___ 19.12 - SW 12	___ 21.03 - HE 3	___ Disk 96 •
LaserWriter Fonts	___ 12.27 - S 27	___ 16.04B - SU 4	___ 19.13 - SW 13	___ 21.04 - HE 4	___ Disk 104 •
___ 6.01 - LW 1	___ 12.28 - S 28	___ 16.05B - SU 5	___ 19.14 - SW 14		___ Disk 105 •
___ 6.02 - LW 2	___ 12.29 - S 29	___ 16.06B - SU 6	___ 19.15 - SW 15	System Software 6.0.3	___ Disk 106 •
___ 6.03 - LW 3	___ 12.30 - S 30		___ 19.16 - SW 16	___ SS.ST	___ Disk 108 •
	___ 12.31 - S 31	Word Processing Utils	___ 19.17 - SW 17	___ SS.PT	___ Disk 123 •
Paintings (MacPaint)	Telecommunications	___ 17.01 - WP 1	___ 19.18 - SW 18	___ SS.U1	___ Disk 128 •
___ 11.01 - P 1	___ 13.01 - T 1	___ 17.02 - WP 2	___ 19.19 - SW 19	___ SS.U2	___ Disk 134 •
___ 11.02 - P 2	___ 13.02 - T 2	___ 17.03 - WP 3	___ 19.20 - SW 20		___ Disk 143 •
___ 11.03 - P 3	___ 13.03 - T 3	Adobe Screen Fonts	___ 19.21 - SW 21		___ Disk 147
___ 11.04 - P 4	___ 13.04 - T 4	___ 18.01 - AF 1	___ 19.22 - SW 22	HyperCard 1.2.2	___ Disk 150 •
___ 11.05 - P 5	___ 13.05 - T 5	___ 18.02 - AF 2	___ 19.23 - SW 23	___ HC.01	___ Disk 151 •
			___ 19.24 - SW 24	___ HC.02	___ Disk 153

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

Disk Series, Disk Sets

___ Anti-Virus Utilities	3 disk set - \$ 10.50	___ Miscellaneous Utilities	13 disk set - \$ 45.50
___ Desk Accessories	10 disk set - \$ 35.00	___ System Utilities	6 disk set - \$ 21.00
___ FKeys (Function Keys)	2 disk set - \$ 7.00	___ Word Processing Utils	3 disk set - \$ 10.50
___ ImageWriter Fonts	4 disk set - \$ 14.00	___ Adobe Screen Fonts	14 disk set - \$ 49.00
___ LaserWriter Fonts	3 disk set - \$ 10.50	___ HyperCard Stackware	29 disk set - \$ 101.50
___ Paintings (MacPaint)	5 disk set - \$ 17.50	___ Mac II Series	14 disk set - \$ 49.00
___ Sounds	31 disk set - \$ 108.50; last 7 - \$ 24.50	___ HyperCard Externals	4 disk set - \$ 14.00
___ Telecommunications	8 disk set - \$ 28.00		

Mall this form with your check to:
Disketeria
Washington Apple PI, Ltd.
7910 Woodmont Ave., Ste. 910
Bethesda, MD 20814

Are you a member of Washington Apple PI, Ltd? Yes/No ___. If Yes, Membership Number _____.
All payments must be in U.S. funds drawn against U.S. banking institutions.
Disk Prices are \$ 5.00 for members, \$ 8.00 for non-members; deduct \$ 1.00 per disk for 5 or more.
Disk Prices for sets are as marked for members, add \$ 3.00 per disk for non-members

Number of Disks	Member Price /Disk	Extended
Singles		
___ 4 or less @	\$ 5.00 =	___
___ 5 or more @	\$ 4.00 =	___
___ Sets (each disk) @	\$ 3.50 =	___
___ + Postage - \$ 1.00 /disk, max \$ 5.00		___
___ Disk Catalogs	\$ 3.00 =	___
___ + Postage @ \$ 1.50 ea.		___
TOTAL AMOUNT		___

Name		
Box Number, Apartment, Suite, etc.		
Street Address		
City	State	ZIP Code
Daytime telephone	Evening telephone	

Washington Apple Pi, Ltd.

7910 Woodmont Avenue, Suite 910

Bethesda MD 20814

(301) 654 - 8060

Membership Application

Please Print

Name																								
Company																								
Box Number, Apartment, Suite, Mail Stop, etc.																								
Street Address																								
City															State					ZIP Code				

Membership Contest			
Enter Sponsor's Member Number & Name			

Home Phone ()	Business Phone () x	Your Occupation
-----------------------	-----------------------------	-----------------

Special Interest Groups & Activities		
Check to:	Join Group	Volunteer
AppleWorks SIG		
Apple II GS SIG		
Apple III SIG		
AV SIG (Arts & Video)		
CP/M SIG		
Disabled SIG		
Disk Library		
Desktop Publishing SIG		
EDSIG (Education)		
Excel SIG		
Federal SIG		
GameSIG		
HOTLINE		
HyperCard SIG		
Law SIG		
Mac Programmers SIG		
Music SIG		
NeXT SIG		
PIG (Pascal Programming)		
PI-SIG (Program Interface)		
Stock SIG		
Telecommunications SIG		
WAP Journal Editorial Board		
Works SIG		

Enclose check or money order payable to Washington Apple Pi, Ltd. (Payment must be in U.S. dollars and payable on a U.S. bank)

- \$32.00 Basic membership
- \$25.00 Student rate[†]
- \$6.00 Add for use of WAP bulletin board system (TCS)
- \$17.00 Add for First Class mail to U.S.
- \$20.00 Add for Air to Canada, Mexico, W. Indies, C. America
- \$38.00 Add for Air to Europe & S. America
- \$48.00 Add for Air to Asia & elsewhere
- \$18.00 Add for Surface to Europe, Asia & elsewhere

Please indicate type of new member kit below.

[†]For student rate enclose a copy of your student ID

\$ Total amount enclosed (see payment note above)

Signature and date

- Indicate Desired New Member Kit (one only)
- Apple II
 - Apple II GS
 - Apple III
 - Mac 400k
 - Mac 800k
 - 5.25" disk
 - 3.5" disk

Initial It's ok to publish my name, city, ZIP code, and phone number in the membership directory.

Initial I'll be glad to suffer some junk mail if it helps the Pi raise some money.

WAP policy prohibits releasing member information unless it is authorized above.

Mailing lists are never released to vendors; WAP handles mailings itself.

What kinds of computers/equipment do you use regularly? (Check all that apply.)

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> Apple II | <input type="checkbox"/> Mac 128 | <input type="checkbox"/> Mac II | <input type="checkbox"/> Modem 300 |
| <input type="checkbox"/> Apple II + | <input type="checkbox"/> Mac 512 | <input type="checkbox"/> Mac IIX | <input type="checkbox"/> Modem 1200 |
| <input type="checkbox"/> Apple II e | <input type="checkbox"/> Mac 512 e | <input type="checkbox"/> Mac II cx | <input type="checkbox"/> Modem 2400 |
| <input type="checkbox"/> Apple II c | <input type="checkbox"/> Mac Plus | <input type="checkbox"/> Other Mac II _____ | <input type="checkbox"/> Modem 9600 |
| <input type="checkbox"/> Apple II GS | <input type="checkbox"/> Mac SE | <input type="checkbox"/> | <input type="checkbox"/> FAX modem |
| <input type="checkbox"/> Other Apple _____ | <input type="checkbox"/> Mac SE/30 | <input type="checkbox"/> | <input type="checkbox"/> Printer, dot matrix |
| <input type="checkbox"/> Laser 128 | <input type="checkbox"/> Mac laptop | <input type="checkbox"/> | <input type="checkbox"/> Printer, impact |
| <input type="checkbox"/> Basis | <input type="checkbox"/> Other Mac _____ | <input type="checkbox"/> | <input type="checkbox"/> Printer, laser |
| <input type="checkbox"/> Franklin | <input type="checkbox"/> | <input type="checkbox"/> IBM or compatible | <input type="checkbox"/> |
| <input type="checkbox"/> Apple III | <input type="checkbox"/> LISA | <input type="checkbox"/> Non-Apple laptop | <input type="checkbox"/> |

WAP Tutorial Registration

By Lynn R. Trusal, Tutorials Coordinator

Apple IIe, IIc, and IIgs Tutorials

The following three WAP tutorials are being offered to Apple IIgs owners on the first three Tuesday evenings of the month for 2 to 3 hours, beginning at 7:15 PM, at the office. Arrive by 7:00 PM to set up your computer. We are currently alternating months between the Apple IIe, IIc and IIgs. These tutorials are designed for beginners — not experienced users. You may sign up for one or more tutorials. The fee for each session is \$15 for WAP members and \$20 for non-members. You are urged to bring an Apple, monitor and disk drive. Please note that WAP does not have equipment for you to use; if you do not bring your own, you will have to look over someone's shoulder. Tutorials without a minimum of two students will be cancelled.

June 6 (Tuesday) Welcome to the World of Apple (IIgs)	July 11 (IIe & IIc)
June 13 (Tuesday) How to Use Your Apple Software (IIgs)	July 18 (IIe & IIc)
June 20 (Tuesday) Popular Applications (IIgs)	July 25 (IIe & IIc)

Macintosh Tutorials

These are for beginners — not experienced users. They are given regularly on the 2nd, 3rd and 4th Monday evening of each month at the office, from 7:15 to 10:15 PM. The fee for each session is \$15 for WAP members and \$20 for non-members. You may sign up for 1, 2 or all 3 sessions. You are strongly urged to bring your Macintosh, external disk drive, startup disk, and several blank disks. WAP does not have equipment for you to use. (Note to Mac II owners: You are not expected to bring a computer, but we do not have a Mac II for you to use.) These tutorials fill up quickly, so call the office to verify space before mailing your registration.

June 12 - (Monday) Introduction to Macintosh. Prerequisite: Guided Tour
June 19 - (Monday) Intermediate Mac Skills. Prerequisite: Familiarity with Desktop
June 26 - (Monday) Personalizing your Mac for Productivity: Prerequisite: 1st two sessions.

Macintosh Tutorials in Northern Virginia

Macintosh tutorials taught by Russ Bradley are held at the Fairlington United Methodist Church, Rt. 7 and I-395 (King Street Exit), in Alexandria, VA. They will be conducted at three month intervals— March, June, September and November 1989. This year they will be on the 2nd, 3rd and 4th FRIDAY NIGHTS in each of these months. The fee for each session is \$15 for WAP members and \$20 for non-members. You may sign up for 1, 2 or all 3 sessions. Call the WAP office for specific directions or Russ Bradley at 703-768-2529. The tutorials will be held from 7:00 to 10:00 PM.

June 9 - (Friday) Introduction to Macintosh. Prerequisite: Guided Tour
June 16 - (Friday) Intermediate Mac Skills. Prerequisite: Familiarity with Desktop
June 23 - (Friday) Personalizing your Mac for Productivity: Prerequisite: 1st two sessions.

Washington Apple Pi - Special Tutorials

HyperCard - May 29 - (Monday) This tutorial is taught by Bob Platt in response to several requests. It will cover the basics of HyperCard, but will not deal in any depth with the HyperTalk language.

WE ARE LOOKING FOR INSTRUCTORS

We are looking for several new instructors to teach Macintosh tutorials. New instructors will be required to sit in on one tutorial for each of the three sessions taught prior to teaching. Acceptance as an instructor on a regular basis will be determined by critiques filled out by the students in classes taught. Contact Lynn R. Trusal at 301-845-2651 before 10:30 PM if you are interested or require additional details.

COSTS: All seminars are \$15/session for WAP members and \$20/session for non-members unless otherwise indicated

Name _____

Class name: _____

Address _____

Class date: _____

City/State/Zip _____

Class name: _____

Class date: _____

Phone (day) _____ (evening) _____

Number of classes _____ x fee _____ =

Total enclosed \$ _____

Member Number _____

June 1989

Mail this form with your check to:

WAP Tutorials

Washington Apple Pi, Ltd.

7910 Woodmont Avenue, Suite

910

Bethesda, MD 20814

Washington Apple PI Journal

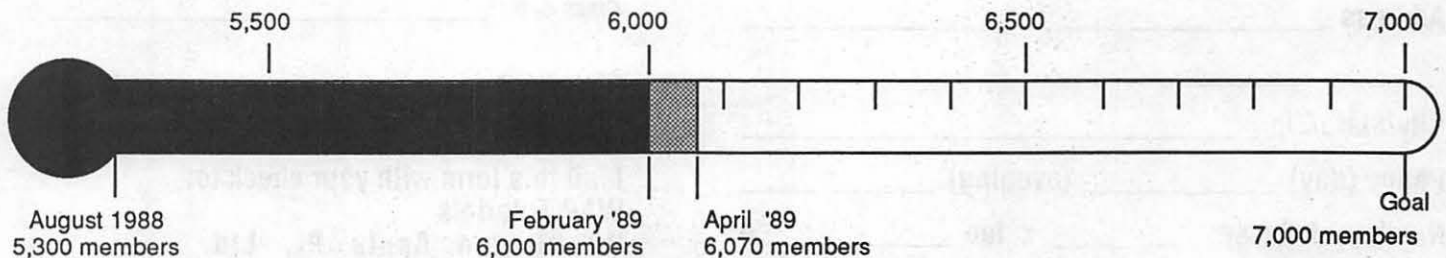
95

Toro!



Autumn Little handles advertising for Image House Graphics and does illustrations as a hobby. She's been a Mac user for one year. Obviously she likes bullfights!

Membership Drive Readout



CALL YOUR BOSS FOR A RAISE...

After You've Called

Our B.O.S.S. to Get the Job Done.

BACK OFFICE
SUPPORT
SERVICES

948 ■ 2175

DOCUMENT
PREPARATION
SPECIALISTS

Presentation Graphics ■ Word Processing ■ Graphic Design ■ Newsletters
Reports ■ Books ■ Illustrations ■ Desktop Publishing ■ Charts

Satellite Scientific

Practical Peripherals 2400 Modem	\$190
Avatex 1200HC Modem	\$125
New - Avatex 1200e Modem	\$90
Orange Micro C/Mac/GS	\$75
Applied Engineering GSRAM +	\$450
Proterm V2 (Communications Package)	\$85
Anchor 2400e	\$170

We have memory for the MAC and GS and II

1 Meg Simms - \$375

Chinook Hard Disk for IIC/IIC+ \$740
Chinook 20 \$650/ 40meg \$860
Chinook 40 comes with 2 year warranty
Chinook Drives come with Apple SCSI

Call about the new
Western Digital Preference Hard Disks

Applied Engineering
2400 Internal w/software \$190
GS Accelerator - \$299
GS Ram + \$375

Crate for Mac
60 meg \$730/40 meg \$650
Crate for IIGS
60 meg \$850/20 meg \$650
2 year warranty

Crate comes with Apple SCSI

Authorized Applied Engineering Dealer

Applied Ingenuity Dealer
1 Meg RAM card \$295
Call about inner drive

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